Poultry, Parrots, and People: Exploring Psyche Through the Lens of Avian Captivity

A dissertation submitted

by

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to

Pacifica Graduate Institute

in partial fulfillment of
the requirements for the
degree of

Doctor of Philosophy
in
Depth Psychology

with emphases in
Community Psychology, Liberation Psychology, and Ecopsychology

This dissertation has been
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Abstract

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Through the Lens of Avian Captivity

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What was the last interaction you had with a bird? Was it a cordial conversation with a parrot or indirectly, as while devouring deviled eggs? The colorful ways in which avian and human lives are connected are as nuanced as they are pervasive. Perhaps this is unsurprising, given that globally, birds are held in captivity by the billions. Despite the massive scale at which our lives intersect, we often fail to recognize the psychological aspects of bird confinement. This project dives below the surface to examine the largely unconscious forces that underlie bird captivity by exploring psychosocial dynamics between poultry, parrots, and people. Employing a heuristic methodology, emergent themes are woven into a 30-minute film, *A Bird Tail* to develop *conscientização*, the cultivation of a critical awareness of how captivity shapes avian-human relationships, the psyches of individual humans and birds, and ultimately our collective, trans-species cultures. Told from the perspective of an avian alchemist, the film explicitly navigates across species lines through imagery and voice by providing a *bird's eye view* of numerous challenges faced by captive-held birds, including death, disease, and trauma. A central purpose of this exploration is to bring these subsurface currents to light so that we as humans can begin to dissolve those psychological constructs and projections that prevent authentic cross-species connection and cause such profound harm.

Keywords: birds, captivity, parrots, poultry, alchemy, trans-species psychology

Dedication

This work is dedicated to my family,

the memory of those passed,

and to the birds.

Acknowledgements

There are several individuals without whom this project would not have been possible. It is prudent that I first acknowledge the birds who have colored my life, both past and present. Absent their willingness to be vulnerable in authentic cross-species connection, I never would have known the true depths of avian beauty. Theirs are the songs that kept me moving even when the road seemed dark and impassible.

I would also like to acknowledge many human helpers. My husband, Kevin, and children, Emily and William, never wavered in cheering me on, patiently holding space for the work to unfold and sacrificing precious hours spent together. Ever supportive, my parents have been great champions—my father, Ian, and my mothers, Margaret, Andrea, and Karen—as have my brothers, Daniel, David, and Peter. My grandmother Julia provided a guiding light, sharing her own thesis with me just a few years ago along with inspiration to follow in her footsteps. I also found kindred spirits in my father's mother and grandmother, who seemed to share a love for birds though we never got to meet.

Gay Bradshaw pushed me forward and lent a sympathetic ear, over the years becoming more than just the chair of my committee but also a dear friend. My readers, Craig Chalquist and Jo-Ann Shelton, provided a ballast that kept this work out of the echo chamber. I would like to acknowledge my cohort at Pacifica, with special thanks to Deb Bridge for the nightly check-ins that kept our dissertations alive in the eleventh hour. Finally, my gratitude to those who lent creative support throughout the years, including the musicians who generously provided music for my film.

Without each and every one of you, this dream would not have come to fruition. Thank you, it means more than I can adequately express.

Table of Contents

The style used throughout this dissertation is in accordance with the Publication Manual *of the American Psychological Association* (6th Edition, 2009), and *Pacifica Graduate Institute's Dissertation Handbook* (2018-2019).

List of Tables and Figures

Tables

Figures

Chapter 1

Introduction

In nova fert animus mutatas dicere formas / corpora.

(I intend to speak of forms changed into new entities.)

— Ovid (trans. 2004, p. 5)

Introduction to the Research Topic

Revered for aerial grace and boundless beauty, birds have long captivated the human imagination. Birds have inspired "art, literature and sculpture, have been accredited with supernatural powers, have played a role in songs, ceremony and dance, as well as day-to-day existence, and have been linked to both death and some of life's greatest challenges" (Tidemann & Gossler, 2010, pp. 5-6). Because of their ability to fly, "birds have been regarded since time immemorial as related to the sky, as mediators between heaven and earth, and as embodiments of the immaterial, namely, of the soul" (Becker, 2000, p. 41). Over the centuries, avian metaphor has become ever more deeply woven into the fabric of collective psyche. This avian-human convergence can be seen in the numerous hybrid human-bird figures (Becker, 2000, pp. 150-151) that "appear in art across the world from the paleolithic to the present, evidencing our urge to project ourselves onto birds" (jones, 2010a, p. 189). Perhaps this is why in the psychoanalytic tradition of dream interpretation, birds are often considered symbolic of the dreamer's own psyche (Becker, 2000, p. 41).

Avian beings appear in the creation stories of numerous ancient civilizations, potent symbols rich with archetypal meaning (Becker, 2000, p. 94). For example, birds are central to the Tjapukai Aboriginal people of Australia. In the Tjapukai creation story,

all of the Earth's species are born from a bird via a cassowary egg that is struck by lightning (Montgomery, 2011, p. 73). In Egyptian mythology, it is a primeval goose who "either laid the world egg or—according to different versions—was born from it" (Becker, 2000, p. 130). The Kono people of Guinea's creation story tells of Earth's species living in eternal darkness before a rooster and a Tou-Tou bird sang the first sunrise into existence (Beier, 1966, p. 5).

The Judeo-Christian creation story similarly considers the role of birds in the world's formation, though they play a less active role as creations of god rather than creators in their own right. The Old Testament of the Bible describes the first animals formed by God as the "creatures of the sea… and every winged bird according to its kind" (Barker, 1985, p. 7). Thus, the formative power of birds as woven across the creation stories of these diverse cultural tapestries testifies to humanity's long-held avian fascination as well as to the powerful symbols that these winged creatures represent as dwellers of both earth and sky.

For centuries, humans "have felt drawn to birds and viewed them as messengers or representatives of some kind of mystical communication" (Murphy-Hiscock, 2012, p. vii). The avian ability to blur distinction between aerial and terrestrial boundaries is associated with spiritualism and transformation, with birds as mediators between the earthly and supernatural realms—a hint toward the alchemical power to bridge opposing forces. Among the Celts, swans were thought to embody celestial beings, and in alchemy, were "regarded as a symbol of the spirit and of the mediation of water and fire" (Becker, 2000, p. 289). Both in China and in Egypt, wild geese were considered intermediaries between heaven and Earth (p. 130). In Syrian tradition, burial tombs often

depicted eagles guiding souls to the heavens, whereas doves have long played a similar function in Judeo-Christian culture (Birds in Mythology, 2014).

Within Shamanism, birds not only serve as spiritual guides to the upper- and underworlds, but at times they are also seen as the embodiment of human beings transformed by supernatural powers (Becker, 2000; Smith, 2007). Owls are hated and feared among the Western Cherokee because they are believed to be witches and sorcerers transformed; similarly, the Cherokee Raven Mocker is a fearsome, fiery bird-like creature said to terrorize humans to death (Kilpatrick, 1997, p. 9). The Thunderbird is another prominent figure in Native American mythology, a supernatural being who brings lightning, thunder, and rain from the heavens (Clark, 1953).

This transformative power of birds was well noted by the medieval alchemists, who were concerned with transmutation of base metals into silver and gold at the exoteric level, which at the esoteric level became a metaphor for the transmutation of "sinful man into a perfect being"—self-realization through individuation in depth psychological terms (Holmyard, 1957, p. 16; Jung, 1928/1966, pp. 173-241). The sacred symbolism of alchemy is steeped in avian imagery. Eagles, for instance, often represent spirit, and the philosophical egg is depicted as a container for the alchemical process of *coniunctio*, the union of opposing forces (Becker, 2000, pp. 91-95; Franz, 1980a). Much of avian alchemical imagery has roots in ancient Greek, Roman, and Egyptian mythology. The Phoenix is one such example (Becker, 2000, p. 232), representative of "renewal in general as well as the sun, time, the Empire, [and] metempsychosis" or the transmigration of the soul (Van den Broek, 1971, p. 9). Egyptian pictograms also employed avian images as symbol, using "birds to depict sounds and concepts" (jones, 2010a, p. 184).

Our ancient avian affinity is also evident in our veneration for birds' vibrant plumage. Bird feathers, long valued for their intrinsic splendor, have been used in Indigenous societies the world over to denote esteem and sacredness in dress. Prime examples can be found in the intricate headdresses of the ancient Mayans (Bonta, 2010, p. 97), the magnificent red and yellow cloaks of early Hawaiian royalty (Nunan & Ducey, 2008), and the hair feathers that denoted status among Māori warriors, which were sourced from the now-extinct Huia (Houston, 2010). In the case of the Māori, the black and white feathers of the Huia were selected rather than the brighter plumage of other species because these feathers symbolized the qualities of the Huia, whose cooperative foraging behavior among mates "came to represent extreme fidelity, devotion and faithfulness" (p. 53). It is interesting to note the discrepancy between humanity's reverence for the symbolic aspects of avian beings while simultaneously killing birds in physical form, particularly when said killing is in the name of what is *tapu* or sacred.

Firmly rooted in this rich collective soil, the archetypal symbolism of birds reaches from deep within human ancestry into the present day. One need only look so far as the Bald Eagle to see the potency of avian influence upon collective psyche (Becker, 2000, p. 91). Bird imagery is prolific in U.S. culture, embossing the logos of countless corporations from Twitter's blue songbird to the bright tail of the NBC peacock. Birds inspire the names of our sports teams, such as the Cardinals, Falcons, and Seahawks. Infiltrating our very language, avian influence can be found in numerous expressions (i.e. *birds of a feather*) and idioms (i.e. *to parrot someone*) often employed in the United States as well as abroad.

Fascination with birds extends well beyond visual and linguistic symbolism to encompass contemporary religious and spiritual beliefs as well. An Associated Press poll (2011) showed that 77% of American adults believe in angels, supernatural beings who merge avian and human likeness (Becker, 2000, p. 41). Clearly, the powerful symbolic qualities of birds retain an active hold upon the human imagination. Yet "the beating hearts and wings of birds are not symbols. Birds feel real fear, real joy, real hope and disappointment" (jones, 2010a, p. 184). As with the Huia, a species now extinct, it would seem that reverence for living, breathing birds falls short when compared to that we assign to their symbolic brethren.

Day-to-day avian encounters, whether direct (e.g., *pets*) or indirect (e.g., *food*) convey a very different inflection from that applied to the allegorical birds of the imagination. Abstract concepts like freedom and transcendence stand in stark contrast with the reality of killing and captivity, wherein presumptions of normalcy imply cages and commodification rather than reverence for the sacredness inherent in profound archetypal meaning. To confront this reality head on is to tangle with another archetypal force, the *shadow*. Carl Gustav Jung described the profound difficulty of this challenge:

> This confrontation is the first test of courage on the inner way, a test sufficient to frighten off most people, for the meeting with ourselves belongs to the more unpleasant things that can be avoided so long as we can project everything negative into the environment. But if we are able to see our own shadow and can bear knowing about it, then a small part of the problem has already been solved: we have at least brought up the personal unconscious. The shadow is a living part

> of the personality and therefore wants to live with it in some form. It cannot be argued out of existence or rationalized into harmlessness. (1954/1968a, p. 20)

The ability to look oneself honestly in the mirror can be a daunting prospect, yet it is necessary if we are to better understand the intricacies and implications of humanity's role as bird captors. Indeed, a central aim of this dissertation is to provide such a mirror.

The onset of capture and captivity of birds varies among cultures, although it is pervasive in nearly all, save perhaps for the Jain of India, who are committed to nonviolence in everyday life. Though at this juncture it is impossible to determine the precise moment in history when human beings first began the practice of bird-keeping, genetic analysis of chickens suggests it has been carried out for at least 10,000 years, when wild junglefowl were first domesticated in Asia (Davis, 2009; Ekarius, 2007; Miao et al., 2012; Storey et al., 2012). Given that many of these studies rely upon changes in DNA that accumulate over many generations, it is likely that the capture of wild birds occurred earlier as a necessary precursor for the process of domestication. Further, many captive species have never been domesticated at all, such as parrots, falcons, and ostriches, whose DNA in captivity is indiscernible from that of their wild counterparts. A more detailed discussion of domestication will take place in the literature review (pp. 29-129).

Regardless of when and where birds were first held captive, that moment in history marks a fundamental shift in the avian-human relationship. No longer contemporaries with comparable rights and capabilities as participants in the web of life, birds became possessions and humans their captors. This shift in power was decisive and, as when a stone is thrown in water, the consequent ripples continue to unfold into

the present day. Modern technologies allow for the capture and commodification of birds on an unprecedented scale. Presently, an estimated 50 million parrots are living in American homes, and the number of captive chickens in the United States numbers in the billions (Tweti, 2008; Davis, 2009).

Despite its monumental scale, the psychological implications of this practice remain largely unexamined. Avian and human psyches do not exist within a vacuum; interactions between species reciprocally affect one another in ways both subtle and overt (Bradshaw & Watkins, 2006). The purpose of this study is to bring to the fore these reciprocal impacts upon psyche, raising a critical awareness of the role that captivity plays in the psychological wellness of both birds and humans while challenging the social constructs that allow for bird captivity in the first place.

Autobiographical Origins of the Researcher's Interest in the Topic

You do not have to be good.
You do not have to walk on your knees
for a hundred miles through the desert, repenting.
You only have to let the soft animal of your body
love what it loves.
Tell me about despair, yours, and I will tell you mine.
Meanwhile the world goes on.
Meanwhile the sun and the clear pebbles of the rain
are moving across the landscapes,
over the prairies and the deep trees,
the mountains and the rivers.

Meanwhile the wild geese, high in the clean blue air,

are heading home again.

Whoever you are, no matter how lonely,

the world offers itself to your imagination,

calls to you like the wild geese, harsh and exciting –

over and over announcing your place

in the family of things.

—Mary Oliver (1986, p. 14)

My intention in the following section is to trace an abbreviated avian autobiography, sharing some key experiences that inform my present understanding of relationships between humans and birds. This move is reflective of the relational paradigm that guides this work, providing a critical counterbalance to the avian perspectives explored throughout. It describes my view from the human side of avian-human relationship. I do not, after all, come to the table *tabula rasa* nor free from psychological transference, but rather carry a set of complexes and projections, which in turn have metamorphosed over time. In this transformative aspect I, like the birds, am continuously engaged in the process of individuation.

As a child, there was a story I loved to tell anyone who would listen: That I once saw a purple swan swimming in the pond behind our house. To the credit of my listeners, this fib was always met with feigned belief; perhaps they saw no harm in a 6-year-old's whimsical imaginings. Yet a funny thing happened, which happens often when specious stories are repeated. Over time I began to believe I'd really seen it. So vivid were my recollections that I could practically trace the water beading off those

lovely lavender feathers, could hear the muffled wing beats as the swan descended from the sky and slid to a stop across the pond's glassy surface.

And why not believe such a thing? It never seemed too far-fetched, for the world around me was bursting at the seams with countless examples of Bird Magic: the Canada Geese whose precise migrations marked the seasons without fail; the Great Blue Heron's statuesque stillness punctuated by lightning-fast fish spearing; the ducklings whose mothers transformed into fierce falcons upon my encroachments; the parakeets and humming birds and peach-cheeked Cockatiels who proved that indeed feathers can and do come in every size, shape, and color. I was a student of each and every one, these birds imparting to me that the breadth and depth of avian expression can accommodate a purple swan and then some.

Far from my formative days of swan fibbing, as I got older, my relationship with birds became more complicated. For several years, springtime for me meant monitoring the nesting sites of the ducks that lived on our pond. When the eggs were close to hatching, I waited until the mother was out foraging for food and took this opportunity to slip a few eggs from her nest. To assuage any guilt born of this egg-napping, I rationalized that I was serving a greater good and observed that many small ducklings who took their chances out on the pond met a premature end through predation. For a small and defenseless baby duck, the land was only slightly more dangerous than the water, where hawks and eagles assaulted from above while massive Bullfrogs swallowed from below. With my protection they had the greatest odds of reaching adulthood. This is what I told myself, although in retrospect I acknowledge that the benefits—and drawbacks—of this arrangement were disproportionate and often weighted in my favor.

I placed the stolen eggs in an incubator and then hand-reared the ducklings, intoxicated by the privilege of full access to fluffy plumage that would otherwise be inaccessible were their mothers allowed to mother. Through trial, error, and intuition, over the years I discovered a great deal about the hearts and minds of ducks. In a way, these encounters served as my own version of famed ethologist Konrad Lorenz's imprinting studies (1937) that would later give rise to attachment theory as articulated by Mary Ainsworth and John Bowlby (1991). I noticed that certain sounds and movements were easier to impart on young ducklings than others. What worked best was often what most resembled the upbringing they'd have had out on the pond with their mothers, calls mimicking her voice, movements indicating where to find food, that danger was coming, or that all should settle in for some light sleeping. Those mother ducks whose clutches escaped the grasp of predators—myself included—served as my wisest mentors, for they were the ones with the keys to unlock a young and impressionable duckling's heart.

It was during this time that I also learned of the fragility of the aquatic fowl's psyche: that a duck (or goose for that matter) seems to lose its species self-identity if bonded solely with humans, instead becoming for all intents and purposes a hydrophobic human who wants to live inside the house just like everybody else. Victims of our own acculturational success, these now-grown ducks in identity crisis ceaselessly followed my every move. At first endearing, this proclivity quickly revealed its shadow side. As my wayward progeny pressed themselves against our sliding glass doors, defecated upon every walkable surface, and became covered in oil from waiting forlornly where last the car was parked, I found myself regretting fulfillment of a wish. Furthermore, I gained a

deep respect for the intense devotion that comes along with earning a bird's passionate, unabating, and unconditional love.

As the years passed, my bird rearing expanded beyond the aquatic realm to include chickens, guinea fowl, and even turkeys. In my experience, such terrestrial species tended to bond with all the intensity of waterfowl yet demonstrated greater psychological resilience in regard to maintaining their avian self-identities. A duck raised exclusively by humans will think itself a human in duck's clothing; a chicken, on the other hand, always somehow remembers that it is a chicken. In other words, I observed that ducks and chickens have different attachment styles, the former seemingly more susceptible to identity crises along with all the insecurity that such internal conflict brings (Bradshaw, Yenkosky, & McCarthy, 2009). Taken as a whole, these formative fowl experiences impressed on me the need for reciprocity and recognition of authentic avian otherness. Rather than imposing cadence as I had done with waterfowl, I was invited by those land-based birds with intact identities to become culturally bilingual.

And then there were the parrots, bilingual in their own right. The first parrot I remember meeting was a Budgerigar, followed soon after by a Cockatiel. Neither was particularly interested in me, preferring to spend time with my parents. That all changed when I met Rowdy, Rainbow Lorikeet, whose feathered tongue hinted at his specialized diet consisting primarily of pollens, nectars, and fruits. Rowdy was not just a parrot, he was *my* parrot, and I spent countless hours fashioning toys and clothing for him and teaching him how to speak Human. Rowdy had an intense personality, his lightning-fast thoughts and actions magnified by the dilating pupils of his fiery red eyes. He was fueled by liquid sweetness, after all, but unfortunately for every high in blood sugar there was

also a low. Rowdy's mood was mercurial, his demeanor shifting in an instant. When the initial signs of this switch were not heeded, things could quickly take a turn for the worse. Such was the case one evening, when I was about twelve years old.

On this particular night, Rowdy was perched on my finger when struck by an exceptionally foul mood. Suddenly and seemingly without provocation, he bit me quite hard, drawing blood. As though stung by a bee, I instinctively flicked my finger. Rowdy's wings were clipped, so he hit the floor abruptly. It was immediately evident he had injured his wing and, devastated, I fled into the forest behind our house, sobbing for hours in the dark. Rowdy was taken to a veterinarian and given a cast, which he proceeded to chew on constantly. This arrangement was not allowing his hollow bones to heal properly. A very expensive surgery with an avian specialist in the Bay Area was scheduled. Rowdy never woke from anesthesia. If I had spent as much time learning about him as he had spent learning about me, perhaps things would have turned out differently. The pain was an invitation to individuate, to shed anthropocentric ego for a relational sense of self (Jung, 1951/1968, pp. 3-35). My experiences with Rowdy instilled in me a deeper recognition of the subjective aspects of avian life and the solemn responsibility that is assumed when said life is literally taken into one's hands.

The enormity of this responsibility becomes even more apparent when conversing with avian beings whose communiques are transparent to humans, those bilingual few well versed in the many sayings and tonal inflections that comprise human language. Cheyenne joined our family when I was about ten or eleven. A long lived and socially astute Blue and Gold Macaw, her capacity for trans-species relationship flourished as she grew into adulthood. The closest thing to a younger sister as I have ever known, we've

matured together through the years, picking up ever more intricate vocabularies along the way. Our relationship has matured, too, for in Cheyenne's eyes I have gone from sibling rival in need of vanquishing to familiar ally who shares in her favorite pastimes like singing and drinking smoothies. That is, of course, unless my husband is around. She has taken a liking to him, meaning that in his presence once again I must be vanquished, even were I to offer all the smoothies in the world. I used to joke that having Cheyenne around is like having a sibling that can be locked in a cage. Given what I know today, the stark reality of that statement has stripped the humor from it. Now past her twentieth year, Cheyenne continues to offer insights into the subtler intricacies of the avian heart and mind, a challenge to the ethical justifications that would allow for the holding of such a magnificently sentient creature captive.

The case for avian sentience—and perhaps also the clashing of cultures across species—was never as magnified in my life as it was through my relationship with an unpresuming Cockatiel named Q-Pon. When I relocated to attend university at the age of 18, the experience of uprooting from my birthplace was profoundly lonesome. During those first few months I became increasingly withdrawn and depressed. All this changed once I returned from winter break with a new feathered friend in tow, for it was earning Q-Pon's trust and affection that lifted me from the doldrums. She had been a Christmas gift for my mother, but once Q-Pon and I bonded it became immediately apparent that there was no dividing us. She was a shy and timid bird, yet it did not take long for us to become inseparable. We did everything together, each becoming progressively more attuned to the psyche of the other. At the time, I was studying environmental science and becoming more aware of the philosophies behind animal rights. Time and learning led

me to the conclusion that to clip Q-Pon's wings would be a violation of her *telos*, a Greek word indicating one's essence or purpose. Thus Q-Pon flew free throughout the house.

Just days after graduating, I was packing and making preparations to move back home when something terrible happened. Q-Pon's cage had been outside the house for cleaning, a regular routine in our two-and-a-half years together. Only this time, she somehow managed to open her door while I was fetching newspaper from inside. I stepped into the backyard just in time to see Q-Pon's grey tail disappear over the neighbor's fence. I was frantic. I wandered the streets of our neighborhood, calling for her and straining for a reply. I put up posters everywhere, made phone calls, and poured my heart out online. I waited on the roof with a big yellow blanket for days on end. After two weeks I received a phone call from one of the shelters where I'd left a poster. Q-Pon had been found, but she did not survive the ordeal. A nice family had given her water and a cat carrier in which to sleep, but she never woke up. In those two short weeks, Q-Pon had traveled more than six miles, even passing through a busy airport.

I still think about her a lot and miss her profoundly. The guilt is something that never goes away. Despite how devastatingly things turned out, if given the chance to go back I would not alter my decision to keep her wings unclipped, though I would be more mindful during cage cleaning. For flight gave Q-Pon happiness, allowed her *telos* and to feel empowered in the face of danger—to make her own decisions relative to her captive life. Through the loss of Q-Pon, I learned that to relinquish absolute control over another being is to invite both the joy and pain of such a decision. Further, it was not the unclipped wings that were to blame for this kind-hearted Cockatiel's undoing, rather the fact that she was attuned to human culture rather than to the culture of her species. Q-

Pon lacked the outdoor survival skills that a life in the wild would have provided, instead honing the indoor survival skills necessary for adaptation to a human environment. With the benefit of hindsight, I can see now that although her wings remained intact, it was Q-Pon's psyche that had been inadvertently clipped. Hand-reared as a chick, this process of cultural re-attunement began the moment she hatched from her egg and was unwittingly reinforced by me with every tortilla chip and nap in bed.

Such has also been the case for Gir, a bright and opinionated Sun Conure who hatched within a Berkeley, California pet shop in late 2006. Aware as I am now of the myriad and complex issues surrounding the pet industry, including countless unwanted birds, today I would not acquire a parrot in this manner, yet admittedly at the time I saw it as a plus: one less bird snatched from the world's dwindling rainforests and pre-tamed to boot. It had been about a year since Q-Pon died, and in retrospect I was still raw with grief. At the time I reacted with the fear-based decision to clip Gir's wings so as to avoid a similar fate. For a young Sun Conure still adjusting to life outside the pet shop, this act precipitated a breaking point.

Gir expressed her inner turmoil outwardly when she began the self-injurious practice of plucking out her own tail feathers, a tell-tale symptom of trauma in birds (Bradshaw, 2009; Bradshaw, Yenkosky, & McCarthy, 2009; Bradshaw & Engebretson, 2013). It took months of vigilant companionship and gentle redirection to break this pattern of self-mutilation. It also took some painful self-reflection and the realization that in clipping her wings, I had prioritized my own fears above her most basic freedoms, had single-handedly initiated a cycle of trauma. Throughout the years, Gir has forced me to face these consequences of my assumption of human privilege head-on and has

challenged me to approach our relationship on a more even footing, paying equal heed to both avian and human dignity. I still keep a keen eye out, as I know her feather plucking could happen again—for the psyche of a bird is a delicate thing.

As with so many of the feathered souls who have graced the preceding pages, Gir is highly attuned to human culture. She regularly takes showers, goes to the bathroom in the sink or toilet, and mimics the sound of running water, coughing, whispering, and various other noises. She can sense when someone new is afraid of her and seems to relish in the power that comes with this observation. Perhaps most telling, she has shown little interest in befriending other birds and instead has formed a romantic attachment to my husband. With all this human-like behavior forming the basis of my understanding of what it means to be a Sun Conure, I realized that some research was in order if I was to know Gir for the bird she truly is. I discovered that Sun Conures are a flocking species native to northeastern South America (Sun Parakeet, 2012, para. 1). Until recently, this species was thought to be plentiful in its native range, but the latest surveys have found that they are rare where once thought common, and in 2008 the Sun Conure was up-listed from Least Concern to Endangered on the International Union for Conservation of Nature's Red List. This means that in the few short years since I have known her, Gir has officially become an endangered species.

My discovery of this fact just a few years ago forced me to re-examine many previously held assumptions about Gir: that it was morally sound to have her because she was bred in captivity rather than caught in the wild; that she was happiest living with me; that the barbarism of capturing wild birds for the pet trade is something that only happens *over there* and *back then* and has nothing to do with us. But what of Gir's forebears?

Were they wild-caught? And what does it mean to be endangered? That word conjures with it another, which is even more frightening: *extinct*. Suddenly I realized I had distanced myself all these years from what is truly conveyed by that term—the permanence, the loneliness, the genocide (Davis, 2010, pp. 254-260). Whether by accident or design, my psyche had filled the space around it with images of drawings from the late 1800s, of Dodo Birds and descriptions written in calligraphy. Absent were the creatures themselves, like the little yellow bird who still shares a home with me.

As demonstrated through this abbreviated relational avian autobiography, my relationship with parrots and poultry has been complex and at times even paradoxical. I find myself reconciling the fact that I am simultaneously bird murderer and rescuer, inhabitant of a liminal middle space between friend and foe—a place Gloria Anzaldúa (1999) called the borderlands. This straddling of sorts is made even more complicated by the observation that just as the psyche of birds can become humanized, my own psyche in many ways is quite avian, a quality manifested most clearly in my neuroses: social anxiety, trichotillomania, insomnia. I would be remiss not to mention also my married name, Crow, which refers not only to a species of corvid but also to the daily proclamations made by roosters.

There are still other ways in which the birding of my psyche has infiltrated my identity. Given my numerous avian companions and preoccupations—present study included—I have semi-jokingly referred to myself throughout the years as a "crazy bird lady," though I fall short when compared to those who commission avian family portraits. Given all these swirling, confounding forces that blur the line between humanness and birdness coupled with innumerable ruptures in human-avian relationship,

I find myself attempting to locate my position within this multifarious soup. From within this morally ambiguous mess, I am compelled to tease out those beautiful parts that promise pathways toward reconciliation, equilibrium through avian alchemy.

As of this writing, my flock consists of 11 avian beings: one rooster, Robin; six hens, Red, Chipmunk, Charlene, Coyote, Skunk, and Velvet Bear; and four parrots, Gir, Skittles, Luca, and Hoei, who was named by a previous guardian after the brand of her cage. It is often from within my flock that I catch a glimpse of the many subtleties surrounding what it means to be a captive bird—as well as a bird captor. Through their eyes, I attempt to re-experience the world. As I ponder the illegal parrot pet trade, for instance, I wonder about Gir's parents and her parents' parents; when I see images of hens living in battery cages, I imagine the faces of my chicken friends staring back. The effect is as stark as it is profound, and I find myself trapped just as they are within the sticky, multivalenced dynamics of bird oppression.

My flockmates ground this work in the present, and behind us all the lessons gleaned from the avian mentors who came before. The birds I know are a continual reminder that this research is not only relevant, it is desperately needed, that for every one of the birds in my care, there are at least a million more condemned to needless suffering in captivity. This in turn also leads to needless suffering among humans. Love calls me to action, to amplify the voice of symptom so that others of my species can awaken fully to the dire nature of *business as usual*. I credit the many birds I have known, past and present, with opening my eyes, and thus I owe each a great deal of gratitude for the contributions they have and will continue to make in regard to this study.

The Researcher's Predisposition to the Topic

For me, the practice of keeping birds in captivity is fundamentally problematic. At the same time, it is not an issue that is entirely black or white. Many of the ethical difficulties I see stem not only from the act itself, but from the motivations and assumptions that underlie it. For example, the commodification of nonhuman animals results in their objectification and implies that humans are inherently superior as a species and thus deserving of subjectivity, whereas other species are not. This anthropocentric worldview is reflected in the legal regulations meant to protect aviankind, which typically refer to birds as either property belonging to humans or natural resources. The Convention on International Trade in Endangered Species of Wild Fauna and Flora (CITES), for instance, allocates quotas regarding the number of protected birds that can be captured and killed. The Animal Welfare Act omits birds used in research and agriculture entirely. Despite the fact that it is beyond the scope of this study to remedy perceived shortcomings in regard to such policies, it is important to note that the implicit hierarchical assumptions embedded within these documents reflect the dominant paradigm within contemporary U.S. culture, one in which birds are routinely denied the intrinsic value possessed by all experiencing, psychological beings.

The case for avian psyche—impressed upon me at the individual level through numerous avian encounters like those mentioned in the section above—has been strengthened in recent years by findings within the neurosciences. In 2012, it was written in the Cambridge Declaration on Consciousness that birds, among other nonhuman animals, "have the neuroanatomical, neurochemical, and neurophysiological substrates of conscious states along with the capacity to exhibit intentional behaviors. Consequently,

the weight of evidence indicates that humans are not unique in possessing the neurological substrates that generate consciousness" (Low, 2012, para. 6). This inner psychical life of birds implies a sentience steeped in ancestry preceding the emergence of humankind, each species evolving over time, neither superior to the other.

Within this framework that disables human privilege based on the assumption of intellectual primacy, subjugating birds for exploitation, denying basic freedoms, and relegating some to the fate of extinction are practices ethically comparable to human imprisonment, slavery, and even genocide (Davis, 2005; Spiegel, 1996). Just as the captor of human beings has an ethical responsibility to those in his or her care, so too does the captor of birds. Moreover, just as human dignity is better served by freedom than captivity, so too is the dignity of birds. This is true for individuals who are physically confined as well as those who are held by invisible walls, internal psychological landscapes that have been pruned through the processes of domestication and acculturation. It is essential to note that neither birds nor humans are immune to such processes. Instead we are engaged in a dynamic, transformative dance with one another and with the larger world around us.

This leads me to a larger theoretical supposition that is foundational to my work, namely that over the course of our agricultural and industrial revolutions, human beings have become increasingly estranged from the rest of the natural world. I see the notion that birds are objects rather than subjects as a symptom of this estrangement. Intimately linked with outer nature throughout most of our evolutionary history, humanity's inner nature adapted for millennia in congruence with a landscape imbued with psyche. Reverence for our fellow species and for those ecological processes that sustain life

followed. As animals whose flesh is comprised of those same interstellar molecules that form water, air, and earth, it is evident that the health of humanity and the natural world are irrevocably intertwined.

Over the course of tens of thousands of years, humans in postindustrialist societies have created increasingly potent technologies designed to alter the natural landscape, technologies that eventually fostered in us a sense of mastery over nature and have allowed for ecological destruction at an exponential rate. Through our manipulation of the natural world, human beings have created environments unlike those we encountered at any other time in our evolutionary history. Conversely, our genome has remained relatively unchanged since the Pleistocene era (Shepard, 1998). The incongruence between humanity's built environments and those natural environments in which our species evolved has deleterious effects upon our ontogenetic development. This often manifests as psychopathology, with symptoms such as anxiety, narcissism, and depression speaking to a larger issue that has been termed Nature Deficit Disorder (Louv, 2008). Bereft of many of the developmental inputs required by the evolutionary expectations of our genome, the modern postindustrialized human has essentially become ontogenetically crippled (Shepard, 1982).

I, too, am developmentally stunted in this way, influenced as I have been by human-built environments and a culture that denies its intimacy with the natural world. Time spent outdoors as a child and mindful, connecting practices later in life have provided a salve for these wounds of estrangement, but they can never be healed completely. The twin processes of *conscientização* (Freire, 1970/1997) and individuation (Jung, 1928/1966, pp. 173-241) are ever-unfolding. Hence in a way, this study is an act

of the blind leading the blind; admittedly there may be vestiges of ontogenetic crippling that prevent me from seeing certain aspects of phenomena or that confine me to the unconscious projections and patterns of thinking inherent to a culture of estrangement.

Whatever the causes or ramifications of humanity's imagined disconnect with nature, it is my firm belief that a pathway toward reconciliation can be found in our relationships with nonhuman animals. To have the privilege of befriending another species is to experience first-hand the contradictions that come with the simultaneous straddling of two incompatible realities: what we are told by our culture to be true and what we feel to be true through our lived experiences. Our heads caution that when we feel love for an animal and see aspects of ourselves in them, we are somehow fantasizing or anthropomorphizing or projecting. But our hearts tell a different story, one that seeks communion rather than separation, to rejoice in this reciprocal recognition rather than to repress it. The heart remembers something that the head has forgotten: That human beings are not superior to and separate from animals, that we *are* animals and as such we are equally endowed with the psyche in and of the world.

Relevance of Topic for Depth Psychology

The multifaceted motivations underlying human beings' desire to hold birds captive cannot be explained solely in terms of conscious phenomena; rather it requires an understanding of the interplay between conscious and unconscious forces (Jung, 1954/1969, pp. 167-199). Likewise, the trans-species relational dynamics that result from captivity cannot be entirely relegated to the domain of consciousness. Recognition of this porous exchange between conscious and unconscious factors aligns this study with the field of depth psychology, which holds as a fundamental supposition the existence of

the unconscious. Early contributors to the field, including Sigmund Freud and Jung, probed into the depths of this mysterious psychical realm, garnering insights that would eventually form the basis of theories still relevant to depth psychology as a whole and to the line of inquiry central to this particular dissertation study. Freud's ideas concerning unconscious drives and the psyche's many defense mechanisms, for example, shed light upon the reactions of avian and human individuals who experience trauma as a result of captivity as well as the justifications cited for inflicting such. Similarly, many of Jung's theories, including archetypes (1954/1968a, pp. 3-41), the collective unconscious (1954/1968a, pp. 3-41; 1954/1969, pp. 190-199), individuation (1928/1966, pp. 173-241), and the egoless Self (1951/1968, pp. 23-35), lend themselves to a deeper understanding of those implications associated with keeping birds in captivity that operate at both an individual and collective level.

At its deepest core, the fundamental goal of this study is depth psychological in nature, to bring to the surface and make conscious the often submerged and hidden forces that influence psyche. This is similar to what Paulo Freire (1970/1997) referred to as *conscientização*, developing a critical awareness of the hidden cultural narratives that uphold oppressive dynamics within a society. Indeed, the very practice of keeping birds in captivity may go completely unconsidered by some, who take it as the unquestioned norm that parrots belong on pirates, geese are most valuable when laying golden eggs, and chickens are most appealing when reduced to nuggets.

Beyond its relevance to the field of psychology as a whole, this topic of study is pertinent to many subdisciplines within the field. By questioning internally and externally embedded power structures and creating avenues of advocacy for those avian

and human beings who are presently oppressed physically and psychically, it is a contribution to the fields of liberation and critical community psychology. Through recognition of the reciprocal relationship between humankind and the more-than-human (Abram, 1996) realm, this study has firm roots within ecopsychology as well, supporting the idea that archetypes are not relegated to the human psyche, but rather appear throughout nature. It promotes trans-species understanding through an ecopsychological praxis that allows for the mutual and authentic expression of psyche from both sides of the avian-human relationship.

What makes this study unique is that it considers both avian and human psyche simultaneously and reciprocally in a way that treats all species as experiencing subjects, an attempt to move beyond the anthropocentric paradigm that is dominant in U.S. culture. It is the only study of its kind to juxtapose the experiences of so-called domesticated (i.e. poultry) and nondomesticated (i.e. parrots) avian species in captivity while examining the ways in which these experiences converge, inform, and transform human experience. The analytical lens I bring to this research is, in many ways, unique as well, consisting of three layers of increasingly precise scale: that of depth psychology, ecopsychology, and trans-species psychology. It is through this tri-focal lens that I am able to explore those uncharted places that are the spaces in between—in between bird and human, in between humanity and the rest of the natural world, and in between conscious and unconscious psychological processes.

Definition of Terms

Before delving deeper, let us pause for a moment to consider the importance of linguistic convention, those cultural constructs that inform terminology. The language

we use is neither sterile, neutral, nor benign. Words—and the ways in which we wield them—carry an etymological charge, socio-political histories rife with implicit assumptions. Our values are imbedded within our words, revealing how we see the world and how we identify ourselves: parrot *breeders*, poultry *farmers*, pet *owners*, avian *co-creative companions*. A brief survey of the prevailing language used within avian-centered groups reveals the often subtle ways in which language influences our relationships with birds while simultaneously shaping our own self-perception.

For example, within the broiler chicken industry, it is customary to refer to *meat birds* as being in an antemortem state prior to processing, at which point they become a postmortem *product* (e.g., Owens, 2014). The framing of these birds' lives in terms of death reveals the values inherent to the industry, that chickens are objects, means to an end, products to be churned into profits. The longer they are alive, the more detrimental is their effect on the bottom line. The worth of a broiler hen, measured by the pound in dollars and cents, cannot be realized ante-exsanguination; she must be bled out if she's to bring the cash ledger from red to black.

Another example can be found in the realm of parrots, wherein the term *parront* (2017) refers to a human who identifies as the parent of a parrot. A familial kinship beyond parrot ownership is implied, a warm fuzzy feeling evocative of photo albums containing baby's first words. Yet this language can be problematic in that it is framed in generational terms, the human always the elder, the bird an eternal child. In neither of these examples is the bird's authentic voice represented. In the former, it is denied outright; in the latter, its immaturity is imposed. Indeed, it is not uncommon within avian research to draw comparisons between the minds of parrots and human children (e.g.,

Angier, 2016; Bradshaw, Yenkosky, & McCarthy, 2009; Emery, 2006; Pepperberg 1999; 2008). On intelligence tests, for instance, parrots are said to achieve the "levels of [a] three- to five-year old" child (Tweti, 2008, p. 9).

With the profound power of language in mind, I have made several deliberate linguistic choices throughout this project with the intention of bringing the work into alignment with the trans-species ethic that guides it. This ethic, articulated more fully in the pages that follow, is greatly informed by the work of Gay Bradshaw, who similarly felt the need to clarify linguistic convention at the outset of her book on pachyderm post-traumatic stress disorder (PTSD), titled *Elephants on the Edge*:

> Unless otherwise specified, *elephant* is used with the assumption that the characteristic being described generally holds for all elephant species and subspecies. *Captive* or *captivity* pertains to elephants in the closed confinement characteristic of zoos, circuses, and other settings of extremely limited space; the terms imply attendant psychological and physical restrictions. *In captivity* is used in lieu of *captive* to emphasize that it is the conditions, not the elephant, that differ behind bars or fences compared with animals who are free ranging. (2009, p. xxvi)

For the purposes of this study, Bradshaw's mindful linguistic moves regarding elephants in captivity are extended to the avian realm. Upon this firm trans-species foundation, I have built some additional considerations.

Chief among my concerns is seeking ways to further illuminate and mitigate those largely invisible embedded cultural narratives that serve to hinder connection across species. One such implicit cultural assumption is that of species ascendancy, the idea that parrots are inherently more majestic than poultry, for example, or that humans are

superior to all. As a rebuttal to this implied hierarchy, humans are recognized as animals and thus the phrase *nonhuman animal* is often employed. In addition, much care has been taken in regard to capitalization and naming, which admittedly at times diverges from those rigid formatting guidelines set forth by the American Psychological Association.

Following a precedent set by the American Ornithologists' Union, official common "names for each recognized species, where they exist, are to be treated as proper nouns and capitalized accordingly" in recognition of the fact that "capitalization implies elevated status, and until recently most of western culture thought little of animals" (Hurtado, 2015). In much academic writing there is a preference for binomial nomenclature when identifying a particular species, yet here English names are preferred over Latin. This move is an answer to those human hierarchies that give primacy to individuals with access to formal (i.e. Westernized) education and impose homogenous taxonomic classification in place of regional names, thereby colonizing language.

To further eschew hierarchical interpretation, careful attention will be paid to word order. Avian-human and human-avian will be used interchangeably and appear with approximately equitable frequency, as will the listing order of poultry prior to parrots and vice versa. The title of this work—*Poultry, Parrots, and People*—represents a conscious deprivileging, the order intentionally chosen to give primacy to those species who currently experience the greatest marginalization in modern society.

Cultural narratives like species ascendency do not take hold in a vacuum; a prerequisite to ordering is othering given that a being cannot be categorized as *greater than* or *lesser than* without first being seen as *other than* oneself. Underlying this

conceptual divide between humanity and the rest of nature is a Cartesian split between matter and spirit. To counter this, and in following the path laid out by Bradshaw and others including the Indigenous peoples who walked it before, all living beings will be referred to using personal pronouns (i.e. *she*, *he*, *whom*) regardless of species.

A few more terms defined: For the purposes of this study, *psyche* refers to the inner psychical life of a sentient being, including conscious and unconscious behaviors, emotions, and expressions, and is assumed to be a quality of both human and avian experience. At times, this will be used interchangeably with the word *soul*, its usual translation from Greek, while acknowledging that there are subtle differences, including scientific versus religious connotation. The term *Psyche*, expanded upon throughout the course of this study, refers to a relational psychical field akin to Jung's idea of the collective unconscious, only comprised of both unconscious and conscious processes. As with P/psyche, *personhood* and *personality* are seen as qualities experienced by all sentient beings, not just humans. Also shared across species, *imaginal alchemy* is a phrase used in the research question to denote an imaginal process akin to individuation wherein conceptual opposites are internally synthesized—metaphorical base matter transmuted to gold—and manifested outwardly via creative and/or social expression.

The idea of *wellness* is preferred over terms such as well-being that imply a static state and do not necessarily include all aspects of experience. The word *health* is similarly eschewed, further complicated by the shifting cultural constructs that redefine the baseline as to what is considered healthy or not. Just as the idea of health implies its opposite in the notion of unhealthiness, the concept of wellness encompasses a spectrum which includes unwellness as its counterpoint. Here, wellness is defined as congruence

between the environmental (including social) expectations implicit in our ancestral genomes—the needs of an embodied psyche—and the lived environments in which we find ourselves.

Statement of the Research Problem and Question

The research problem. Presently, our understanding of avian-human relationship and the implications of keeping nonhuman animals in captivity is primarily one-sided and confined to the realm of behaviorism, which limits experience to what is observable outwardly rather than recognizing the complex interplay between internal and external psychological dynamics. This one-sidedness is compounded by the assumption of human privilege embedded in the dominant cultural narrative and used as an ethical justification for maintaining this status quo. Consequently, a barrier emerges preventing humans from engaging with authentic birdness and all the alchemical transformation that such entails. The situation is exacerbated by a paucity in the existing literature regarding the deeper, reciprocal psychical dimension that the human-avian relationship implies, particularly those mutual impacts upon psyche that stem from the practice of keeping birds in captivity and the myriad constructs that uphold it.

The research question. How does captivity shape avian-human psyche and what role can imaginal alchemy play in restoring equitable relationships among poultry, parrots, and people?

Chapter 2

Literature Review

This review focuses on the nexus of multiple perspectives and disciplines where bird and human psyches intersect. Its purpose is twofold: to ground discussions of bird and human minds and experiences in this interdisciplinary substrate and to cast a sharp light upon the phenomenon of avian-human relationship in the context of captivity. The first section maps the historical and contemporary landscapes of two divergent—yet in many ways parallel—groups of captive-held birds: parrots and poultry. The avian representatives discussed here have been chosen for their ubiquitous association with captivity in Westernized culture and their potential for contrasting ways in which cultural constructs such as domestication mediate human-avian relationships.

Parrot serves as an umbrella term that includes a diversity of wild, undomesticated although frequently captive-bred, species which span continents. Here in the United States, parrots are the most prevalent exotics held in captivity and the fourth-most popular companion animals following dogs, cats, and fish (Engebretson, 2006, p. 263). Similarly, the term *poultry* encompasses a wide array of aquatic and terrestrial fowl appropriated for human use, including genetically "wild" species like game birds as well as so-called *domesticated* species, a concept and practice which will be problematized and deconstructed throughout the course of this study.

Our avian exploration commences where the bulk of mainstream research resides—in the realm of positivist, "objective" science—by examining literature that describes birds from the outside-in. I begin within the framework of anthropocentrism, juxtaposing ancient and modern bird "keeping" (i.e., capture and captivity) practices,

followed by an examination of the social structures, morphologies, and evolutionary histories of parrots and poultry. This separatist comparative approach is reflective of the reductionistic paradigm that underlies the status quo regarding captive-held birds. The intention of this preliminary excursion is to lay out the prevailing human epistemic and sociocultural landscape so that we may subsequently delve more deeply into largely uncharted territory: an understanding who poultry and parrots are from the inside-out, at the level of psyche.

The scientific rationale for an inclusive view of psyche has been established for more than a decade, bolstered by findings in fields such as neuroscience and trans-species psychology that document analogous brain structures and functions across species, thus opening the door to inferential symmetry in regard to psychical processes (e.g., bi-directional inference; Bradshaw, 2005; 2010; 2017; Butler & Cotterill, 2006; Low, 2012). In light of the observation that parrots and poultry are psychological beings, from a depth psychological perspective these species and individuals share the task of reconciling conscious and unconscious processes along with the myriad challenges that such processes entail, including pathology, projection, and individuation. Given the infinite complexity and transformational quality of this self-actualizing journey, from within a trans-psyche framework birds can be seen as alchemists of sorts, embodiments of *coniunctio,* the union of opposites (Franz, 1980a).

Following the juxtaposition of poultry and parrot lives, I expand focus to include theoretical aspects of the literature with the goal of better understanding and articulating the phenomenon of avian captivity. I begin by examining the largely unconscious forces underlying the dynamics of bird disempowerment. These include human identities as

21st-century Americans and the attendant culturally embedded narratives responsible for conditioning psychology and driving the economic and socio-political factors that motivate and sustain bird keeping practices. Despite the fact that I restrict discussion geographically to experiences within the United States, much of this analysis pertains to locales including avian countries of origin. Such forces lie in stark contrast with holistic, eco-centric worldviews like those found in many traditional, precolonial Indigenous and non-Westernized societies, paradigms that lay the groundwork for the conclusion of this literary review. I close with discussion of theoretical approaches aimed at using the image and methods of avian alchemy to mend divides across species in an effort to disable the human practice of incarcerating and dismembering avian psyches while discerning a path toward reconciliation between birds and their would-be captors.

Literature Relevant to the Topic

> *Parrot and Chicken were fowls living in a village of Mankind near a town; which they had built together. They were living there in great friendship. Then Parrot said to Chicken, "Chum! I'm going to make an engagement for marriage… give me now thy fine dress!" (For the occasion.) Chicken said, "Very good!" and he handed his tail feathers to him. Thereupon, Parrot went on his marriage journey. When he came home again, he said to himself, "These feathers become me. I will not return them…" Parrot took all his family, and they flew up in the air away. At once, he decided to stay there, and did not come to live on the ground again. Chicken was left remaining with Mankind in the town. Whenever Chicken began to call to Parrot up in the treetops, asking for his clothes, Parrot only screamed back "wâ! wâ!" That was a mode of speech by which to mock at Chicken.*

— West African folktale (Nassau, 1914, p. 199)

Across the centuries, birds have had a profound impact upon the human psyche, serving as feathered founts of allegory and inspiration. The depths of this fascination are reflected in classic works such as the "Daedalus and Icarus" episode in *Metamorphoses* (Book 8: 183-235 as cited in Ovid, trans. 2004, pp. 303-305) and Leonardo da Vinci's *Codex on the Flight of Birds* (Smithsonian, 2013), which bridged the experiences of bird and human by imagining into the avian world of flight. Bird magnetism continues to attract humankind, arguably with a pull that is stronger than ever. For instance, 2018—the year of this dissertation's publication—has been declared the Year of the Bird by a host of respected organizations including National Geographic, BirdLife International, and the Audubon Society (Franzen, 2018). This insatiable "bird complex" is also reflected in our collective shadow (Jung, 1951/1968, pp. 8-10; 1954/1968a, p. 20), manifesting as a covetousness that ensnares millions of wild-caught birds each year and threatens approximately one in eight bird species on the planet with extinction (BirdLife International, 2008, p. 2).

Just as it is undeniable, avian allure is nondiscriminatory, blurring the lines between otherwise distinct communities—artists, philosophers, and scientists—in the process. Perhaps it is no surprise, then, that as complement to countless artistic works, a great deal of scientific literature has been published on birds in captivity, some investigating individuals directly and others extrapolating to wild populations or other animals, including humans (e.g., Aydinonat et al., 2014; Borsari & Ottoni, 2005; Bradshaw, Yenkosky, & McCarthy, 2009; Faure, Val-Laillet, Guy, Bernadet, & Guémené, 2003; Marino, 2017; Pepperberg, 1999; Rodenburg et al., 2005; Smith, Taylor,

& Evans, 2011). Over time, each equipped with a unique lens and point of entry, researchers have sown an expansive field of avian hypotheses as varied as the human beings who germinate them. These theories reach into the past, with explorations into the historical role of birds (e.g., Seligmann, 1987; Shelton, 2009) and into the future, applying avian discoveries to innovations like pathogen detection (Cherry et al., 2001) and species cloning (Macdonald et al., 2012). This multidisciplinary tapestry interweaves a myriad of often overlapping –ologies: ornithology, biology, neurology, sociology, ecology, zoology, and more recently psychology (e.g., Bradshaw & Engebretson, 2013; Cater & Bradshaw, 2010; Kaplan, 2015; Marino, 2017), to name a few.

The forces driving bird research are similarly diverse, yet often marked by an overarching scientific agenda that seeks to capitalize upon discoveries, knowledge which in turn is usually gained at the expense of killing the very beings one strives to "know." Furthermore, the findings of these studies are often extrapolated to humans but not the other way around. The unidirectional and predatory nature of such research is symptomatic of the value structures that underlie it, namely that primacy is given to human-centered knowledge, which in turn is the commodity of the university. The effect is that we find the waters of avian inquiry muddied by financial motive, with the majority of studies commissioned by groups with a vested interest in bird commodification.

A prime example can be found in the realm of poultry research. The agricultural industry spends a fortune funding research aimed at maximizing the production value of these birds for eggs, feathers, and meat (e.g., Owens, 2014). To this end, poultry biology and genetic code have been routinely assessed and even engineered in an effort to create the "perfect" supermarket bird, one that grows at exponentially faster rates than it did just

50 years ago (Ekarius, 2007; Meek, 2000). As a consequence of this financial agenda, "scientific literature on [poultry] cognition and behavior is relatively sparse in many areas, and dominated by applied themes, artificial settings, and methodologies relating to their 'management' as a food source" (Marino, 2017, p. 128).

Unfortunately, commodification is not the only way in which the anthropocentric agenda colors avian research. Some academics, for instance, explore the role birds have played in the development of human societies (e.g., Tidemann & Gosler, 2010) or speculate about the potential for avian solutions to solve manmade problems, as with the cloning of extinct species (e.g., Macdonald et al., 2012). Still others employ birds as experimental models within schools and laboratories, beginning with egg hatching exercises in primary school (Davis, 2009) and culminating in complex collegiate theses in fields like neuroanatomy and genetics (Burt, 2007).

This is not to suggest that all avian inquiry is human-centered. In recent years, there has been a small upswell of researchers attempting to move beyond anthropocentric aim by learning about birds in a way that genuinely considers avian points of view (e.g., Bradshaw, Yenkosky, & McCarthy, 2009; Cater & Bradshaw, 2010; Davis, 2009; Seibert, 2016). Still, the entrenched nature of dominating paradigms makes them difficult to escape, leaving many who strive to mend ruptures in avian-human relationship struggling to truly grasp the whole of what it means to be a bird. A recent study by Lori Marino entitled "Thinking Chickens: A Review of Cognition, Emotion, and Behavior in the Domestic Chicken" (2017) exemplifies this through a survey of scientific literature intended to provide evidence of chicken sentience. As promising as such an endeavor sounds, the parsing out of poultry perspicacity into the separate domains of

cognition, emotion, and behavior is fundamentally problematic, as it compartmentalizes chicken experience and omits the soul or psyche entirely, effectively dissecting chickens both physically and epistemically.

The propensity for framing avian sentience in mammalian terms further reveals the unconscious dynamics of the embedded and often invisible power structures that permeate so much of mainstream science. At the outset of her study, Marino falls into this trap while observing:

> Domestic chickens are members of an order, Aves, which has been the focus of a revolution in our understanding of neuroanatomical, cognitive, and social complexity. At least some birds are now known to be on par with many mammals in terms of their level of intelligence, emotional sophistication, and social interaction. Yet, views of chickens have largely remained unrevised by this new evidence. (2017, p. 127)

The likely unintentional nature of this statement exposes its footing in the collective unconscious (Jung, 1954/1968a, pp. 3-41; 1954/1969, pp. 167-199) and the phrase *at least some birds are now known to be on par with many mammals* betrays the author's enculturation into the mainstream positivist scientific paradigm which values mammals above birds and humans above all. Still, by attempting to learn about the birds themselves without outright anthropocentric utilitarian aim, inquiries like that conducted by Marino are laying the groundwork for a much-needed revision within bird research that broadens consideration to both avian physiology and psychology.

As compared with poultry research, which is conducted almost entirely in the context of captivity, parrot literature generally bifurcates into field studies of wild parrots

by naturalists (e.g., Rohwer & Anderson, 1988; Rowley & Chapman, 1986) and controlled studies of parrots in laboratory settings (e.g., Auersperg, von Bayern, Gajdon, Huber, & Kacelnik, 2011; Pepperberg, 1999). The body of naturalist research anchors and contextualizes findings from the latter by shedding light upon the evolutionary history and endemic culture of those wild parrot species that are also held in captivity. This type of research is often backed by conservation organizations such as the World Parrot Trust (2017), which seek to protect sensitive habitats and the native species who inhabit them. It is important to note that admirable as it is, parrot conservation is not without shadow (Jung, 1951/1968, pp. 8-10). This was demonstrated in 2014 when the World Parrot Trust unceremoniously ousted long-dedicated staff at a Costa Rican macaw sanctuary upon taking over, then proceeded to relocate and exploit these birds-in-upheaval in order to attract new donors (The Ara Project, 2014; QuincySlave, 2014). Unfortunately, this is not an isolated incident; the friction between profitability and philanthropy plagues the realm of environmental conservation—perhaps most succinctly exemplified by conservation's "kill to save" approach (Shelton, 2004b)—and reveals deep political divides systemic to the capitalistic worldview. This in turn colors the findings of parrot studies funded by such organizations regardless of their purported nonprofit status.

Whether conducted in the field or laboratory, parrot research is conventionally empirical in nature, focusing on observable phenomena alone such as bird biology and behavior while leaving out obscured yet equally important internal processes, including psyche. Just as the majority of poultry research focuses upon the "management" of birds as a food source, the same is true for parrots, whose "management" applies to the pet

trade, another variation on the theme of commodification. The majority of private funding for parrot research is provided by stakeholders in the pet industry that seek to optimize physiological health and reduce problematic behaviors in pet parrots (e.g., Aiello & Moses, 2016, pp. 1885-1929) with the goal of making these birds more appealing to consumers and thus more profitable.

Although it is now recognized that psychological forces often underlie so-called "parrot problems" (i.e. Bradshaw, Yenkosky, & McCarthy, 2009; Seibert, 2016), this scientific understanding of avian-human brain and mind comparability remains largely ignored in favor of the conventional—yet out of date scientifically—mode of perceiving birds as behavioral objects. This serves to support economic exploitation and human-nonhuman differencing given that it is more economical to interpret psychological symptoms as behavioral problems for the sake of human convenience, which in turn bolsters the illusion that parrots are low maintenance pets. Language reinforces this idea by referring to the need for training rather than teaching, which places all emphasis upon the outward manifestation of compliance rather than the internal processes that inform external behavior. Requiring parrots to keep quiet or clipping their wings to prevent destruction of home interiors, for example, are easy "fixes" for humans as compared with the decades-long complex psycho-social interactions that would be required to even partially fulfill the psychological needs of these highly social creatures, which could prevent problematic symptomology in the first place.

Despite its many shortcomings, there are some strengths inherent to an empirical approach, namely that direct observations of birds have laid the groundwork for more nuanced avian-human comparisons by revealing the value of parrots as animal models—

in other words, surrogates to study human minds and bodies—which in turn opens the door to bi-directional inferences that apply human observations to birds. For example, linguistic studies involving parrots have been used to shed light upon language development in children (Pepperberg, 1999) and in turn, child development concepts such as attachment style have been applied to parrots (Bradshaw, Yenkosky, & McCarthy, 2009). Both have contributed to a cultural projection of infantilization onto psittacine species, hence the adoption of terms like *parront* by their captors (2017). Avian neurobiology and comparative neuroanatomy studies show that just as bird brains can serve as models of human neuroanatomy, human brains have functional similarity to analogous structures in birds (Jarvis et al., 2005). Yet by and large, there continues to be a lag within the scientific community concerning application of the ethics that true bi-directionality demands. The Animal Welfare Act (USDA, 2017) specifically excludes birds used in research, which is perhaps unsurprising given the myriad of financial incentives to maintain the status quo (Smith, 2002).

As mentioned in our previous discussion of Marino's study on chicken sentience (2017), it is only more recently that certain members of the scientific community have attempted to move beyond anthropocentric aim in an effort to learn about parrots and poultry on their own terms and in a way that acknowledges avian psyche. For instance, human-based discoveries in the field of traumatology have led to the development of effective psychotherapeutic modalities for birds (Bradshaw, Yenkosky, & McCarthy, 2009), the measurable effects of social isolation have been observed in African Grey parrots (Aydinonat at al., 2014), and personality traits have been examined in chickens (Favati, Leimar, & Løvlie, 2014). Those researchers applying the ethical considerations

implied by bi-directionality conduct such studies in a way that minimizes the harm done by killing, netting, banding, and other potentially lethal or traumatic techniques so often employed in the name of science.

As it turns out, approaching avian inquiry with the birds' needs in mind can enhance outcomes, as was demonstrated by the recovery efforts of the California Condor. Hovering on the brink of extinction, in the 1980s the last 22 remaining wild Condors were captured as part of an eleventh-hour captive breeding program meant to save the species (Farnsworth, 2015). Early on, captive-bred birds who were released into the wild experienced high mortality rates, associating food with humans and having no knowledge of things like power lines. It was soon realized that young California Condors needed to be raised in a way that prepared each developmentally for condorness, to be fed by puppets and learn that power poles are to be avoided—as are humans for that matter:

> A certain amount of "aversion training" takes place before condors are released into the wild. In essence, they are being trained not to trust *Homo sapiens*. In terms of longevity, it apparently benefits condors not to consider us a friendly species. (Farnsworth, 2015, p. 35)

Given what we know today regarding the cross-species applicability of attachment theory (e.g., Bradshaw, 2005; 2017; Bradshaw, Yenkosky, & McCarthy, 2009), it is not surprising that meeting Condors on their terms greatly improved the efficacy of recovery efforts. As of 2015, there were 432 California Condors, more than half of whom are flying free (Farnsworth, 2015, p. 35).

In the paragraphs that follow, I will shift the dialogue surrounding avian inquiry toward psychological consideration of birds, beginning first at the surface where so much

extant literature resides, then delving deeper into the waters of authentic avian experience by way of alchemy. The natural histories of parrots and poultry will be juxtaposed, as will ancient and contemporary bird-keeping practices. In addition, the concept of avian psyche will be explored and applied to the context of captivity. In light of their divergent evolutionary histories—one taking an altricial, arboreal path and the other precocial and largely grounded—as we will see, parrots and poultry have a surprising amount in common when one considers the shared experience of captivity. The powerlessness that accompanies confinement, the disruption of native familial structures, the silencing wrought by objectification, commodification: These consequences of captivity do not discriminate based upon species lines, whether bird or for that matter, human.

Parrots. *His formative years were spent confined to the corner of a hotel lobby, the passing of each day demarcated not by the movement of the sun but by the comings and goings of a never-ending wave of tourists—mostly Americans—who, ironically, had come to this Costa Rican hotel to escape from the trappings of their everyday lives. Some would notice him, would stop and even take the time to engage in conversation. It was resplendent reprieve from an otherwise lonely life amidst a sea of humanity. On rare occasion, these ephemeral encounters with soft-spoken strangers gave way to something more meaningful, to what felt like an authentic witnessing of his being, his situation. A feeling, long forgotten, stirred inside and for a moment the metal barriers, the lobby chairs, the moving suitcases all melted away. But these miraculous moments were few and far between. More often, he was passed by without so much as a glance, parents impatiently pulling on the arms of children entranced by his colorful crimson plumage.*

He would have given anything to accompany those ephemeral visitors on an outdoor excursion, to see his brothers and sisters flying through the forest canopy one last time.

The weeks accumulated, turned into months, then years. They were long years. For countless hours there he sat, unmoved, a fixture in the lobby. Entombed in timeless limbo, he wanted nothing more than to escape, to hide. A bone-penetrating craving for refuge set in, an urgency to seek relief from the gazes that pierced from all sides. He imagined himself away, traversing some distant place or merely gone, invisible. He began to dissociate and unravel, yearning to remember what it was like to feel anything other than numb. Then, without warning, everything changed. The first time he pulled a feather by the shaft was electric. At once a flash of pain awoke something deep inside him. He finally felt in control, able to express himself through the transmutation of his body. Empowered by this newfound sense of agency, he repeatedly performed this silent outward gesture as a way of voicing all that was screaming inside.

This is the story of how Plucky developed the self-destructive habit for which he was named (see Figure 1). Eventually, Plucky's penchant for this particular mode of expression did indeed parole him from years of purgatory. Without feathers, he was without value to the hotel, which promptly replaced him with another parrot, one whose scars had not yet risen to the surface. So it was that Plucky's crimeless sentence was not forgiven, rather transferred to another unwitting inmate—another fixture for the lobby.

Plucky could not have known the symbolic depths of this feathery dismantling, least not from the human perspective. It is a potent protest, a succinct undermining of his confinement's justification. For those selfsame feathers he chose to reject are so integral to what captivates us humans, enticing us toward covetousness. Plucky made clear that

Figure 1. Plucky the Scarlet Macaw (*Ara macao*). Plucky's story was relayed to me in 2012 by Jenny Pettigrew, former lead biologist at The Ara Project, a macaw sanctuary in Costa Rica. Feather plucking is a common response of parrots to trauma (Bradshaw, 2009; Bradshaw, Yenkosky, & McCarthy, 2009; Bradshaw & Engebretson, 2013). Photo by E. M. Burton-Crow.

he exists apart from the plumage that previously defined him, violently shedding his feathers in demonstration that he and they are not one and the same, just as human beings are not reducible to hair color. As though breaking a spell upon the senses, his transformation was a challenge to his captors, a symptom—the invitation to awaken to modes of perception unbounded by physical form. It is no secret that birds are masters at communication via plumage, spending endless hours preening in an effort to appear most radiant to would-be friends or foes. Plucky was clearly also communicating through feathers, though his message was marked by urgency and desperation. His voice is not

alone, but one in a chorus of many. It is estimated that 10% of captive-held birds express themselves in the same self-mutilating way as Plucky (Tweti, 2008, p. 34). As their captors, we are compelled to hear the message radiating from this chorus.

Parrots in human society.

The Contrast; The Parrot and the Wren

Within her gilded cage confined,

I saw a dazzling Belle,

A Parrot of that famous kind

Whose name is Nonpareil.

Like beads of glossy jet her eyes;

And, smoothed by Nature's skill,

With pearl or gleaming agate vies

Her finely-curved bill.

Her plumy mantle's living hues

In mass opposed to mass,

Outshine the splendour that imbues

The robes of pictured glass.

And, sooth to say, an apter Mate

Did never tempt the choice

Of feathered Thing most delicate

In figure and in voice.

But, exiled from Australian bowers,

And singleness her lot,

She trills her song with tutored powers,

Or mocks each casual note.

No more of pity for regrets

With which she may have striven!

Now but in wantonness she frets,

Or spite, if cause be given…

— William Wordsworth (1956, pp. 73-74)

We begin by entering the world of parrots from the outside-in, utilizing insights gleaned from the large body of work assembled by traditional modes of research that give primacy to anthropocentrically framed knowledge. Parrots have made an undeniable mark upon human cultures both past and present, their squawking voices and splendid feathers inspiring songs, sacred rituals, and more recently literature, advertising, and film. Today, more than ten million parrots are kept as pets in American homes, making these undomesticated birds the fourth most popular pet choice in the United States (Bradshaw & Engebretson, 2013, pp. 5-6). This staggering figure is testament to the undeniable affinity that parrots continue to evoke within the human psyche. Paradoxically, our fascination with parrots seems at once reverential and diminutive, a conflicting view reflected in the very definition of the word.

According to the Cambridge Dictionary (2016), *parrot* is both a noun and a verb, meaning "a tropical bird with a curved beak and usually colorful feathers" and "to repeat something said by someone else without thought or understanding," a synonym for mindless mimicry. As we have seen in the previous section, avian intelligence studies (e.g., Emery, 2006; Pepperberg, 1999; 2008) challenge such presumptions by

demonstrating time and again the complex emotional and cognitive capacity of parrots. However, the fact remains that in common vernacular, birds continue to be marginalized as so-called *birdbrains*. Perhaps it is not the parrot who repeats without understanding, after all, but rather the captor who presumes to know his or her captive.

It was not always this way. Many ancient peoples deeply revered birds and other nonhuman animals, weaving stories about these wild kin into cultural mythos. For example, the parrot has long been "a Christian symbol of Mary's virginity, because its feathers supposedly do not get wet, but rather stay dry when it rains" (Becker, 2000, p. 226). In Australia, parrots often appear in the Creation and Dreamtime stories of the Aboriginal groups who have called this continent home for tens of thousands of years. Such stories make up the fabric of Aboriginal culture and incredibly, more than 400 have been documented about birds alone—more than any other group of animals—with more believed to exist as oral accounts handed down through the generations (Tidemann & Gosler, 2010, p. 157).

One such story from the Jawoyn people of Northern Australia describes how the Rainbow Lorikeet got its markings (Cameron, 2012). A Jawayak-wayak (Black-faced Cuckoo-shrike) killed a kangaroo but had to have the other birds carry it because he had a sore foot. The birds took the kangaroo that had been killed by Jawayak-wayak back to their home and began to cook it:

> Jawayak-wayak told Detdet (Rainbow Lorikeet) to take a slice of meat from the kangaroo and then fly away. He put a big slice of meat still hot and a bit raw on his back. Juices from the meat ran around onto his chest which became a reddish color and is still like that to this day. (Cameron, 2012, pp. 185-186)

In the Amazonian rainforest, the Waiwai people of Guyana and Northern Brazil tell a story about how the bird people created parrots' unique color combinations:

> The bird people who were truly beautiful were those who had human souls (*ekati*). But they did not become "proper" birds until they bathed in a river of blood and someone bespelled them. As they slowly sprouted wings and tails, they got caught in a rainstorm that changed their colors; they then experimented with each other's feathers until they achieved a pleasing appearance. (Reina & Kensinger, 1991, pp. 54-55)

Such stories reveal the profound symbolic meaning of parrots in ancient societies.

The Bribri people of present-day Costa Rica also wove mythology into their complex understanding of the parrots and other creatures with whom they shared the rainforest. For the Bribri, birds are more than just inhabitants of the landscape; they "are beings with knowledge that can benefit people in everyday life, as well as in critical times of change or disaster" (Tidemann & Gosler, 2010, p. 291). Despite the fact that such knowledge of birds is being lost through modernization and cultural change, many human beings still recognize the significance of particular birds, including parrots. The messages that birds carry are understood by the Bribri both through careful observation of their behavior during waking hours and through their appearance in dreams. To "dream of a parrot may mean that the person will be a healer because parrots are associated with wisdom" in Bribri culture, and thus they are considered sacred (p. 295).

In addition to incorporating parrots symbolically into their cultures via story, the Bribri also physically integrate parrotness into sacred practices through the incorporation of colorful plumage. Parrot feathers from species such as the Great Green Macaw are

used in healing ceremonies, for example. During these ceremonies, "the healer, *awapa*, sings, brushing the sick person with the feathers to draw out the illness" (Tidemann & Gosler, 2010, p. 295). The sacred allure of parrots and their colorful feathers plays an important role even in Indigenous cultures that extend beyond the tropical regions where many of these birds typically live.

Several types of Amazonian parrots have been depicted on the murals and pottery of the Pueblo peoples of the Southwestern United States, and parrot feathers were used by Pueblo tribes to adorn clothing, works of art, and other sacred and ceremonial objects (Cameron, 2012, p. 184). Feathers from Scarlet Macaws were among the most highly prized, although this particular species is not endemic to the habitat where the Pueblo people lived. There is evidence suggesting that Scarlet Macaws were brought to the area about a thousand years ago, carried in small baskets on the backs of humans. In addition, breeding pens made out of adobe have been discovered in Northwest Mexico. Though it is likely that parrots were first held captive at numerous points in human history, this particular case demonstrates how our reverence for the sacred qualities of birdness can translate to a life spent in captivity for the individual birds who represent it. For the Pueblo peoples, as for countless other ancient human tribes who have confined parrots, there is no doubt that given this close proximity, over time what may have begun as an aesthetic and symbolic fascination deepened into the observation that in many ways, parrots are like us.

Now that we've examined the historical aspects of parrot captivity, it is time to turn our attention to contemporary captivity practices. Parrots have been kept as pets for millennia, yet in all that time we have not domesticated these birds as we have animals

such cats, dogs, or even chickens (Miao et al., 2012). This is due in part to the fact that many parrots "are only one or two generations removed from the wild and, as such, retain most if not all of their wild instincts and behaviors" (Engebretson, 2006, p. 263). Thus, the heart of even the most "civilized" parrot remains wild, its psychology and physiology adapted to the arboreal landscapes that predate the emergence of modern humans rather than suburban living rooms. Trapped somewhere in the space between wild and tame, parrots are "liminal creatures in the sense that they [live] in the human world, but easily [revert] to the natural world," particularly when stressful situations cause parrots to fall back on wild instincts (Shelton, 2004a, p. 371). As essentially wild beings, parrots require much in the way of physical, emotional, and mental stimulation in order to thrive in captivity, an environment for which they were not adapted (Bradshaw & Engebretson, 2013). Unfortunately, many parrot owners are not able to provide this, particularly in light of the fact that such a commitment can in some cases last well over a century.

The result is that countless birds live devastatingly deprived and depressing lives. Some are locked in cages for months or years on end. Others are kept in the dark for days at a time or abused in other ways to keep parrots from squawking. Still more slowly deteriorate as they are starved, isolated, immobilized, and even killed. Such circumstances understandably lead to numerous psychological repercussions, including

> many emotional responses indicative of stress and distress, including persistent fearful temperament; diminished capacity to modulate memory, fear, and social judgment; hyperaggression and emotional dysregulation (agitated screaming, biting); symptoms of PTSD and complex PTSD; feather-picking and feather-damaging behavior; personality disturbances (depression, social and physical

> incompetence, and attachment disorders); eating disorders; mate trauma; unresponsiveness; poor motor-cognitive-affective skills and response, low activity; and stereotypy. (Bradshaw & Engebretson, 2013, p. 15)

For many, the ramifications of life in captivity are too much to bear, leading to self-mutilating behaviors not seen in the wild, such as pulling out feathers and even gnawing on their own keel bones, with sometimes fatal results (see Figure 1).

It is estimated that as many as one in ten captive-held birds engage in self-destructive behaviors like feather plucking, a staggering statistic given the millions kept in homes in the United States alone (Bradshaw & Engebretson, 2013; Tweti, 2008, p. 34). Still other unhappy parrots lash out at their human captors, creating a vicious cycle in which they become even more isolated and deprived. These outward symptoms reveal an inner turmoil that was described as a kind of identity crisis by Marc Johnson, founder of the sanctuary Foster Parrots Limited:

> Our greatest challenge in sanctuary is accommodating birds who identify themselves as human, but who are nonetheless wild animals. They appear to live in a state of constant inner conflict and confusion. They have a foot in two worlds, but they fit into neither. (as cited in Bradshaw & Engebretson, 2013, p. 16)

The appearance of these disturbing and destructive behaviors is not difficult to understand when one considers just how social and intelligent parrots really are.

Exasperated owners of pet parrots, in turn, put a strain on their fellow humans when unwanted birds are relinquished to shelters and rescue groups that are already over capacity, underfunded, or ill-equipped to deal with birds. Unlike the visibility given to issues regarding overpopulation and homelessness of dogs and cats, similar problems

surrounding Americans' third most popular pet are virtually invisible (Tweti, 2008). This is made worse by the fact that "abandoned pet parrots are twice-traumatized beings: denied first their natural will to flock and then the company of the humans who owned them" (Seibert, 2016). Yet the problem has reached epidemic proportions, and due to the long life of parrots, is expected to only get worse. Despite this, parrots continue to be bred in horrifying conditions as well as caught in the wild with the sole purpose of adding to the already overstocked pet bird market.

One of the leading causes of parrot extinction in the wild is trapping by poachers. The methods used to catch parrots in the wild are violent and often barbaric, including taking young birds from nests and catching adults in a number of ways, such as through harmful nets, luring using "caller" parrots, and even trapping birds on sticks covered with glue (Tweti, 2008, pp. 150-151). This practice terrifies parrots to the point where they have been known to chew off their own toes in an attempt to escape. Trapping events are shattering to the social structure of the parrot flock, leaving individuals lucky enough to evade captivity grieving lost family, friends, and even lifelong mates (Tweti, 2008, p. 149). Yet it is worse for those who get captured. The mortality rates of wild-caught parrots are staggering, with three or four dying for every one that makes it into the pet trade, traumatized yet still living (Engebretson, 2006).

Given the trauma that such wild capture inflicts upon parrots and the negative impact it has upon wild populations, one would think that the practice would be against the law. Yet the harvesting of parrots in the wild is often not only legally sanctioned, it is encouraged. The Convention on International Trade in Endangered Species of Wild Fauna and Flora (CITES) is an agreement among 167 countries that designates yearly

quotas on the number of parrots that can be exported from their native regions. The "annual CITES quotas for wild parrots are more than 215,000. But when you factor in the number of birds killed as collateral damage, it is not unlikely that more than one million parrots" are hunted and trapped legally each year (Tweti, 2008, p. 152).

The result is that almost a third of parrot species are endangered, "making parrots the most endangered group of birds on the planet" (Tweti, 2008, p. 158). Thankfully, the enactment of America's Wild Bird Conservation Act in 1992 significantly reduced the number of parrots being legally imported to the United States through CITES, yet the United States and Australia are the only countries to enforce such regulations. It is also important to note that the Wild Bird Conservation Act has not eliminated the import of wild-caught parrots to the United States, it has only lessened it. Before the Act was passed, nearly one million wild-caught parrots were imported to the United States for more than 20 years (p. 164).

The Endangered Species Act (ESA) makes it unlawful to import or export, take within the United States or on the seas, possess, sell, deliver, carry, transport or ship any species that is listed as endangered. Theoretically, this makes it illegal to import endangered parrot species into the United States, but there are several loopholes. A number of ESA exemptions allow individuals to engage in activities otherwise prohibited under the ESA, as long as a permit is acquired first. Such exemptions include if the animal is being used for scientific purposes, for enhancing the propagation or survival of the species, or for the incidental taking of endangered wildlife (Paquette, n.d., p. 5).

But what about further legislation that could protect parrots once they are in captivity? When the Animal Welfare Act was passed in 1966, birds were omitted

entirely, which was an issue for parrots and poultry alike. It was not until 2002 that the Helms Amendment was passed, which extended protections to include those birds, rats, and mice who are in the pet trade. Birds bred for food or research purposes, however, remain excluded, and the Act does not specify requirements regarding minimum cage size, transport of unweaned parrots, or behavioral and environmental enrichments (Tweti, 2008, p. 123).

With all the harm that can come from keeping parrots in captivity, it is tempting to conclude that the practice should be eliminated entirely. Yet, ironically, for some parrots teetering on the brink of extinction, life in captivity may be the only thing keeping their species from disappearing forever. Further, many point out that for humans, the therapeutic benefits of interacting with nonhuman animals like parrots are significant (e.g., Buzzell & Chalquist, 2009). Vietnam veteran Mike Batnick, for instance, revealed that a Green Cheek Conure named Sailor helped him with post-traumatic stress disorder (PTSD) in ways that therapy and drugs never could (Mikkelsen, 2017). Batnick is not alone; a parrot sanctuary called Serenity Park opened in 2005 at the West Los Angeles Veterans Administration Medical Center with the goal of pairing veterans with PTSD with parrots who have also experienced trauma (Siebert, 2016). Lorin Lindner, the psychologist who runs Serenity Park, described the mutual benefits of this arrangement:

> We know that what's preserved across species, all vertebrates truthfully, is the ability to feel compassion. As for birds and humans, we both have sympathetic nervous responses. We react the same way to trauma on the physiological level and in terms of the reparative nature of compassion and empathy. That's what is doing the healing. That's what is bringing the broken halves together. We don't

> know what the actual healing factor is, but I believe that it has to do with mental mirroring. That the parrots get what the veterans are going through and, of course, the veterans get them, too, because, hey, they are all pretty much traumatized birds around here. (para. 37)

Examples like these demonstrate that the ethics surrounding keeping parrots in captivity are by no means straightforward or easily resolved. Indeed, one parrot owner observed that his favorite pastime was equivocal to slavery: "I'm a slave owner," he said. "I'm a good slave owner, but that's what I am" (Tweti, 2008, p. 39). To admit as much is to challenge one's own self-identity.

Self-identity is how we express and know ourselves. There are many facets and ways we do this: by the clothes we wear, the parents and family with whom we were raised, our friends, cultures, memories, and even hobbies that we enjoy. Self-identity shapes our decisions and relationships; how we see ourselves influences how we perceive and behave towards others. Such an identity, if it is to be benign within a trans-species paradigm, requires that we seek a restoration of balance within the avian-human relationship beyond merely providing a better life for those birds who are already held in captivity. Perhaps demand for parrots can never be eliminated entirely, even despite the fact that by many measures, they are unsuitable as companion animals (Bradshaw & Engebretson, 2013; Engebretson, 2006). Indeed, the very notion of pet-keeping is fundamentally problematic. It has been defined as "an abyss of covert and unconscious uses of animals in the service of psychological needs, glossed over as play and companionship" (Shepard, 1982, p. 38). There are additional moral dilemmas associated

with condoning captive breeding programs, not to mention the fact that this practice can lead to developmental issues and identity confusion for both humans and parrots.

Parrot social ethology, morphology, and natural history. As mentioned at the outset of this literature review, the following section employs a separatist, comparative approach in order to parse out the social ethology, morphology, and natural history of parrots. This will allow us to explore more fully who psittacines are from an outside-in perspective. It is a move reflective of the traditional reductionistic paradigm that informs the majority of avian research yet departs from a wholly anthropocentric understanding of these colorful birds. Consequently, it is the final exploration required to complete our foundational understanding of parrots, allowing for our forthcoming departure into the largely uncharted territory of avian psyche.

The word *parrot* refers to more than 350 species that make up the order *Psittaciformes* within the *Neoaves* evolutionary branch (Bradshaw & Engebretson, 2013). This order is divided into three superfamilies: the cockatoos, which are known as *Cacatuoidea*; true parrots, which are known as *Psittacoidea*; and the New Zealand parrots, or *Strigopoidea* (Joseph, Toon, Schirtzinger, Wright, & Schodde, 2012, p. 34):

- Superfamily *Cacatuoidea* is comprised of family *Cacatuidae* (subfamilies *Nymphicinae, Calyptorhynchinae,* and *Cacatuinae*)
- Superfamily *Psittacoidea* is comprised of families *Psittacidae* (subfamilies *Psittacinae* and *Arinae*), *Psittrichasidae* (subfamilies *Psittrichasinae* and *Coracopseinae*), and *Psittaculidae* (subfamilies *Platycercinae*, *Psittacellinae*, *Loriinae*, *Agapornithinae*, and *Psittaculinae*)
- Superfamily *Strigopoidea* is comprised of families *Nestoridae* and *Strigopidae*

The oldest known parrot fossil, *Pulcrapollia*, dates back 55 million years (Tudge, 2008, p. 159). Generally, parrots are not considered to be closely related to any other bird family, though recent DNA analysis indicates the possibility of an ancestral relationship to falcons (Angier, 2016; Burger, 2002; Cameron, 2012).

It is not unusual for any given species of parrot to have more than one common name, so a single Latinized scientific name has been assigned to each, with the first word referring to the genus and the second referring to the particular species. When a subspecies is discovered, a third name is added. When a species becomes extinct, it is removed from the list entirely, which unfortunately happens too often given that one third of parrot species are threatened with extinction, making parrots the world's most endangered group of birds (Angier, 2016; Bradshaw & Engebretson, 2013; Tweti, 2008). Though useful for taxonomic organization, Latin names tend to be cumbersome, a layer of abstraction between the reader—or scientist, for that matter—and the birds. Therefore, in an effort to aid in clarity and connection, common species names will be preferred over Latin for the purposes of this study.

Researchers tasked with identifying and classifying parrot species utilize the same striking attribute that many parrots use to recognize each other: their colorful plumage. Feathers, which first appeared more than 75 million years ago on dinosaurs rather than birds, achieve their color both through pigmentation and light refraction (Prum, 1999). Sexually dimorphic color variations occur less frequently in parrots than in many other types of birds; however, there are notable exceptions such as the Eclectus parrot, with males taking on an emerald green hue while females' feathers are red and purple (Selander, 1966). Parrot bodies encompass a myriad of colors, shapes, and sizes, from

the sparrow sized pygmy parrots of New Guinea to the macaws who can reach lengths of more than three feet and the flightless, nine-pound Kakapos of New Zealand who are 400 times heavier than the smallest parrot species (Angier, 2016; Bradshaw & Engebretson, 2013; Cameron, 2012; Tudge, 2008, p. 160; Tweti, 2008, p. 23).

Parrot minds and bodies reflect their environment, having evolved to fit together like hand and glove. The majority of parrots are found in tropical and subtropical climates; however contrary to popular belief there are certain species who live in colder regions such as the mountainous landscapes of the Andes and Himalayas and even sub-Antarctic islands (Bradshaw & Engebretson, 2013, p. 4; Cameron, 2012, p. 5; Tudge, 2008). In fact, "the Kea of New Zealand's Southern Alps positively enjoys the snow" (Tudge, 2008, p. 159). The northernmost parrot species in recent times was the Carolina Parakeet, once plentiful throughout the North American continent with a range extending as far north as Connecticut and as far west as Illinois (Cokinos, 2018; Tweti, 2008, p. 79). Sadly, the Carolina Parakeet was "shot to extinction by the early twentieth [century] as an agricultural pest" (Tudge, 2008, p. 159).

An example of avian environmental adaptation can be found in the characteristically elongated, curved beaks of parrots, which work in concert with a strong and dexterous tongue to reach food sources oftentimes inaccessible to other birds (Bradshaw & Engebretson, 2013). Diet varies among species, but is typically comprised of some combination of seeds, fruit, nectar, pollen, buds, and even in rare cases small insects and animals (Cameron, 2012). Some parrots have adapted to specialized dietary niches, such as the Hyacinth Macaw, whose robust beak can crack open Brazil and macadamia nuts, or the Rainbow Lorikeet, with a feather-like tongue that allows it to

more easily collect the nectar and pollen that comprise the majority of its diet. Parrot beaks serve a number of roles within an ecosystem, creating mulch through chewing on bark, leaves—or anything for that matter—as well as spreading seeds and other nutrients through messy eating and the droppings demarcating the end of this digestive process.

As a group, birds have the best developed color vision of all vertebrates, their eyes able to see beyond the spectrum visible to humans (Burger, 2002, p. 156). In addition to the reds, greens, and blues that humans can see, birds can also see ultraviolet colors, allowing birds to pick up on subtle patterns in each other's feathers that are invisible to the human eye and to determine "whether a piece of fruit is ripe or not just by looking at it" (Tweti, 2008, p. 13). In general, parrots tend to have large heads with eyes positioned high and laterally on the skull, which allows for an extremely wide visual field, even compared with other bird species. This ability comes in particularly handy while in flight, a feat achieved effortlessly by many parrot species.

The fine aerial evolutionary tuning of Psittaciformes is not limited to sight. Unlike mammalian lungs, bird lungs don't mix old air with fresh (Tweti, 2008, p. 13). Thus, birds are able to pull oxygen from the air more efficiently than mammals—humans included—allowing birds to breathe easily at even the highest altitudes. With the exception of the ground-dwelling Kakapo of New Zealand, parrot wings have evolved for flight, subtle adjustments of tail and wing feather orchestrating the most precise of aerial movements. Shape and size affect wing aerodynamics, which in turn impacts "the way they perform in different situations. Some wing types are adapted for high speed, others for maneuverability. Wing types can often provide clues to a bird's lifestyle" (Cameron, 2012, p. 23). Those parrots with the broad, rounded wings required for optimal

maneuverability are often found in forests where obstacles abound, whereas those with long, pointed wings most commonly live in open areas like deserts. Some parrot species are migratory, such as the Swift Parrot that "breeds in Tasmania and winters on mainland Australia" (p. 24). Even nonmigrating parrot species have been known to fly hundreds of miles a day in search of food (Bradshaw & Engebretson, 2013, p. 4).

All parrots have zygodactyl feet, which means two toes point forward and two backward. This allows parrots to climb easily by placing one foot over the other and to use their feet to grasp in a similar way to how humans grasp with their hands. Given the dexterity of parrot feet, perhaps it should come as no surprise that parrots have been known to engage in what was once considered a purely human endeavor: tool use (Feltman, 2015). Hyacinth Macaws, for example, have been observed using tools to position and open nuts while feeding (Borsari & Ottoni, 2005) and Kea demonstrated flexible problem solving in a controlled study that included the first report of stick tool use in the species (Auersperg et al., 2011).

In general, parrots are extremely long lived, with some species' lifespans exceeding one hundred years (Bradshaw & Engebretson, 2013). Although there are exceptions, particularly among smaller flocking species, many large parrots are monogamous, some choosing one mate per lifetime. Parrots typically nest in the hollowed-out cavities of trees, laying only a small clutch of eggs once or twice per year, though there are those with higher fecundity (Cameron, 2012). Just like humans, parrots are considered to be an altricial—or what ecologists refer to as K-selected—species, meaning that they have relatively few offspring who require much in the way of caregiving (Bradshaw & Engebretson, 2013). This is in contrast to precocial species:

> "Precocial" and "altricial," two words describing the degree of development in young birds at hatching… save ornithologists from repeatedly using phrases when single words will do. A precocial bird is "capable of moving around on its own soon after hatching." The word comes from the same Latin root as "precocious." Altricial means "incapable of moving around on its own soon after hatching." It comes from a Latin root meaning "to nourish" a reference to the need for extensive parental care required before fledging in altricial species. (Ehrlich, Dobkin, & Wheye, 1988, para. 1)

Thus, the altricial young of parrots take time to reach sexual maturity and, in the interim, require a great deal in the way of cultural learning, both vertically from parents and grandparents and horizontally among peers.

A prime example of the critical role caregivers play in the cultural development of young parrots is demonstrated by cross-fostering between Galah and Major Mitchell's cockatoos. Having similar breeding territories and habits, both species have been known to lay eggs in the same clutch, though the larger Major Mitchell's Cockatoo typically fights off its smaller competitor and winds up rearing the young of both species. Interestingly, Galah Cockatoos raised in such a scenario behave as, and associate with, Major Mitchell's while ignoring members of their own species (Rowley & Chapman, 1986). The calls they make, their pattern of flight, even the diet they consume are all shaped by this early parenting, revealing that parts of their identity are "innate, parts are the result of imprinting and parts, of later learning" (p. 1).

It has only been recently that mammals such as our closest genetic relative, chimpanzees and other great apes, and elephant, lions and other "social brained" animals

were accepted as having culture (Bradshaw & Engebretson, 2013). Indeed, there is still debate among scientists as to whether animal culture really exists. Yet it seems a logical conclusion given the numerous ways in which fundamentally, parrots are like humans. Scientifically, we are classified the same; we are animals (*Animalia*) who have internal spines (*Chordata*) and thus central nervous systems. Birds are bipedal, warm-blooded, and have hearts that are four-chambered, just like ours. Utilizing sight as a primary sense, humans' reliance on visual acuity has us in closer alignment with birds than with many of our fellow mammals, who often rely heavily upon olfactory perception. These parallels between humans and parrots are not relegated to our physical attributes. As with us, parrots are highly social creatures; thus it follows that they, too, have developed complex cultural tapestries with nuances particular to each species, as demonstrated by the cross-fostered Galah Cockatoos mentioned previously (Rowley & Chapman, 1986).

Studies of Australian and Costa Rican parrots offer the greatest published evidence of such tapestries. Research on Glossy Cockatoos in Australia, for example, has revealed complicated group dynamics wherein all members of a flock comprised of 30 or more individuals relate to one another, yet preference is shown for a particular subgroup or individual (Cameron, 2012, p. 48). The late Ian Rowley (1926-2009) also conducted a number of studies centered on Australian parrot society (e.g., Rowley & Chapman, 1986). One such inquiry into the flock dynamics of Pink Cockatoos demonstrated that during the breeding season, unpaired individuals joined local groups of immature birds, small flocks that remained relatively stable and "sometimes coalesced into groups containing as many as 250 birds" (Cameron, 2012, p. 48). The magnitude and complexity of cultural exchange evoked by such a scene is mind-boggling, with older

birds teaching the young, single birds vying for mates, bonds strengthened through allopreening, and a cacophony of messages filling the space between.

This vocal aspect of the social lives of parrots has been studied extensively by scientists from the Cornell Laboratory of Ornithology, who have focused their efforts primarily upon Costa Rican parrots like the Orange-Fronted Parakeet. These investigations have led one Cornell scientist, Jack Bradbury, "to conclude that parrot societies fit the fission-fusion model applied to social mammals… [wherein] groups form and dissolve in ways that best serve the interest of group members" (Cameron, 2012, p. 49). Fission-fusion societies allow for complex interactions among flock members because they necessitate the ability to quickly relate to unfamiliar individuals, requiring both mutual recognition and subtle verbal and nonverbal communication between birds. One clue that can aid birds in recognizing one another is regional dialect, geographically based accents that have been observed in feral (Buhrman-Deever, Rappaport, & Bradbury, 2007) as well as wild parrot populations (Baker, 2000).

So, what do parrots talk about? Like us, they presumably are most often preoccupied by the events of day-to-day life. However, some situations are more grave than mundane, and there is evidence, for instance, that parrots mourn the dead. In fact, exploitation of this quality contributed to the Carolina Parakeet's demise as a species, as they "were easy to kill, in part because they would whirl and cry in distress over injured and dead kin" (Cokinos, 2018, para. 3). Author Matt Cameron (2012) described an encounter with another wild parrot species in mourning:

> I pulled off the quiet country road to examine a bundle of green feathers lying on the verge. As I got out of the car, a flock of Superb Parrots (*Polytelis swainsonii*)

> exploded from the lush weeds growing by the road. The flock landed in a nearby tree, allowing me to quickly count 25 birds… The roadside corpse turned out to be a female, less colorful than the male but still a beautiful bird with her orange bill and blue-grey cheeks. She had been feeding on wild oats, trampling the tall green stems to access the maturing seed. Disturbed by an approaching vehicle, she had flown across the road and been struck. The flock looked on quietly while I played crime scene investigator, but took off calling loudly when I started my vehicle. They headed west, while I continued east. (p. 46)

Observations such as these allow us to glean the surface dynamics of parrot society and provide a hint as to the complexity underneath. Yet to know these birds at a deeper level, we must move beyond assessing outward behavior, moving instead toward an understanding of the inner workings of parrot minds.

Parrot psyche. In light of the many parallels already noted between parrots and humans, psychological complexity is a salient addition to the list. Until recently, scientists imagined the brain much like a layered cake that evolved with increasing complexity over time and species (Bradshaw & Engebretson, 2013). Birds were considered to be somewhat primitive and lacking in the brain structures and mental capacities that humans and other mammals possess. This confusion derived in part from a cultural prejudice that holds nonhuman animals as inferior to human beings. It was a belief inculcated into Westernized culture with the medieval concept of *scala naturae*, which places all living beings along a ladder from most primitive to most complex, with humans placed at the top of this hierarchical ranking. Charles Darwin was among the

first well known scholars to debunk the myth that humans are located at the top of an evolutionary hierarchy, showing instead that we all share common ancestry.

However, most scientists misinterpreted Darwin's work and saw it from the linear *scala naturae* perspective. This misperception persisted until very recently with the advancement of comparative neuroscience. Refined neuroanatomical and observational studies have debunked the idea that human cognition is superior to that of all other animals. Such research has exposed that early investigators misclassified certain brain structures such as the basal ganglia and cytoarchitecture—the shapes of cells and neurons—in birds and reptiles, revealing that birds, mammals, and reptiles have functionally similar brains, as do invertebrates like octopi, yet have developed along different evolutionary paths (Butler & Cotterill, 2006; Emery, 2006; Jarvis et al., 2005). As a result, mammal and bird brains are equally sophisticated in terms of cognition and emotions but are governed by very different forebrain organizational plans. It is now established that the basal ganglia in mammals and in birds make up a comparable part of forebrain and that the "cortex neuroanatomy and cytoarchitecture [indicating] that the evolution of mammalian and avian neural substrates may have diverged, but mental evolution has been convergent" (Orosz & Bradshaw, 2007, p. 775). Thus, it is likely that patterns of circuitry rather than neuroarchitecture are responsible for these parallels in animal consciousness (Butler & Cotterill, 2006, p. 106).

Though birds such as parrots "have long been denied having mental and emotional capacities possessed by mammals," given their comparable neuroanatomy it follows that humans and birds experience the world in similar ways, conscious beings capable of both emotion and cognition (Bradshaw & Engebretson, 2013, p. 11). This

conclusion was buttressed at a University of Cambridge summit conference wherein a prominent international group of cognitive and computational neuroscientists, neurophysiologists, neuropharmacologists, and neuroanatomists stated "unequivocally" that other animals have and experience consciousness comparable to humans:

> Birds appear to offer, in their behavior, neurophysiology, and neuroanatomy a striking case of parallel evolution of consciousness. Evidence of near human-like levels of consciousness has been most dramatically observed in African grey parrots. Mammalian and avian emotional networks and cognitive microcircuitries appear to be far more homologous than previously thought. Moreover, certain species of birds have been found to exhibit neural sleep patterns similar to those of mammals, including REM sleep and, as was demonstrated in zebra finches, neurophysiological patterns, previously thought to require a mammalian neocortex. (Low, 2012, para. 4)

In light of this avian-mammalian congruity, it should come as no surprise that "parrots, which have forebrains relatively the same size as apes, live in complex social groups and have a long developmental period before becoming independent, have demonstrated ape-like intelligence" (Emery, 2006, p. 23). This is what has led some to refer to parrots as "feathered apes," and—as with primates—has led researchers to conduct intelligence studies incorporating the use of human language (Bradshaw & Engebretson, 2013, p. 4).

Alex, an African Gray parrot whose name is an acronym for avian language experiment, is perhaps one of the most famous examples of complex avian cognition. Alex could identify and locate some 80 objects, describing the color, shape, size, and other characteristics (Pepperberg, 1999; Tweti, 2008, p. 2). He also learned the sounds of

the alphabet and even demonstrated the ability to read phonetically and create his own words spontaneously. For example, Alex would call an apple a *banery* because the inside was yellow like a banana and the outside was red like a cherry (Tweti, 2008, p. 17). When Alex passed away unexpectedly in September of 2007 at the age of 31, his loss was felt the world over, obituaries appearing in the *New York Times* and on ABC's *Good Morning America.* For it was not only the loss of a feathered friend, but also of the light he was able to shine upon what it means to be a bird and what it means to be a human. Fortunately, subsequent studies with other parrots have shown that Alex was not alone in his abilities, which is quite an impressive display of avian intelligence, particularly when one considers that human language is not a bird's native tongue.

The intelligence of parrots is by no means limited to their ability to use language. They have extraordinarily advanced spatial memories, and some species can recall hundreds of visual patterns at a moment's notice (Bradshaw & Engebretson, 2013). Parrots have demonstrated episodic memory and theory of mind, "two supposedly unique aspects of human cognition" (Emery, 2006, p. 23). They have been known to solve puzzles, predict earthquakes, and—as almost anyone who shares their home with a parrot can attest—are often Houdini-like escape artists, able to unlock the most complex of latches. In addition to cognitive intelligence, parrots are also socially and emotionally astute. They form friendships and alliances among members of their flock and are known to provide a helping beak to those in need, be they bird or human:

> One parrot attacked the assailant who killed his owner in a robbery attempt. The parrot died, but not before doing serious damage to the offender's face and hands. The culprit was arrested and charged with murder as a result of the DNA found on

> the bird's body. When he was apprehended, the killer told police he had never seen anything fight as hard as that parrot to save his owner. (Tweti, 2008, p. 29)

Altruism of this sort requires empathic ability, a skill parrots possess in abundance.

Given the sophisticated inner-workings of the parrot mind coupled with the complex and nuanced role that parrot culture plays upon psychological development, it is not a leap to apply the term *psyche* to these avian beings. As we have seen, the "structures that process and regulate sociality, cognition, and emotions and associated traits (e.g., maternal behavior, communication, self-awareness, episodic memory, play, sexual behavior, fear, aggression, moral development, and affect regulation) are highly conserved evolutionarily across species" (Bradshaw & Engebretson, 2013, p. 12). I would add to this list maturation of the ego by way of Jung's concept of individuation, embracing "our innermost, last, and comparable uniqueness" while striving toward self-realization (1928/1966, p. 173).

A key requirement of individuation is the ability to synthesize opposing forces, an aptitude demonstrated time and again by those bicultural parrots who are reared in captivity yet retain intact avian identities capable of relating socially to both conspecifics and humans (Bradshaw, Yenkosky, & McCarthy, 2009). It is not an entirely conscious process and involves the interplay of archetypal forces. Archetypes are "primeval images or ideas that exist in the spiritual/mental world" (Becker, 2000, p. 22). Furthermore, archetypes are "unconscious schemas for recognizing and responding to salient patterns of external and internal stimulation… likely to be shared by both birds and humans. This has far-reaching implications for the concept of the collective unconscious" (jones, 2010a, p. 193).

The fact that parrots—like us—embody all the nuanced and often paradoxical qualities of psyche reveals their true nature as avian alchemists. The process of individuation itself can be seen as a form of alchemy wherein "psychological development is analogous to the stages in the alchemical transformation of base matter into gold—the Philosopher's Stone" (Franz, 1980a, p. 12). Gold in this case refers to Selfhood, a porous conceptualization of self that dissolves the boundary between inner and outer, self and other. In alchemy, this dissolution of binary is referred to as a divine marriage wherein *anima* and *animus*, the masculine and feminine aspects of personality, merge into wholeness of being (Jung, 1928/1966, pp. 188-211; 1951/1968, pp. 11-22; Franz, 1980a). In the wild, parrots are free to individuate as they navigate the plurality of otherness found in nature. Trapped in a cage, however, this intrinsic process is effectively short-circuited, resulting in a stunting of ontological development wherein symptoms are expressed as pathology.

As demonstrated through the experience of Plucky (see Figure 1), neuroses including self-mutilation are all too common in captive-held parrots (Bradshaw & Engebretson, 2013). Compulsive, repetitive movements called stereotypies are often seen as well, just as stereotypies are well known to occur in species like elephants and primates trapped in zoos (Bradshaw, 2009). Excessive screaming, biting, and violent expression are further signs of emotional turmoil, the remedies for which have traditionally been external as through behavior modification or environmental enrichment rather than recognized as emanating from the inside-out and thus requiring psychological intervention (Aiello & Moses, 2016; Bradshaw, Yenkosky, & McCarthy, 2009). Such

symptoms indicate alchemical vessels out of balance: beings trapped in cages both physical and metaphorical, wing clipping mirroring concomitant ontological pruning.

In order for true healing of parrot psyche to begin, as their captors we too are tasked with healing, taking back those projections that limit wholeness by way of *coniunctio*. This begins with seeing parrots as more than just parroting—disembodied echoes of human voices—instead recognizing these birds for who they truly are: embodied relational beings engaging in the spectrum of somatic expression. We must deconstruct all that emanates from a solar projection that gives primacy to spirit over matter and masculine over feminine. Parrots' association with *über*-manly pirates lays bare this projective bias. The masculine sun represents constancy, and we demand this in captive-held parrots, denying our pets hormonal and reproductive cycles (unless of course such can be commoditized) and eschewing emotional fluctuations. Yet the truth is that parrots of all genders, like humans, are both masculine and feminine, cyclical and constant, physical as well as psychological. Until the plurality of authentic parrotness is recognized and revered, these avian alchemists are caught in a scalding exothermic chemical chain reaction that brings suffering to the birds and to us as their willful captors.

Poultry. *The pressure was unbearable, waxing and waning as she sat, eyes closed, convalescing in the shade. It had started as familiar abdominal discomfort, a seasonally recurring symptom that had been afflicting her off and on since the dawn of adolescence. But this time was different; this time the dull pain that usually subsided grew angrier, like a ball of fire inside her belly. Tried as she could, she could not expel it. As the hours and days wore on, she grew exhausted and began to lose hope. Concerned friends had noticed for quite some time that she was not her usual self.*

Normally an early riser, she had become withdrawn, sleeping until noon and constantly napping. Next, she lost her appetite and her thirst, along with her passion for spending time outside tending to her garden and favorite flower beds.

Desperate for relief, she finally went to see a doctor. He was a patient and knowledgeable man, taking the time to listen carefully to her symptoms and the stories behind them. Her prognosis was not good, however, for in reviewing her medical history, the doctor found that a parasitic infection caught early in life had left potential scarring and weakening of her inner organs. The only cure was an expensive and high-risk surgery. The infection that had ravaged her body in the first week of life had nearly killed her. It was a traumatic experience she had long forgotten, yet its impression remained etched upon her inner flesh. The doctor called for an x-ray. It was then that her greatest fears were realized.

Cocoa and her five siblings hatched one late spring morning on a small farm surrounded by magnificent pines. Their parents were paired by a poultry fancier who specialized in rare breeds of geese and chickens. The six chicks were adopted for a couple dollars apiece by this well-meaning human, who had sought out the small farm in an attempt to eschew supporting industrialized hatcheries—which, wretched as many of their practices are, do immunize chicks, though the methods used are not without issue. As these young poults travelled to their new home, they carried an invisible and ruthless passenger inside them: coccidiosis, a parasitic single-celled organism found in most soil that, in high concentrations, can infect the intestinal tracts of various animal species. Its effect on chickens is rapid. Within days, Cocoa and her young flockmates grew weak

and dehydrated. Despite persistent efforts to nurse the chicks back to health, four of the six perished. Only Cocoa and Marshmallow, a Polish-Crested hen, survived.

Yet the damage had been done, and although outside she appeared to be a hen in good health considering her advanced age of 4, inside she carried a ticking time bomb.

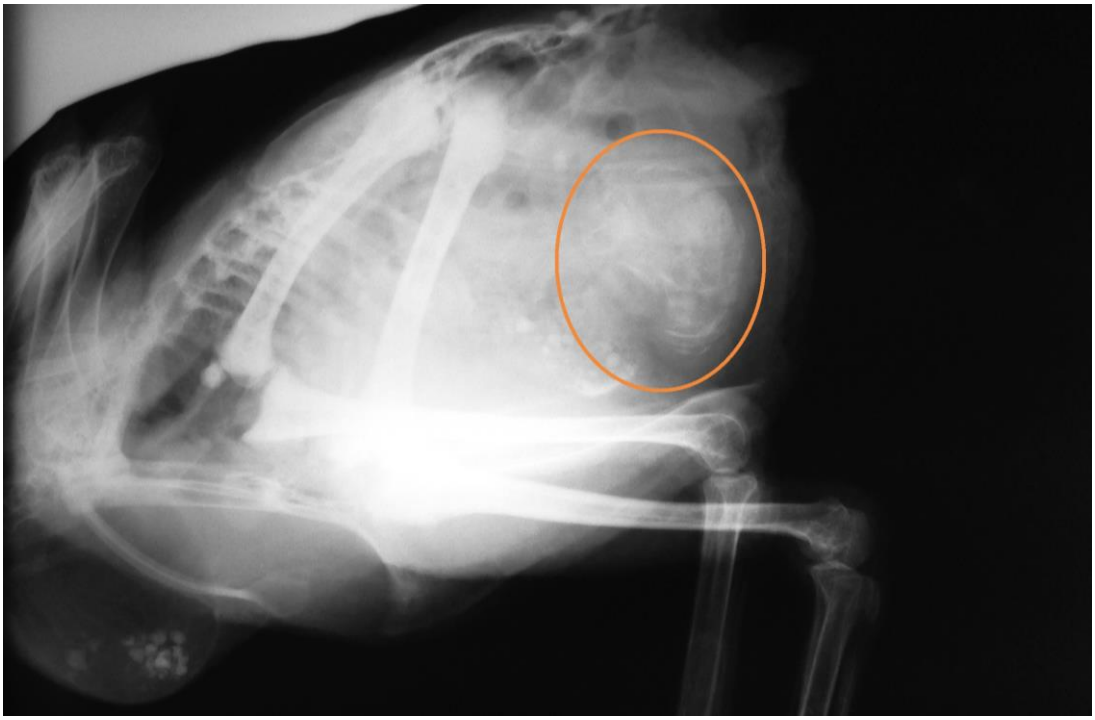

Figure 2. Cocoa's X-ray. Taken June 22, 2016, this X-ray shows Cocoa's ectopic egg, circled in orange. Photo by E. M. Burton-Crow.

Over the years, Cocoa's oviducts had all but dissolved, allowing the next egg her ovaries produced no route to escape her body—a body engineered by humans to lay without reprieve. The doctor's X-ray had revealed the culprit of her agony: a large egg trapped in her lower abdominal cavity, known clinically as an ectopic egg (see Figure 2). The odds stacked against her and too weak for surgery, a day later she succumbed, egg-bound. Today Cocoa is buried near the coop where her flockmates still flourish.

Poultry in human society.

The Hen

Alas my child, where is the Pen

That can do justice to the Hen?

Like Royalty, she goes her way,

Laying foundations every day,

Though not for Public Buildings, yet

For custard, cake and omelette.

Or, if too old for such a use

They have their fling at some abuse,

As when, to Censure Plays unfit

Upon the Stage they make a 'Hit.'

Or at elections, Seal the Fate

Of an obnoxious Candidate.

No wonder, child, we prize the Hen

Whose egg is Mightier than the Pen.

— Oliver Herford (1905, p. 26)

We launch into this investigation of poultry parallel to where we began with parrots: in bodies of traditional research that strive to know fowl from the outside-in and in human terms. Research indicates that poultry species were domesticated independently in several locations across the globe, beginning with chickens in northern China and southeast Asia beginning around 10,000 years ago (Davis, 2009; Ekarius, 2007; Miao et al., 2012; Storey et al., 2012). Since the time of Charles Darwin (1868), it

has long been assumed that Red Junglefowl were the predecessors to modern chickens (Marino, 2017; Smith, 2012; 2014). However, recent mitochondrial DNA analysis suggests that multiple members of the genus *Gallus*, including Grey Junglefowl, contributed to their genetic makeup (Xiang et al., 2014). Similar studies also suggest that "domestic chickens and wild junglefowl may have experienced substantial gene flow and genetic admixture following domestication of the chicken" (Miao et al., 2012, p. 281). Despite the fact that there are currently more than 70 domesticated breeds of chicken, the production demands of industrialized agriculture are promoting genetic uniformity among commercial breeds, leading to the need for increased conservation efforts for rare poultry breeds (Ekarius, 2007, pp. 7-8).

Compared with chickens, ducks and geese were domesticated more recently, approximately 5,000 years ago (Ekarius, 2007, p. 170). There are more than a hundred species in the wild, yet all domesticated ducks are thought to be descended from just two— the Muscovy and the Mallard—with the latter the progenitor of most modern breeds. Mallards were domesticated independently in both Asia and the Middle East, whereas the Muscovy, "native to Central and South America, was first domesticated in pre-Inca Peru as a pet" (p. 169). Geese were domesticated in Asia, northern Africa, and southeastern Europe, with three species giving rise to all modern domestic breeds: the Greylag, Egyptian, and Asian Swan Goose (p. 170).

Turkeys, endemic to the Americas, were first domesticated by the Aztecs more than 2,000 years ago, primarily for use in religious ceremonies (Ekarius, 2007, p. 217). It is likely that the Ocellated Turkey of Central America—rather than its northern cousin, the Common Wild Turkey—gave rise to the first domestic breeds. A few hundred years

later, turkeys were domesticated again by the Mogollon culture of present-day New Mexico. In fact, "Native Americans domesticated the species several times, for they are easy to raise on berries and seeds, including acorns" (Tudge, 2008, p. 119).

Interestingly, the domestic turkey we know today, though originating in the Americas, was further cultivated and later re-introduced by European colonists:

> Spanish explorers returning from the New World in the late 1400s and early 1500s brought turkeys back with them. In fact, by 1511 Spain's King Ferdinand ordered that every ship returning to Spain should bring back ten turkeys (five toms and five hens). These turkeys were domesticated and spread throughout the continent surprisingly quickly. Later, as colonists crossed the Atlantic in the other direction, the domestic turkey returned with them and recrossed with Eastern wild turkeys. (Ekarius, 2007, pp. 217-218)

Thus, both European and Indigenous American societies influenced the genome of the contemporary heritage turkey, whose traits have been further modified with the rise of agricultural industrialization into what is known as the commercial turkey, which will be discussed at greater length in the following section.

There is some debate within the scientific community regarding when nonnative poultry species were first introduced to the Americas. Despite the fact that the long-held assumption is that domesticated livestock, including chickens, were introduced by Christopher Columbus and subsequent European settlers, the Aracauna chicken breed may have originated elsewhere. Aracaunas and their "progenitors, the Collonca and Quetero birds, [are] domestic races that were kept by tribal groups in different areas of

Chile," suggesting a transoceanic introduction from Asia predating the arrival of Columbus (Ekarius, 2007, p. 4).

Regardless of their origin, the chicken quickly established itself in Indigenous cultures throughout South America, with the Quechua peoples of the Andes developing the concept *wallpa*, which "refers to the chicken, to the experience of the Spanish Conquest, and to prehispanic notions of power and authority" (Seligmann, 1987, p. 139). *Wallpa*, which also represents the name of the Inca king defeated by the Spaniards, "came to mean chicken in Quechua because the crowing rooster seemed to be repeating the Inca Atahualpa's name" (p. 142). The Quechua people were an exception; however, many Indigenous groups in the region did not use chickens primarily as a food source, but "rather it was regarded as a pet and treasured for its feathers, which could be dyed for ornamental purposes" (p. 143).

Save for a few outliers like Andean pet chickens and the Muscovy Ducks of pre-Inca Peru, the reason human beings first domesticated poultry—whether waterfowl or land fowl—can be encapsulated in one word: utility. Fairly easy to raise with a fast rate of reproduction, poultry has long been an economical source of protein in the form of meat and eggs. Feathers were used for clothing and insulation, and vocal birds, such as geese and roosters, also served a protective function by alerting their keepers to the presence of incoming intruders (Ekarius, 2007).

Along with providing a reliable food source for ancient humans, over time some species of poultry also came to hold entertainment and symbolic value for the humans who kept them. Perhaps the most prevalent example—indeed one that is still practiced

today—can be found in cockfighting, the pitting of two roosters against one another in a violent and bloody display that often results in death for the losing opponent:

> Cockfighting is probably one of the first uses mankind made of chickens, and game birds were once closely associated with religious deities. From the time of early civilizations, including those of the Syrians, Greeks, and Romans, birds were associated with the gods—or held godlike in their own right. The Sumerians built temples to honor the fighting birds. The flesh of the birds was considered sacred and not for human consumption. (Ekarius, 2007, p. 26)

Although illegal in the United States, cockfighting persists to this day, though it is no longer associated with divinity, but is reduced instead to a form of illicit gambling.

The popularity of cockfighting "as a leisure activity in ancient Greece is attested to by both written and pictorial sources" (Shelton, 2009, p. 102). In addition to providing a sublimating stage on which Greek men could express their frustration and hostility, cockfighting also served as "a frightening reminder of what humans would be like if not bound by social conventions," in Freudian terms, all id and no superego (p. 103). For Athenian soldiers, the courage, tenacity, and ferociousness of fighting cocks were used as an allegory representing the ideal warrior, with images of roosters often depicted on soldiers' shields (pp. 103-105).

In addition to their association with the warrior-like qualities of the goddess Athena, roosters were also symbolic of sexuality, another manifestation of masculinity:

> Birds, in general, were associated with lustfulness, and therefore Aphrodite is often depicted as riding on a bird such as a cock, swan, or goose, or being drawn in a chariot pulled by birds such as sparrows. So closely were birds associated

> with salaciousness that Greek artists produced images of *phalli* with wings and of birds portrayed as *phalli*… in many vase depictions, the phallic bird is a cock. (Shelton, 2009, p. 105)

The rooster's erect, red comb and loud crow were evocative of human sexual activity (Davis, 2009, p. 25). This helps explain why such birds were the most common courtship gifts in male homosexual relationships, with "the presentation of cocks by older men to younger men as part of the pederastic seduction process" as well as the persistence of the double-entendre still held by the word today (Shelton, 2009, p. 106). Compared with Greece, cockfighting and the use of roosters in homoerotic courtship did not hold as much appeal for the Romans, who developed their own symbolic constructs for chickens and other birds.

One such example can be found in the early Roman augurs, who carried "one of the most important functions in the Roman state; for nothing of importance was done respecting the public, either at home or abroad, in peace or in war, without consulting them" (Nuttall, 1840, pp. 48-49). Augury, the art of interpreting omens through the observation of birds, is an ancient practice that has shaped the very founding of historic civilizations both in Europe and beyond (Chalquist, 2007, p. 108). The site of Rome was famously chosen through a vulture-viewing contest between Romulus and Remus, for instance, and the location for the Aztec capital of Tenochtitlan was decided via an eagle sighting. Augury was by no means limited to the ancient Romans (Becker, 2000, p. 41); however, they expanded the practice over time, and eventually such avian-based divination became a pervasive backdrop to everyday life.

In addition to omens from wild birds, the Romans would use the feeding behaviors of chickens to decipher whether the auspices of the gods were favorable (auspicious) or unfavorable (inauspicious). The keeper of these sacred birds, the *Pullarius*, was tasked with tending the chickens and interpreting their signals:

> This augur usually went to consult them early in the morning; and, having commanded silence, he threw them down a handful of crumbs, or of corn, and then let out the chickens from their confinement. If they seemed indifferent to the meat, passed by it without notice or scattered it with their wings, or flew away, it was an unlucky omen. If, on the contrary, they leapt hastily out of the pen, fell greedily to the meat, so as, in their impatience, to let some of it drop from their beaks upon the pavement, there was assurance given of success. (Nuttall, 1840, p. 439)

Chickens who were eager to gobble up food were considered auspicious, whereas timid chickens who refused to eat or flapped their wings in escape were considered inauspicious. This form of augury using domesticated birds often took place during military expeditions, with the outcome of the chickens' sacred dance determining the next strategic move.

Over the centuries, as chickens and other domestic poultry became further entrenched in human societies, they began to hold religious symbolic value for the humans who kept them. Perhaps the most salient example of this can be seen in ritualistic sacrifice. Today, such sacrificial offerings are often associated with paganism or Satanic practice; however, many of the world's preeminent religions have used—and indeed still do!—animals for sacrifice. Judaism, Christianity, and Islam all hold

sacrificial offerings as part of their traditions. In Eid al-Adha, the annual Islamic Feast of Sacrifice, offerings of meat not only fulfill an obligation to the demands of God, "they also create ties between the living and the dead, and serve to unite the living in their future state of resurrection" (Bowen, 1993, p. 274). With larger species are preferable, all households are expected, at the very least, to sacrifice a chicken or duck for the great holiday as a symbolic enactment of Abraham sacrificing a ram in place of his son. Some Christian sects consider animal sacrifice a means of eliminating sinfulness. In these rituals, the "sins of those who presented the victims to the priest, or of the dead on whose behalf they were presented, were in a mysterious way transferred to the animals slaughtered, and through their death cast away" (Conybeare, 1903, p. 65). Similarly, within Judaism, the Hasidic *Kaporos* are intended to serve as atonements for sin. In one form of the ritual, "adherents transfer their sins symbolically to chickens, their 'doubles,' who are then slaughtered" (Davis, 2005, p. xiii). It is a practice that, though controversial, is still practiced to this day in cities across the United States.

Divine appeasement through sacrifice is a common thread among both monotheistic and polytheistic religions. Chickens were often favored as sacrificial animals due to their ability to guide souls (Becker, 2000, p. 58), and in "Egypt, ducks were favored sacrificial animals" (p. 89). In addition to appeasement, sacrifice in such polytheistic religions allowed for the calling forth of a particular god along with its specific qualities or protections. Ancient Hawaiians, for instance, often used chickens as sacrificial animals because they represented not only the deity to whom they were being sacrificed, but also the human traits characteristic of the sacrifier. For early Hawaiians, the chicken appears as a human "in various myths and may alternate between its animal

and human forms" with heroes like Kepakailiua being hatched from a chicken egg (Valeri, 1985, p. 47).

Ancient Greeks and Romans performed animal sacrifices for many reasons, including requesting help or protection from harm from a specific god or goddess (Shelton, 2009). Interestingly, only domesticated animals were used for such offerings, given that compared with "wild animals, with which humans were always 'at war,' domesticated animals had value, when alive, to humans" (p. 107). Fortunately for those gifting such valuable sacrificial animals to the gods, bones and fat were the divine preference, allowing their human sacrificers "to consume the flesh of the dead animal, all the while feeling very pious about having given the god a valuable gift" (J. Shelton, personal communication, May 15, 2018).

Now that we have examined the historical aspects of poultry in human society, it is time to shift our gaze to contemporary captivity practices. In the United States, poultry is a ubiquitous—though often invisible—facet of everyday life, woven into the very fabric of society. Poultry's influence upon our national identity is exemplified by the humble turkey, whose mark was as indelibly made upon the first Thanksgiving dinner as it was upon our country's forefathers. Benjamin Franklin famously asserted the wild turkey should usurp the Bald Eagle as national bird, observing in a 1774 letter to his daughter that it "is in comparison a much more respectable bird, and withal a true original Native of America" (Ekarius, 2007, p. 219). "He is besides," Franklin continued, "though a little vain and silly, a bird of courage, and would not hesitate to attack a Grenadier of the British Guards who should presume to invade his farm yard with red coat on" (in Ekarius, 2007, p. 219). In 1863, President Abraham Lincoln's family was

presented a live Christmas turkey. His son, "Tad, ever fond of animals, quickly adopted the bird as a pet, naming him Jack and teaching him to follow behind as he hiked around the White House grounds" (King, 2012, para. 14).

Today, the food we eat, clothing we wear, vaccines we inject, and even the phrases we speak have all been shaped by our connection with poultry. Commonly employed idioms are brimming with references to fowl and other birds, demonstrating not only our affinity for avian metaphors but also revealing the embedded value structures that underlie our conceptualization of birds:

> Our language reflects our disrespect. Something worthless or unappealing is 'for the birds.' An ineffectual politician is a 'lame duck.' To 'lay an egg' is to flub a performance. To be 'henpecked' is to be harassed by consistent nagging. (Ackerman, 2016, p. 1)

Whether conscious or unconsciously, we desire to disparage the animals we abuse, as doing so can be used as justification for our actions. Thus, compared with those ancient peoples who held birds as sacred, the modern human's irreverence is betrayed by our most basic figures of speech.

In the modern era, the idea of poultry has become inextricably linked with industrial-scale farming. Before delving headlong into a discussion of prevailing practices within factory farms, it is important to note that—just as escaping such a fate does not guarantee positive outcomes for present-day poultry—life was by no means bucolic for farmyard fowl in the pre-industrialized era. In Europe in the 17th century, geese were nailed to the floor to encourage weight gain, and it was customary "to cut the legs off living fowl in the belief that it made their flesh more tender" (Davis, 2009, p. 3).

In 18th-century England, some believed that the meat of tortured animals tasted better, and poultry keepers were known to sew the guts of their fowl in an effort to fatten up the birds (pp. 3-4). Perhaps if there is one good thing to come of a shift toward the efficient uniformity required of industrial-scale farming, it is the concomitant homogenization of horrors; for small-farm fowl, it would seem, the potential harms are as diverse as the settings in which they're kept.

Mass production of chickens for meat and eggs was not invented by modern-day capitalists, though they have done much to mechanize the process. Egyptians first implemented fire-heated clay brick incubators to simultaneously hatch thousands of chicks beginning some 4,000 years ago, and the Romans later followed suit, constructing ornate chicken farms capable of housing up to 200 birds at a time (Davis, 2009, p. 3). Today, modern poultry production is an endeavor that strives toward ever-growing efficiency: of caloric intake, housing capacity, and speed of slaughter. According to the United States Department of Agriculture, poultry consumption is at an all-time high, with approximately 108 pounds consumed annually per capita in 2016, compared with 51 pounds in 1976 and 89 pounds just twenty years ago (Livestock and Meat Domestic Data, 2018).

By far, chicken leads as the primary source of poultry consumed, making up more than 80% of the meat in Americans' diets. An astronomical 40 billion chickens are slaughtered for meat worldwide each year, and more than 5 billion egg-laying hens are confined to battery cages (Davis, 2009, p. v). These staggering statistics have led some to draw a comparison between industrialized farming and the holocaust, a term that was itself "taken over from the Greek word *holokauston*, which in ancient times denoted their

own and others' cultural practice of sacrificing animals" through burning (Davis, 2005, p. 12). The parallels are not relegated to bird experience, but also apply to us mammals, including elephants and humans (Bradshaw, 2009). Just as many Nazi soldiers suffered psychological trauma as a result of the blood of Jews on their hands, so, too, do poultry workers suffer from a myriad of psychological symptoms directly stemming from the violent nature of their work (Hutz, Zanon, & Neto, 2012; jones, 2010b). In this regard, slaughterhouse workers are also victims of cruelty, subject to low wages and work conditions that are as stressful as they are dangerous.

In light of the sheer magnitude of modern poultry farming, the experiences of individual birds are difficult to extrapolate, located at varying points along a continuum of violence that changes cadence with commodity, species, and time. One extreme finds birds blissfully unaware of their fates, living out their short days with the pleasures of pasture and sun. The other is a scene of abject horror filled with disfigurement, disease, and indescribable suffering. In such mechanized environments, "mutilations, starvation procedures, and methodologies of mass-murdering birds, euphemistically referred to as 'food production,' raise many profound and unsettling questions about our society and our species" (Davis, 2009, p. 10). Consider for a moment the life of a battery cage hen:

> Imagine yourself as a layer chicken; your home is a crowded cage with a wire floor that causes your feet to hurt and become deformed; there's no room to stretch your legs or flap your wings and they become weak from lack of exercise; but at the same time, you can never be still because there is always one of your miserable cell mates who needs to move about; one of the other chickens is always picking on you and you cannot get away—except by letting others sit on

> top of you; the air is filled with dust and flying feathers that stick to the sides of the cage splattered with chicken shit from the inmates in the cage upstairs; it is hard to breathe… Eventually, despite your wretchedness and anguish, and the tormented din of thousands of birds shrieking their pain together, you lay an egg and watch it roll out of sight; but the joy of making a nest, of giving birth, of clucking to your chicks is absent—laying the egg is an empty, frustrating, and exhausting ritual. (C. D. Coats, as cited in Davis, 2009, pp. 31-32)

Regardless of the quality of the accommodations, once on the commodification conveyor belt, with rare exception there is but one way off: death.

While most of these birds end up on our dinner plates—or in the case of spent layers, perhaps our pets'—those who meet a premature end will find that this conveyor belt does not lead solely to the supermarket freezer. For some, death is met much earlier, as when a laying hen is fatally trampled, a male chick is tossed into the trashcan or grinder, or a fast-developing "meat bird" succumbs to the demands put on a body that never evolved for such rapid growth (see Figure 3). Within the last century, intensive development of broiler breeds by universities and chemical companies like Upjohn and Merck has led to the development of poultry varieties that weigh four times as much in half the time (Davis, 2009, p. 99). Heart and respiratory problems, malfunctioning ovaries, and leg disfigurement are common issues among such heavy birds, who are kept in crowded conditions and even constant darkness in order to prevent caloric "waste" as well as injury or even death through exertion (pp. 116-117).

Imprisoned in gargantuan bodies ill-suited to the most basic of natural behaviors and further confined by housing that restricts such movements, commercialized broiler

Figure 3. From left, commercialized turkeys Louis and Alexis. Rescued from slaughter, turkeys like Alexis and Louis face numerous challenges stemming from their human-engineered genomes. With bodies designed for rapid weight gain, they often endure collapsed legs and congestive hearts, as they are typically slaughtered by the age of six months. Louis recently died as a result, suffering catastrophic limb and heart failure. Without intervention from a veterinarian, Louis would have drowned from anthropocentrically-generated edema. He was only 14 months old. Photo courtesy G. A. Bradshaw. Reprinted with permission.

birds live a lethargic and vegetative existence, not truly alive and not yet dead, rather somewhere in the liminal space between, the borderlands (Anzaldúa, 1999). This is reflected in the way the poultry industry refers to them, as antemortem rather than alive—life framed always in terms of its proximity to death, at which point from the capitalistic perspective their true life as a product can begin (e.g., Owens, 2014). Yet, lest we forget, they are alive, communicating through symptoms. As with parrots, poultry subjected to

such unabating stress express their inner trauma outwardly through self-mutilation, cannibalism, and stereotyped behavior (Davis, 2009). Poultry farmers attempt to curtail these destructive behaviors through preemptive mutilation. As one turkey farmer put it:

> In more than 30 years raising turkeys, I have never had to debeak, clip toenails, or remove the snood from any of my heritage birds. If you have a good nutrition plan, and provide them with plenty of room to move, they will never exhibit feather picking or cannibalism. I understand from research that large commercial whites must have their bodies altered significantly to avoid cannibalistic and feather-picking behavior. My guess is this has a great deal to do with the boredom and overcrowding of commercial birds. (Drowns, 2012, p. 173)

As hinted at previously in discussions regarding colonization of psyche (Fanon, 1965), the psychological ramifications of a life spent in such maladaptive conditions cannot be overstated.

In addition to foraging, flapping, preening, and socializing, we have taken from many commercialized birds the ability to fulfill their most basic evolutionary prerogative, bringing new life to future generations:

> Today's commercial turkey is selected to efficiently produce meat at the lowest possible cost. It is an excellent converter of feed to breast meat, but the result of this improvement is a loss of the bird's ability to successfully mate and produce fertile eggs without human intervention. Both the Broad Breasted White and the Broad Breasted Bronze turkeys require artificial insemination to produce fertile eggs. These turkeys also have a less robust immune system and are prone to cardiac, respiratory, and joint problems. (Ekarius, 2007, p. 221)

Poultry genomes have been engineered to a point that challenges the very definition of what is means to be a species, "a set of animals or plants, members of which have similar characteristics to each other and which can breed with each other" (Species, 2018). Further, we humans have opened a Pandora's box regarding the ethical implications of interspecies sexual assault (Davis, 2017), particularly when one considers that *artificial* insemination is not artificial at all. It is conducted by human animals—beings who are indeed a part of nature.

It is ironic that chicken eggs provide the base for many human vaccines, given that the same overcrowding that often accompanies production of said eggs is responsible for one of the greatest threats in modernity: epidemic outbreak. At the turn of the century, fears of an apocalyptic scenario concerning avian flu strains like H5N1 led to the global extermination of countless poultry flocks, including 118,000 six-week old chicks in Maryland in a single day and more than 80 million chickens in just two months in Southeast Asia (Davis, 2005, p. 22). This was not the first time such a scene unfolded, as a Newcastle Disease scare in the 1970s led to some nine million hens being similarly "destroyed" in California—a pathogen that, notably, also infects psittacines and can be transmitted between parrot and poultry species (Aiello & Moses, 2016, p. 2856; Davis, 2005). With the worst of such outbreaks avoided thus far through intensive mass-culling, human beings have found another way to employ poultry bodies—and antibodies—in the service of combatting epidemics. So-called sentinel chickens are used globally as early detection systems for mosquito-borne infectious diseases including West Nile Virus (e.g., Cherry et al., 2001). These lonely sentinels, left isolated in small cages across the

world's landscapes, serve as our proverbial canaries in the coalmine, the first warnings of apocalypse written in their blood.

It is important to note that waterfowl are not exempt from the ill effects of commercialization, including extermination en masse in the face of virulent disease. This is because they, too, have been selectively bred for meat and egg production and are confined, like their terrestrial brethren, to a sedentary life often spent crowded indoors:

> Commercial waterfowl operations usually incubate eggs and raise the young indoors with supplemental heat for at least the first six weeks of life. Larger commercial operations often have the ducks continue their lives indoors to protect them from predators, though geese usually go out on pasture until they are ready for processing. (Ekarius, 2007, p. 171)

As with chickens and turkeys, the natural behaviors of waterfowl are problematic within an industrialized setting calibrated for efficiency. Allowing "ducks access to straw, an outdoor run, or open water increases the behavioural opportunities of the ducks (foraging, preening, bathing, and swimming), but can also lead to poor hygiene and increased health- and food safety risks" (Rodenburg et al., 2005, p. 633). The result is that many commercialized waterfowl are denied the very thing that sets these birds apart from other species of poultry, an act integral to their core identities: swimming in water.

Though not as prevalent as chicken and turkeys, waterfowl are raised for food throughout the United States. Whereas "Wisconsin and Indiana lead the country in commercial duck production, California and South Dakota are the main goose-producing states" (Ekarius, 2007, p. 171). In addition to being raised as a source of protein through their meat and eggs, ducks and geese face additional exploitation in the foie gras (Marie-

Etancelin et al., 2008) and feather industries. Foie gras involves the force-feeding of ducks and geese in order to obtain the fatty liver that is considered a luxury food item in many countries, particularly France (Foie Gras, 2018). In a process known as gavage, corn is often boiled with fat and then delivered directly through the esophagus via a feeding tube. The result is a liver six to 10 times its normal size (Production Methods section, para. 7-12). Whereas geese were traditionally most commonly used for foie gras, ducks have far usurped the goose in recent years, today making up more than 90% of foie gras production worldwide (Guémené & Guy, 2007).

By far the majority of these are Mule Ducks—those sterile Muscovy-Mallard hybrids discussed in the previous section—which in France alone accounted for more than 35 million individuals force-fed in 2001 (Guémené & Guy, 2007, p. 210). Ethically, it is worth noting that use of Mule Ducks for food like foie gras is a double-violation of sorts. Muscovy Ducks' history of domestication as pets resulted in lower fear and stress reactions in the presence of humans—and conversely, greater trust—than displayed by other species including Pekin Ducks, making Muscovies ideal candidates for breeding programs (Faure et al., 2003). Lest this be interpreted as evidence of minimized suffering during force-feeding, the same study demonstrated that hybridized Mule Ducks like those used for foie gras do not show any less fear or stress compared to other species.

While many geese may have escaped their fates as the producers of foie gras, others must endure the equally frightening prospect that is commercial feather production. The same soft and downy feathers that provide buoyancy and keep migrating geese warm at altitude are coveted as insulation by humans, who use the feathers to stuff jackets, sleeping bags, comforters, and pillows. The popularity of goose down for use in

textile products can be traced to its thermal properties, whose fractal dimension is very close to the *golden mean* of 1.618, which plays significant roles in many natural phenomena (Gao, Pan, & Yu, 2011). Though there are rare exceptions in which down is collected during natural molting cycles, by and large goose down is obtained through slaughter or plucked from live geese in order to avoid damage or denigration via contact with blood:

> During the course of slaughter and processing, feather and down is exposed to various unfavourable effects which degrade its quality. Conversely, the feather and down harvested by hand from live geese is superior to the industrial feather product in several respects. However, animal rights activist groups recently began to protest vigorously against the hand-harvesting of feathers from live geese. (Kozák, Gara, & Kawada, 2010, p. 767)

Such protests have led to a ban on live-plucking in the United States and European Union, though the practice is still prevalent in countries like China, which produces 80% of the down that makes its way to American shores through the world supply chain (Gibson, 2016).

Bleak as many contemporary captivity practices are for fowl, there are at least a few examples beyond the reach of industrialization in which the relationship between humans and poultry is relatively benign and, perhaps even to some degree, mutually beneficial. Sanctuaries adequately equipped to address species-specific physical and psychological needs exemplify such an arrangement, as many rescued or abandoned birds have medical conditions that necessitate lifelong care (Davis, 2009). Facilities dedicated specifically to poultry, though not plentiful, are widespread, occupying a number of need-

based niches such as Rooster Haus Rescue that focuses on the victims of illegal cockfighting rings (Rooster Haus Rescue, 2018). More common are generalized farm sanctuaries that take in a variety of domesticated species including cattle, pigs, sheep, and other so-called *barnyard* creatures. As generalists, the ability of these sanctuaries to attend to the specific needs of poultry varies on a case-by-case basis.

Outside of sanctuaries, benevolent human-poultry relationships are perhaps most succinctly illustrated by the interrelated uses of fowl as pet and therapy animal. However, just as we saw in the previous discussion on pet parrots, anthropocentric uses by humans can be fundamentally problematic. For example, when applied unidirectionally to the needs of the human, animal-assisted therapy is arguably just another—albeit subtler than some—form of exploitation (Buzzell & Chalquist, 2009). With that being said, there are a few promising examples of avian-human connection in this context, including the beneficial role hen keeping has been found to have upon marginalized groups like the elderly (Salter, 2014). One such project launched in 2012 in the United Kingdom called HenPower introduced therapy chickens at "eight pilot sites, ranging from care homes to assisted-living schemes such as Wood Green. As well as practical poultry keeping, there [were] hen-based activities, including art, dance and singing" (Salter, 2014, para. 6). A University of Northumbria study of male HenPower participants found improved well-being as a result of the program, including reduced depression and loneliness (para. 13).

Pet chickens are becoming an increasingly popular choice within American homes, showing up in many places one would least suspect: city apartments, suburban condos, even among the tech-savvy of California's Silicon Valley (Holley, 2018). In

such places, chicken-keeping "has emerged as an unlikely badge of urban modishness… a trendy, eco-conscious humblebrag on par with driving a Tesla" (para. 5). Those who can afford it spare no expense for their birds, treating the chickens to salon treatments, personal chefs, and cutting-edge automated coops. In 2002 in California alone, it is estimated that there were 62,000 pet chickens, though "some experts believe the updated figures might double that number thanks to the 'chicken-mania' that is 'sweeping the Bay Area,' as the Mercury News put it" (para. 26). Many urban chicken keepers see caring for their birds as a way of momentarily escaping the trappings of modernity through connection with the natural world. Yet this uptick in pet chicken keeping is not without its shadow side (Jung, 1951/1968, pp. 8-10; 1954/1968a, p. 20), as the "rise in backyard-chicken numbers correlates with the rise in numbers of abandoned chickens in parks, animal shelters and roadsides" (Huemer, 2018, para.1).

Though new in its technological twist, the ecotherapeutic (Buzzell & Chalquist, 2009) potential of poultry keeping is by no means a novel discovery. In her 1905 essay "Poultry Raising as a Fad," Margaret Daly touted the therapeutic benefits that hobbyist housewives could receive from tending small poultry flocks:

> If possible leave some of the indoor work to some one else to do or leave it undone, unless it be absolutely necessary, and pay more attention to your poultry. It will pay you well, not only from a money stand point but that of good health as well. Exercise in the open air conduces to good health and the sound sleep that comes from out door exercise. Among my acquaintances I find that those women who spend a part of each day out of doors in all weathers and seasons as the

> poultry woman must do, are invariably healthier, happier, more intelligent looking than she who spends her whole time in the kitchen. (p. 10)

In light of the increasingly indoor demands of the 21st century, human beings still crave connection with the natural world, perhaps now more than ever. Whereas duck diapers and chicken pianos may represent an overcorrection of sorts through further anthro-imposition, meaningful trans-species connections can and do occur within the context of captivity when given a firm footing in mutual ethical consideration.

Poultry social ethology, morphology, and natural history. Our exploration of land and water fowl now departs from wholly anthropocentric framing to begin looking at the birds themselves by way of the reductionistic approach that defines much of traditional avian inquiry. This completes our foundation of external understanding so that we may subsequently dive into the inner, alchemical world of avian psyche.

Derived from the French word *poule* (from the Latin *pullus*) meaning small animal, the term *poultry* encompasses a wide number of bird species primarily of the superorders *Gallomorphae* and *Anserimorphae*, commonly referred to as fowl and waterfowl, respectively (Poultry, 2017):

> The gallinaceous birds, which are members of *Gallomorphae*, are terrestrial, chickenlike birds with relatively blunt wings that aren't capable of flying very far. They have strong legs and feet for digging, fighting, and running. There are over 250 species in this group… The *Anserimorphae* are waterfowl, and there are over 150 species in the group. They are strong swimmers with short, stout legs and webbed feet. They also fly very well, though many of the domestic ducks and

> geese have been bred to have a large breast, which reduces their flying capabilities. (Ekarius, 2007, pp. 2-3)

There are some species of waterfowl whose categorization as duck or goose has been called into question. Muscovy Ducks of South America are one such example. Remaining relatively isolated for tens of millions of years, Muscovies have developed unique evolutionary adaptations like nesting high in the trunks of trees (Ekarius, 2007, p. 192). Their classification as ducks has been challenged by those who note the Muscovy's quackless vocalizations, 35-day egg incubation period—the same as geese and a week longer than ducks—and inability to create fertile offspring when crossed with other duck species, instead producing sterile mulards or *Mule Ducks* (Marie-Etancelin et al., 2008).

Although today the word *poultry* is effectively synonymous with domestication, birds like guinea fowl, pheasants, and emus with genomes largely indiscernible from wild populations are also considered poultry rather than wild game when captive-raised for their eggs, meat, or feathers. It is worth noting that domestication itself is more continuum than binary, with genetically engineered commercialized birds on one end and on the other, individuals whose DNA is only one or two generations removed from their wild brethren. The distinction between so-called commercial and heritage breeds further complicates this spectrum of domestication, as does interbreeding between domestic and wild populations (Ekarius, 2007; Miao et al., 2012). One spring in my early youth, I witnessed this first-hand when a migratory Canada Goose had hybrid goslings with one of the African Grey Geese who lived in our pond. The result was a goose who for all intents and purposed looked and acted like a wild Canada Goose, save for a light mottled coloration on the neck and slightly larger size.

Along with the use of poultry for meat, feathers, and eggs, the University of Kentucky's College of Agriculture, Food and Environment also adds "entertainment (racing, exhibition, hunting, etc.) or work" to the list of uses for poultry otherwise considered undomesticated (Welcome to Poultry Science, 2017). This opens the door to inclusion of genetically wild swans, partridges, and messenger pigeons in the definition of poultry. Inexplicably omitted from this list of uses is poultry kept as pets. This study does not make such exclusions. Rather, the *pet* category will be considered a subtype of the entertainment or labor categories depending upon the context of captivity—as a family member or therapy animal, for instance.

Given its inextricable association with anthropocentric use, whether through domestication or wild capture, captivity seems requisite for the classification as poultry. This is in contrast to the situation with parrots, whose genomes remain wholly undomesticated having been captive-bred for only a handful of generations and whose classification as such is not dependent upon human context (see previous section for further discussion). Considering the wide net cast by the term *poultry,* which encompasses diverse forms of fowl from ostrich to quail to everyone in between, this discussion focuses primarily upon the four most commonly kept groups within the United States: chickens, ducks, geese, and turkeys (see Table 1). Further, discussion will be weighted toward those species whose prevalence has amassed the most scientific study; there are far more examples of cognitive research using chickens, for example, than there are for ducks.

As with other birds, biologically poultry and human beings share a lot in common, with a few notable differences:

> Poultry have feathers instead of hair, wings in place of arms, no sweat glands, nonexpendable lungs plus air sacs, and a much higher body temperature, between 105.6 and 107˚F (40 to 41.6˚C). Poultry have no teeth (hence the saying *scarce as a hen's teeth*) but instead use a muscular organ called a gizzard to grind food. (Drowns, 2012, p. 43)

While this basic anatomy holds true across all types of poultry, there are a few species-based differences. Waterfowl, for example, have gizzards that are more rigid, higher

Table 1

A Comparison of Poultry and Humans

Species	Chrom-osomes	Diet	Mating Strategy	Terminology		
				Female	Male	Young
Chicken	78	omnivorous	polygamous	hen	rooster or cock	chick
Duck	80	omnivorous	varied	duck or hen	drake	duckling
Goose	80	vegetarian	monogamous	goose or hen	gander	gosling
Turkey	80	omnivorous	polygamous	hen	tom	poult
Human	46	omnivorous	varied	woman	man	child

Note. Table incorporates information from multiple sources (Drowns, 2012; Ekarius, 2007; Smith & Johnson, 2012).

immunity to waterborne parasites, and the ability to withstand colder temperatures thanks to a subcutaneous fat layer and downy, insulating feathers (p. 44). The ability to insulate against cold has allowed some species of waterfowl to inhabit territories that are unhospitable to other birds. One such example is the Snow Goose, who nests in the

Arctic tundra, where it plays a key role in maintaining the diversity of plant ecosystems (Gauthier, Bêty, Giroux, & Rochefort, 2004).

In contrast to altricial bird species like parrots who enter the world essentially bald, newly hatched poultry arrive covered in fluffy feather down, the shafts of which develop into the bird's first set of feathers within a month or two. There are some breed-specific variations, but generally, feathering follows a predictable pattern: "shoulder and thigh around two to three weeks; rump and breast at three to four weeks; abdomen, neck, and leg at four to five weeks; back at five to six weeks" and finally, at six to seven weeks, wing coverts and the head (Drowns, 2012, p. 49). In addition to protection from the elements and aiding in flight, the feathers of waterfowl provide buoyancy, a quality maintained through regular preening using a specialized oil gland at the base of the tail.

Visually, the feathers of fowl are every bit as diverse and spectacular as the plumage of their exotic counterparts, including parrots. Perhaps the most famous multi-hued example can be found in the Peacock, though many iridescent drakes and ornamental doves hold their own in terms of technicolor luminosity (Ekarius, 2007; Jeffreys, 2017). Although there are a few exceptions—notably, among waterfowl—most poultry species display a great deal of sexual dimorphism in their feathers, with males possessing brighter colors than females, whose muted hues provide camouflage while nesting. Some breeds of duck temporarily lose this visual differentiation while the drakes are molting. During this "eclipse period" male ducks appear virtually identical to females (Ekarius, 2007, p. 171). Interestingly, males of the ancestral precursor to domesticated chickens, Red Junglefowl, also exhibit eclipse plumage, which has been used in studies to assess the purity of wild genotypes as distinct from "populations [that] have been

contaminated genetically by introgression of genes from domestic or feral chickens" (Peterson & Brisbin, 1998, p. 387).

Sexual dimorphism is also expressed across species through differentiation in body size. With rare exception, male fowl are larger than their female counterparts. This is true of chickens, ducks, geese, and turkeys, whose overall size mirrors this alphabetical listing. On the lightest end of the spectrum, bantam Serama Chickens, commonly kept as pets in Malaysia, weigh in at less than twelve ounces (Ekarius, 2007, pp. 154-155). The heaviest is the Broad Breasted White Turkey, genetically developed over the past 50 years for intensive, industrial-scale farming. At full maturity a tom can weigh 50 or more pounds, though most never achieve this feat given that typically the "birds are butchered as soon as they reach marketable weight, between 14 and 18 weeks of age" compared to 24 to 28 weeks for heritage breeds (p. 229; Drowns, 2012).

The many colors, shapes, and sizes of poultry reflect the diverse habitats in which they are found. Occupying virtually every corner of the world, wild terrestrial fowl tend to establish specified home ranges. Many species of waterfowl, however, observe no such geographical limitations and traverse the globe by way of seasonal migration. Bird migrations are one of the greatest feats in the animal kingdom, incomprehensibly long and treacherous journeys undertaken by countless winged individuals each year.

In addition to the impressive distances covered by migrating birds, often spanning continents (e.g., Gauthier et al., 2004), extreme conditions are encountered along the way, including freezing temperatures and oxygen depletion high in the upper reaches of the troposphere. Bar-Headed Geese hold the record for the highest altitude flown by any migrating bird, recorded at nearly 30,000 feet while crossing the Himalayas (Tudge,

2008, p. 250). The V-formation that geese famously employ may conserve the energy required to achieve such heights in flight (e.g., Cutts & Speakman, 1994):

> Theory has it that turbulence from the wing of the leading bird causes a reduction in the air pressure, which lifts the bird behind and helps to pull it along. Only the lead bird takes the full brunt of flight—and the geese alternate the lead so that all take their share. In this cooperative share-and-share-alike fashion, geese can fly half as far again as they could do if they few alone, or so it's been calculated. (Tudge, 2008, p. 251)

The timing and navigational cues of migration patterns have long fascinated human beings and remain a topic that is widely studied to this day.

Researchers postulate that migrating birds navigate using the sun, stars, and Earth's magnetic fields via magnetoception, which may have a visual component (Heyers, Manns, Luksch, Güntürkün, & Mouritsen, 2007). Interestingly, magnetoception is not possessed solely by migratory species. Chickens, for instance, may use magnetic field detection and orientation (Marino, 2017, p. 129). There is no consensus regarding the exact sensory mechanisms underlying magnetoception; however, it is theorized that birds use iron-containing dendrites in the dermal lining of their upper beak, a feature common across many avian species including pigeons, European Robins, and chickens (Falkenberg et al., 2010). However recent studies on the retinas of Zebra Finches refute this idea, suggesting instead that magnetic field detection may be attributable to a protein in the eye called, somewhat ironically, Cry4 (Pinzon-Rodriguez, Bensch, & Muheim, 2018).

The remarkable sensory capabilities of poultry are not utilized only in migration, orientation, or even while being awake for that matter. Both chickens and ducks have demonstrated the ability to sleep with only half their brains at a time and literally one eye open, a phenomenon called unihemispheric slow-wave sleep or USWS (Mascetti, Rugger, & Vallortigara, 2007; Rattenborg, Lima, & Amlaner, 1999). It is possible that migratory birds use USWS during flight (Rattenborg, 2006); however its primary function is likely as a means of predator detection. Studies using mallard ducks show that individuals located at the edge of a sleeping group strategically use USWS in order to keep their outward-facing eye open (Rattenborg, Lima, & Amlaner, 1999). Some species of poultry also use height to avoid predators while sleeping (Humane Society, 2014, p. 2). For example, wild "turkeys seek safety by roosting high off the ground to foil predators such as coyotes and foxes" (Drowns, 2012, p. 171).

Cultural relational patterns and values vary widely across poultry species, which is reflected in their differing mate selection strategies. For instance, male turkeys and chickens are polygamous, competing for the attention of several females within a flock (e.g., Fawcett, 2004; Smith, Taylor, & Evans, 2011), whereas most geese pair monogamously, often choosing only one mate in their lifetime and spending a full year of courtship prior to breeding (e.g., Gauthier et al., 2004). Ducks find themselves somewhere in the middle, with a few species like Whistling Ducks pairing monogamously for several years, some species choosing a different mate each breeding season, and still others remaining polygamous (Rohwer & Anderson, 1988, p. 188). The primacy of male versus female preference also varies across species, with males often

taking the lead in the case of ducks and chickens and females having the final say among turkeys and peafowl (Drowns, 2012, pp. 304-305).

In a case of convergent evolution with mammals, male waterfowl are one of the few types of bird to have an external phallus rather than a cloaca, though it utilizes a lymphatic rather than vascular erectile mechanism and is spiral shaped (Brennan, Clark, & Prum, 2009). It has been hypothesized that male and female duck genitalia have morphologically co-evolved through antagonistic sexual conflict, with labyrinthine vaginas functioning "to exclude the penis during forced copulations" (p. 1). However, given that the Westernized scientific worldview is rooted in models of conflict and competition along with the observation that monogamous species like geese and swans are similarly endowed, there may be other explanations such as providing a means of cryptic female choice wherein insemination can be controlled postcopulation. Moreover, despite the fact that only about 3% of birds have penises, there is evidence that a common evolutionary ancestor had a phallus, which later became a cloaca in most avian species through the process of natural selection (Herrera, Shuster, Perriton, & Cohn, 2013).

Unlike altricial, K-selected animals such as humans and parrots, poultry are considered to be precocial species–or r-selected in ecologists' argot—meaning they reproduce at relatively high rates and have well developed young who, within hours of hatching, are able to secure their own food (Rohwer & Anderson, 1988, p. 187). It is important to note that just as with domestication, the categories of altricial versus precocial are not binaries, instead representing poles at the ends of a continuum, with individuals of most species located somewhere in between. This is true for humans, who despite being classified as altricial, are precocial-born with respect to our open eyes, hair,

and large brains (Ehrlich, Dobkin, & Wheye, 1988, para. 11). Thus, rather than "a sharp dividing line between hatchlings that are precocial and those that are altricial, there is a gradient of precociality" among birds (para. 3).

Perhaps the most extreme example of precociality can be found in the megapodes of Australasia. The Australian Brush-Turkey, for instance, lays its eggs in piles of decaying vegetation rather than warming the eggs with body heat. Receiving minimal contact with others of their kind, the chicks hatch, fully-fledged, at varying intervals. Given this lack of parental attachment as compared with other *Galliformes*, it has been theorized that Brush-Turkeys utilize inner schema regarding morphological and behavioral cues in order to recognize other members of their own species (Göth & Evans, 2004). Among four levels of precociality, megapodes are considered precocial 1, whereas most poultry species like chickens and ducks are classified as precocial 2 or 3, depending on the chick's ability to find its own food without having to be shown first by a parent (Ehrlich, Dobkin, & Wheye, 1988; O'Connor, 1984).

Despite the precocial nature of their young, for many nonmegapode poultry parents, raising offspring is a serious business. The work begins before the eggs have even hatched, when "the proper temperature, moisture, ventilation, humidity, and position of the egg" must be maintained throughout the course of incubation, which takes three to four weeks depending upon species (Davis, 2009, p. 18). Among chickens, there is evidence that hens and chicks begin communicating prior to hatching, which serves to both signal needs to the hen as well as provide hatchlings a head start in regard to recognizing their mother's distinctive call (Humane Society, 2014, p. 3).

The duties concerning egg incubation are sometimes shared among male and female waterfowl—notably, geese; however, in most cases, the task typically lies squarely with the female. However, that is not to imply that the males of these species are wholly uninvolved in chick rearing. Among chickens, for example, "roosters will often join in the hen's egg-laying ritual" and even participate in selection of the nesting site (Davis, 2009, p. 18; Ekarius, 2007). It is worth noting that the rooster's dedication is something I've witnessed in my own flock, the hens' shrill laying calls bringing Robin running. He then stands protectively at the entrance of the coop and warmly greets his hen with a small dance upon her re-emergence. Turkeys are also well known to engage in such courtly dances.

Once hatched, "a mother hen will tenderly and even fiercely protect her young brood, driving off predators and sheltering her little chicks beneath her wings" (Davis, 2009, p. 18). This is true of mother ducks as well, as relayed in the earlier autobiographical section of this study. Birds are incredibly creative and astute in regard to their protective strategies. On more than one occasion, I have witnessed duck mothers spontaneously switch tactics from attacking me to flying nearby and feigning injury in an attempt to distract my perceived predatory instincts. Geese, exemplars of cooperative co-parenting, often swim with their goslings in single file with one parent leading in the front and another holding up the back of the line. Swans have taken this protective approach to swimming a step further, carrying young—called cygnets—on their backs (Ekarius, 2007).

As we saw in the previous section with cross-fostered cockatoos, many young poultry chicks raised by another species will become culturally attuned to their foster

parents. Poultry farmers sometimes use this cultural "reprogramming" to their advantage. Pheasants, for instance, bred in captivity as game birds, take on a more docile nature when raised by chicken hens:

> She will be caring and watchful, and will help domesticate the pheasants, gentling them down. Remember to keep her in an enclosed building for a while to accustom the pheasant chicks to indoor facilities. Typically, young pheasants will take on the traits of the adoptive mother chicken, so if you want your pheasants more chickenlike this is the perfect way to do it. (Drowns, 2012, p. 236)

It is clear from such observations that, although Australian Brush-Turkeys may be an exception, for many young fowl early learning is an integral part of later development, including the formation of identity (see following discussion on poultry psyche).

Flock social patterns vary among poultry species. In the wild, "ancestral chicken society consisted of long-term, semistable groups of four to 13 individuals of varying ages" (Smith & Zielinski, 2014, p. 65). Wild turkeys, on the other hand, "form predominantly single gender flocks which can range in size from [five] to 50 individuals" and encompass a territory of several hundred acres (Fawcett, 2004, para. 2). Among waterfowl, many species of duck form large flocks, whereas geese are more likely to form pair bonds that intermittently join larger groups, particularly while migrating (Cutts & Speakman, 1994). Regardless of group size, poultry species spend most of the day preening, feeding, and vocalizing with conspecifics.

Despite the paucity of research concerning poultry culture, which reflects the mainstream scientific community's bias toward utilitarian avian approaches, there is "a growing branch of ethology that is concerned with the application of ethological

principles to areas such as the management and welfare of economically important species like poultry" (Mench, 1992, p. 631). However, just as this observation implies, much of said research is behavioristic and anthropocentric in nature, concerned not with the well-being of poultry but with the health of an economic bottom line. To understand who these birds truly are requires a psychological rather than ethological approach:

> By ignoring psyche, animal behavior reduces an individual's subjective experience to mere signs, passive markers that assume an animal's inability to voice. In contrast, a psychological framing sees behavior as one among many symptoms through which an animal speaks. While ethograms silence, objectify and deny nonhuman animal sentience and agency, psychological symptoms communicate in a language that is shared by all sentient beings. (Bradshaw, 2015b, para. 10)

One goal of this study is to plug the gaps in extant literature by contributing to an understanding of poultry at both a cultural level and the level of psyche.

Poultry psyche. As revealed in the previous exploration of psyche in parrots, research on the brain structure and cognitive capacity of birds reveals a complex inner psychical life analogous in many ways to that of humans (Marino, 2017). This is unsurprising given discoveries in the field of neuroscience (e.g., Jarvis et al., 2005) that demonstrate "the avian telencephalon is neurochemically, hodologically, and functionally comparable to the mammalian neocortex, claustrum, and pallial amygdala" (Reiner et al., 2004, p. 377). These areas of the brain are involved in so-called *higher order* functions such as language, perception, and cognition—abilities collectively referred to as consciousness (Low, 2012). Furthermore, recent studies have shown that avian brains

have higher neuron densities than found in mammals, with a greater portion of this neural network located in the telencephalon (Olkowicz et al., 2016). This suggests that when it comes to complex cognitive feats, despite their smaller brain size birds may have the edge over mammals, including humans.

An issue unique to poultry as compared with other bird species concerns the influence of selective breeding upon brain mass and structure. As we have seen, the construct of domestication is more relative than absolute; however, it has long been observed that so-called *artificial* selection leads to measurable changes in species (Darwin, 1868), and further asserted that one such change is a reduction in brain size, particularly in the forebrain region (e.g., Kruska, 1988). Applying this assumption to domesticated birds has provided an implicit permission structure that treats poultry as objects rather than subjective, sentient beings—while paradoxically using birds as models in human research, particularly in studies on early brain development via observation of embryonic eggs (e.g., Redies, Medina, & Puelles, 2001). The fallacy of this *dumbing down* hypothesis emerges upon closer examination of the birds themselves:

> Genetic mapping of brain regions indicates that domestication has led to a larger body mass and to a lesser extent a larger absolute brain mass in chickens, mainly due to enlargement of the cerebellum. Domestication has traditionally been linked to brain mass regression, based on measurements of relative brain mass, which confounds the large body mass augmentation due to domestication. Our results refute this concept in the chicken. (Henriksen, Johnsson, Andersson, Jensen, & Wright, 2016, para. 1)

Once again, the evidence shows that avian brains—regardless of domestication—are functionally comparable to humans', including all the psychological phenomena that such parity entails. This forms the foundation for a unitary model of the mind and brain, a conceptualization of psyche unbounded by species' lines (Bradshaw & Watkins, 2006).

In light of this trans-species approach to psyche, it behooves us to eschew further projection by learning about poultry on their own terms, which begins with listening to what they have to say. As we have seen with parrots, poultry have demonstrated the ability to communicate in ways that are as complex as they are subtle. Several studies on chicken communication, though limited by traditional positivistic approaches such as behaviorism, reveal not only the meanings behind such nuanced communiqués, but also sophisticated social tactics among flock members:

> Wild fowl and domestic chickens demonstrate complex cognitive abilities. Fowl communicate using sophisticated vocal and visual signals and show remarkable behavioral flexibility as well as sensitivity to the attentional states of others during social interactions. They also perform abstract and social transitive inferences. (Smith & Johnson, 2012, p. 76)

Alarm calls are a prime example. Ever cognizant of danger, once a rooster or hen has spotted a threat, they will emit a distinct vocalization specifying whether the approaching predator is aerial or terrestrial. The reaction by other members of the flock will follow suit, ducking down in the case of threats from the sky and standing still or flying into trees for land-based predators (Smith & Zielinski, 2014, p. 62). Interestingly, "the call for an aerial predator sounds rather like the word 'hawk'. When a rooster shouts 'Hawk!' other roosters soon join him, shouting 'Hawk! Hawk!' Hens join in, clucking

forebodingly" (jones, 2010b, p. 365). This reaction is unsurprising given a unitary model of psyche given that humans similarly adjust their reactions based on the type of danger they perceive and subsequently proceed to spread word of this threat to others.

In another parallel with humans, given the threat of detection associated with alarm calls, chickens will adjust their strategy based on social and environmental context. In the case of an aerial predator, for example, a rooster is more likely to sound the alarm with a female nearby or if both are near cover, often varying the composition and duration of the calls to prevent detection by the predator (Smith & Johnson, 2012, p. 78-79). In another strategic move, a "dominant" rooster will make longer calls—thereby increasing his own risk—if a "subordinate" male is nearby, reducing his chance "of capture by giving the predator more than one target" (p. 79). Hens, on the other hand, will only make such calls when chicks are present. Thus chickens, like humans, weigh the physical and social costs before exposing themselves to danger, with higher risks taken in order to protect loved ones or vanquish rivals.

Food is another common topic of both chicken and human conversation and again is dependent upon social context. Perhaps this is most succinctly demonstrated by the offering of food as a romantic gesture. When a hen is present, roosters will often emit a "functionally referential call" upon discovery of a tasty morsel along with a tidbitting display "composed of a series of rhythmic motions and pulsatile vocalizations, which are audible up to 30 meters from the male" (Smith & Johnson, 2012, p. 79). Tidbitting is an important aspect of mate selection given that hens are more likely to accept sexual advances from generous males than from the largest or most dominant within the group's pecking order—a phrase coined by Norwegian biologist Thorleif Schjelderup-Ebbe in the

1920s (Smith & Zielinski, 2014, p. 62). Inevitably, there are males who attempt to use this to their advantage. Deceptive roosters who effectively cry wolf by alerting in the absence of food are, over time, consistently ignored by hens. This is true for directly duped hens as well as those who witness the deception and learn vicariously (Smith, Taylor, & Evans, 2011). This counter-strategy to deception is strikingly "similar to the same kinds of complex behaviors identified in mammals, including primates" like humans (Marino, 2017, p. 138). It is equivalent to a group of women observing a man lying to one of their friends, thereby scuttling his chances with any of them.

Of course, there is more to talk about than immediate needs like food and danger, as evidenced by chickens' broader social communications. The rooster's crow is one such example. Sensitive to infrared light, roosters perceive the morning at least 45 minutes before we mammals do, using this opportunity to locate other flocks in the vicinity by loudly crowing (Davis, 2009). It is estimated that each male is capable of identifying the crows of more than 30 nearby roosters (p. 27). This triangulated social tapestry is used for communication throughout the day, with alerts made by one rooster setting off a chain reaction among his neighbors, messages sent *through the grapevine* as it were.

Despite their overrepresentation in the scientific literature, it is important to note that the social application of language is by no means limited to chickens. Mother ducks, for instance, use a variety of distinct vocalizations with their ducklings that signify different things. I witnessed this myself on the pond growing up and tried to emulate it when hand-raising poultry. In mother duck speech, soft, breathy clucking essentially indicates she wants her ducklings to stay close, its cadence revealing her sense of urgency

and thus the speed at which they should comply. Loud, sharp quacking is indicative of an immediate threat and the ducklings react accordingly, diving under water or into the brush with lightning speed.

This shared penchant for language allows poultry to communicate bi-directionally and across species lines. For example, "when roosters shout 'Hawk!'… ducks and songbirds take cover too. Such cross-species listening has been observed among many different kinds of animals" (jones, 2010b, p. 366). Naming provides another salient example. One backyard chicken keeper described the name her birds had given her, just as she had given names to them, and how they employed her name in various contexts:

> The use of specific names has been discovered in various mammalian species, including monkeys, whales, and dolphins, but has been especially studied in birds, particularly parrots… Tilly, my original head hen, had named me. She was always the most vocal… my chicken name sounds regal. The first three sounds are low, and the last one is almost an octave higher: *Bup, bup, bup, baaahhhh.* They use this sound when they see me, when they want something from me, and when they are snuggling in my lap. (Caughey, 2017, p. 45)

Such observations coupled with a unitary model of psyche bolster the idea that poultry—like parrots and all peoples—form complex social identities. The perspective-taking required for relating on this social level forms the basis of sympathetic concern, which in turn can lead to empathy-based altruism (Marino, 2017, p. 140). Further, "these social cognitive capacities are important indicators of a flexible and dynamic intelligence and are intertwined with other dimensions of psychology, such as emotional responding and

personality" (p. 137). Taken as a whole, such findings imply a shared psychology between humans and poultry.

As mentioned previously in our discussion of brain mass, no conversation about psyche would be complete without acknowledgement of the effects of domestication and, in particular, the intensive human engineering that has taken place to the minds and bodies of poultry— particularly heavily commercialized breeds—over the past half century. In essence, through the process of selective breeding over countless generations, we've hijacked the genomes of countless individuals, turning what were once seasonally laying birds into egg laying machines. Still others feel our signatures in their flesh, with grotesque growth rates leading to Green Muscle Disease, white striping, Woody breast, and a host of other ailments not seen before (Owens, 2014). Humans have trademarked their names and even their DNA, transforming these birds from living beings to property threatened by copyright infringement (Drowns, 2012; Meek, 2000). Perhaps the most extreme example of genome colonization can be found in another modern technological innovation: the cultivation of lab-grown meat (Specter, 2011).

The colonization of poultry genomes has brought with it a concomitant colonization of psyche (Fanon, 1965). Though it is pertinent to point out once again that the process of domestication is more continuum than binary, ecologist Paul Shepard (1982) noted domestication's seemingly universal effects:

> These changes include plumper and more rounded features, greater docility and submissiveness, reduced mobility, simplification of complex behaviors (such as courtship), the broadening or generalizing of signals to which social responses are given (such as following behavior), reduced hardiness, and less specialized

> environmental and nutritional requirements. The sum effect of these is infantilization. (p. 38)

From a psychological perspective, this stunting of ontological growth is essentially robbing domesticated poultry of the chance to grow up fully—or as Jung would put it, individuate (1928/1966, p. 173). Instead, their developmental wings are effectively clipped, leaving domesticated birds imprisoned by neotenized minds, trapped psychologically. There is evidence this is especially true for poultry breeds in the meat and egg industries as compared with ornamental varieties. One study comparing wild junglefowl, Swedish Bantams, and Hy-Lines—a White Leghorn hybrid selected for high food-to-egg conversion efficiency—found that behaviors "of high energetic cost, such as extensive foraging and social interactions, were lower in frequency in the laying hens compared to junglefowl and bantam, allowing the laying hens to save energy that can be reallocated to production traits" (Schütz & Jensen, 2001, p. 753).

Even those normative adult behaviors that do not expend energy, such as sitting on eggs, are labeled problematic when not serving human needs. The response is to weed such proclivities from psyche through further engineering of avian genomes, some even proposing the "disenhancement" of birds' ability to sense physical pain as a means of further adapting poultry to procrustean mechanized use (Davis, 2010; Latimer, 2018). Yet "while the egg industry claims that the modern 'egg machine' has had the broodiness bred out of her, it is more likely that the hen's mothering impulses have been suppressed rather than eliminated" (Davis, 2009, p. 23). If this is true, perhaps despite such psychological trappings, deep down one can take the fowl out of the jungle but not the jungle out of the fowl. Feral chickens' deft ability to adapt to wild environments is

evidence of this, as is the rescued battery hen's ability to thrive in sanctuary (Bradshaw & Robinson, 2010; Davis, 2010, p. 273; jones, 2010a). This is also true of roosters traumatized by cockfighting, who in sanctuary are afforded the opportunity to reconnect with the relational aspects of their psyches (Bradshaw, 2010) and individuate fully:

> Former fighters sleep (in safe crates) with other birds in the coops and spend their days within enclosures that allow them to see and socialize with (but not hurt or be hurt by) other chickens. In this way, they are able to learn the social signals they ought to have learned as juveniles and chicks; this is a kind of *remembering*, as it allows them to come back to their inherently social selves. As they remember themselves in this way, former fighters become better able to forge and maintain relationships with other chickens; because much of this occurs outdoors, they are also able to relate to other elements of the natural world in ways not previously available to them. This is *connection*. (jones, 2010b, p. 370)

Here we find a silver lining of sorts, illuminating paths toward reconciliation that will require decolonization of psyche on the part of both poultry and humans.

It is an alchemical process, one that requires fusion of opposites—recombination of matter and spirit, body and psyche—in order to come into wholeness, what alchemists refer to as the divine marriage or *coniunctio* (Franz, 1980a) and First Nation Americans called *nirdvandva*, living "free of opposites" (Jung, 1929/1967, p. 14). Poultry, bound to the earth through intensive selective breeding, have long been regarded by humans as mere objects, bodies devoid of psyche. This is reflected in our treatment of these beings as mundane meat and egg machines and finds parallels in our society's denigration of the feminine. We are quick to label female chickens "as 'mother hens' or 'dumb clucks,'

often treating them in ways that reduce them to their reproductive functions and foster the dull-wittedness and passivity attributed to femininity" (jones, 2010a, p. 189).

An inverse symptom of this can be seen in our treatment of roosters, who are ground alive or thrown away as chicks and regarded as hypermasculine aggressors when allowed to reach adulthood (Davis, 2009; jones, 2010a; 2010b). This represents a denial of roosters' feminine aspect or *anima*, while at the same time hens are denied *animus*, those masculine qualities that make up the whole of personality (Jung, 1928/1966, pp. 188-211; 1951/1968, pp. 11-22). Instead the moon, associated with the feminine, is unconsciously projected onto female poultry, whose inner psychical lives are relegated to darkness while outwardly, cycles of light and dark are manipulated in order to fool spent ovaries into producing a constant supply of eggs for human consumption (Drowns, 2012).

This imbalance in human-poultry relationship invites *enantiodromia*, described by Jung as "the emergence of the unconscious opposite," which occurs "when an extreme, one-sided tendency dominates conscious life," for this involves the gradual development of an equally strong, unconscious counterposition (1921/1971, p. 426). It is an idea akin to equilibrium in chemistry and to Isaac Newton's third law in physics requiring an equal and opposite reaction for every action. The theme of *enantiodromia* permeates alchemy, which forms a marriage between spirit and matter by asserting, "'*Scito quod terra foetida cito recipit scintillalas albas*' (Know that the foul earth quickly receives white sparks)… the world-soul, which is identical with the spirit of God" (Jung, 1954/1969, p. 190). When applied to poultry—the fowl earth—*enantiodromia* calls for a re-establishment of balance through recognition of the divine in matter, the soul spark that is avian psyche.

From this view, poultry emerge as alchemists in their own right, beings capable of *coniunctio* via lifelong individuation (Jung, 1928/1966, pp. 173-241) that transforms lead-like ego into the golden Self (Jung, 1951/1968, pp. 23-35). Perhaps it is no coincidence that alchemists regard the egg as the ideal vessel for this process, for as Jung observed, "that round thing was in possession of the magical key which unlocked the closed doors of matter… capable of dissolving the tetractys, the embrace of the four elements" (1940/1969, p. 54). Poultry are indeed able to traverse these elements, in turn deftly navigating between the states of solid, liquid, and gas. Take, for instance, the golden goose: a migratory winged creature inhabiting both land and water, all the while imbued with the fiery soul-spark of psyche.

Literature Relevant to the Researcher's Theoretical Approach

> *No bird soars too high if he soars with his own wings…*
>
> *The eagle never lost so much time as when he submitted to learn of the crow…*
>
> *The crow wish'd everything was black, the owl that everything was white.*
>
> — William Blake (1789/1994, pp. 31-34)

Humanity's objectification of birds is part of a larger narrative, one that spans across countless generations and encompasses all of the Earth's species. The modern human being lives in a society of disconnect, estranged both from our own inner nature and from the external nature that makes up the more-than-human (Abram, 1996) world. The effects of this alienation permeate our daily lives, manifesting in symptoms such as anxiety, depression, and destruction of the natural environment.

Evolutionarily speaking, this is a recent development, having formed over only the last ten thousand years or so when the agricultural revolution first sparked

exponential changes within human culture. These changes have outpaced our ability to adapt to them, and we are left ontologically crippled, having to prune aspects of our authentic being in order to function in a society with cultural expectations that are incongruent with the evolutionary expectations of our genomes. What was once seen as a whole has become compartmentalized, our bodies seen as separate from our minds, our humanness seen as separate from the animalness that surrounds us. Instead of envisioning ourselves as embedded in nature, one form of subjectivity among many, we are taught that we are superior to the nonhuman world, the objects of which are ours to do with what we will.

From within this framework, taking a bird from the wild and placing it in a cage for human enjoyment is no different than plucking a flower and putting it in a vase. To dissociate in such a way from the soulfulness of the other is made easier with increasing degrees of evolutionary separation; we have more trouble dissociating when it is a fellow mammal in the cage, for instance, such as a dog or a cat rather than a bird or a reptile or a fish (J. Little, personal communication, August 31, 2012). The assumption of human separation and ascendancy is so embedded within our culture that it can invade our psyches in impervious and imperceptible ways. In order to break free from the entrapments of this narrative, a transformation of worldview is required. We must learn to reimagine psyche not as encapsulated within the individual, but as a relational field in which all species are co-participants. This move is critical if we are to restore our relationship with the natural world, to dance with its multiplicitous sensual forms as though from this ritual of movement a tonic will emerge, a salve meant to heal the wounds of our profound estrangement.

The underlying dynamics of bird oppression. It is not difficult to see how modern man might experience himself as separate from the rest of nature, confined by barriers of his own design and making, a concentric series of increasingly smaller cells: the city, the skyscraper, the cubicle. This estrangement of humanity from the natural world is well documented, its roots traceable to the first seeds planted by our ancestors, its effects upon our psyches and upon our ontological growth as a species well studied, deciphered, recorded (Shepard, 1982; 1998) (Abram, 1996; 2006; 2011). The dynamics underlying this estrangement and its consequent oppression of birds have roots deep in the history of Westernized thought.

***The rise of positivist paradigms*.** Positivism holds that true phenomena are empirical, objective, and quantifiable. At its root is Cartesian dualism, "which separated soul from body, human subject from objective world" (Tarnas, 2000, p. 258). The distinction between matter and spirit did not spontaneously emerge with the ideas of René Descartes, rather its origins are in subtle changes within the Westernized psyche resulting in part from the emergence of the Judeo-Christian worldview (Abt, 1989). Over the course of time, particularly since the Age of Enlightenment that followed in the footsteps of Descartes, the world has been further desouled and "everything numinous, everything daimonic, whatever belongs to the intermediate realm between thought and matter has vanished from the rational view of the world" (Abt, 1989, p. 91). Within the framework of Cartesian dualism, humans are the only creatures imbued with eternal, god-like soul, the rest of the animal kingdom reduced to instinct-laden automatons—matter devoid of spirit. This extrication of the sacred from matter extends to the earth itself,

which within the Cartesian framework becomes an inanimate object whose natural resources are nonliving commodities provided for humanity's taking (Tacey, 2009).

Although the view that psyche can be found solely within the realm of humanity is a relatively recent cultural development, its roots are quite ancient, as "the separation of humans from other animals dates back to the Stoics, who defined *hegemonikon*—the highest component of the soul—as the personalized, private imagination" (Bradshaw, 2009, p. 7). This fed the assumption that human beings exist apart from other animals—that we are somehow superior, special, the sole possessors of psyche. This paved the way for philosophers like Descartes and laid the foundation for a hierarchical worldview that has been used to justify mankind's domination and exploitation of the planet and of the many species that inhabit it. This theme of human domination over nature is reflected in "the archetypal images and fantasies of western human identity and *mythos*: the pioneer, the conquest of Nature through colonialization, and Nature as *terra nullis*—empty wilderness" (Bradshaw & Watkins, 2006, p. 74).

Reframed within a depth psychological view, the idea of human ascendancy can be viewed as a collective construct with roots in what Jung might refer to as a superiority complex. This cultural complex may have roots in the powerlessness and inferiority early humans felt once they traded nomadic life for anchored settlements that found themselves at the mercy of the elements. Key characteristics of cultural complexes are described in the book *The Cultural Complex: Contemporary Jungian Perspectives on Psyche and Society*, edited by Thomas Singer and Samuel Kimbles (2007, p. 21):

> Cultural complexes structure emotional experience and operate in the personal and collective psyche in much the same way as individual complexes,

> although their content might be quite different. Like individual complexes, cultural complexes tend to be repetitive, autonomous, resist consciousness, and collect experience that confirms their historical point of view… Individuals and groups in the grip of a particular cultural complex automatically take on a shared body language and postures or express their distress in similar somatic complaints. Finally, like personal complexes, cultural complexes provide a simplistic certainty about the group's place in the world in the face of otherwise conflicting and ambiguous uncertainties.

In order to grasp the profound power of cultural complexes, one need look no further than another complex that constellates around powerlessness: the denial of death and aging.

To identify this cultural complex at work within the collective Westernized psyche does not require a particularly keen eye; the incomprehensible amount of money spent annually on anti-aging products and procedures in the United States alone is testament to the tightness of the complex's grip upon our culture. Of course, the denial of death also takes on more subtle forms: in the way we relegate the elderly to the margins of society, in our taboos surrounding inquiries regarding a person's age, in the supermarket's packaging of meat so as to disguise the fact that it was once a living, breathing animal.

The cultural complex surrounding the denial of death is representative of a larger estrangement of the Westernized psyche from the nonhuman world. Death is, after all, an integral part of life; it is what makes life on Earth finite and thus so precious. To avoid death at all costs is to deny that we are part of nature, who herself is constantly undergoing a process of death and renewal. Death is the ultimate rite of passage that

transforms us from corporeal being to ancestor while at the same time making room for the next generation. As such, our death-defying cultural complex carries further implications in regard to the collective psyche. For if ancestors are no longer being created, what affect is had upon the collective unconscious (Jung, 1954/1969, pp. 167-199)?

Related to the denial of death is another cultural complex, one that shares its roots in powerlessness: the intolerance of the shadow (Jung, 1951/1968, pp. 8-10; 1954/1968a, p. 20). As with the denial of death, this complex reveals its grip upon the Westernized psyche in ways both manifest and hidden. Our intolerance for the shadow is reflected in the sheer number of pharmaceutical medications that we have invented and the astounding numbers of individuals who take them. There are pills designed to prevent us from feeling sadness, anxiety, and pain—shadowy symptoms that in certain instances could, if given voice rather than rejection, divulge a great deal about the deeper unconscious forces that are vying for our attention. This cultural complex is also made known through many of our sayings, to turn a frown upside down or to put on a happy face, for example. Instead of engaging with shadow, we project it outside ourselves, associating birds like vultures "with death and persecute[ing] them accordingly" (jones, 2010a, p. 188). Intolerance of the shadow is the reason poultry are *processed* behind closed doors and why psychologically wounded parrots are so easily labeled *problems* that must be purged from the home.

Intolerance for the shadow is not limited to the darkness associated with the unconscious or with negative thoughts, feelings, and actions but also extends to Westernized culture's desire to understand fully anything and everything *light* there is to

know in this aptly named Age of Information. This stands in stark contrast to what the poet John Keats called the negative capability—the ability to not know, to actively and willfully experience the world free from the constraints imposed by meaning-making. To embody the negative capability is to have a stance that is receptive to the world, its more-than-human (Abram, 1996) inhabitants and shadowy elements included.

The ability to acknowledge and even embrace the shadow and to restore balance between lightness and dark is closely related to a third cultural complex, one that finds its mythological origins in the story of Prometheus, the Titan who stole fire from Zeus in order to give it to humans. Prometheus who represents "the gifts of ingenuity and invention, steals fire from Zeus, is bound to Caucasus and has his liver eaten by day and restored by night, cheats in sacrificial ritual, and is the divine patron of the human reach beyond the gods" (Slater, 1997, p. 111). Jung identifies the Promethean complex as tied to repression of the unconscious wherein consciousness "has Promethean freedom, but it also suffers from godless hubris" (1929/1967, p. 12). It is such hubris that drives our genetic manipulation of commercialized poultry, for example, and feeds the self-congratulatory ethos of human intervention as a means of preventing parrot extinction.

Closer examination of the Promethean myth reveals that it is not a celebration of hubris, but rather a cautionary tale that forewarns the need for sacrifice in the sacred quest (Singer, 2000; Tacey, 2009):

> The problem with our embrace of Promethean gifts and the freedoms of the enlightened age is that we split off the darker portion of this mythic narrative, namely the tortuous results of untethered innovation. We forget that Promethean abandon can lead to an incarnation of gigantism, which then calls

> forth a corresponding binding—a chaining to the laws of Zeus. Through this familial association, the unruly behavior of Prometheus' relatives endures and enters the world cloaked in the garb of progress… the myth of Prometheus is one of *enantiodromia*, of reversal, the assertion of opposites—the revenge of gods whom we fail to recognize when we become enchanted with our own craftiness and power. (Slater, 1997, p. 112)

To fail to make sacrifice in the face of hubris is to invite tragedy, for it is a well-known tenet within the field of depth psychology that that which we fail to commune with, that which we repress and relegate to the realm of the unconscious, will return in countless forms until it is adequately addressed.

The Promethean myth permeates postpositivist psyche. The popularity of films depicting super heroes with god-like abilities, for example, demonstrates how embedded this complex is within the collective unconscious (Jung, 1954/1968a, pp. 3-41; 1954/1969, pp. 167-199). By traversing the skies in our airplanes and escaping the gravitational pull of Mother Earth with our satellites and rocket ships, we fail to heed the lessons learned by Icarus (*Metamorphoses,* Book 8: 182-235 as cited in Ovid, trans. 2004, pp. 303-305). There is no problem too large for us to invent our way out of, or so we claim. The environmental crisis, itself a byproduct of the Promethean dream, is seen by many as the ultimate problem for which humanity is tasked to invent a solution.

The impact that the Promethean complex has upon the nonhuman world is incalculable: global climate change from the carbon dioxide emitted from our machines; species' extinction as we find bigger, better, and faster ways to gobble up the earth's life-sustaining habitats; an island of garbage twice the size of Texas floating in the Pacific

Ocean; the poisoning of our bodies of water and of our bodies, which are made of water; and the list goes on. A problem cannot be solved with the same mindset that created it, and as such the environmental crisis in its many forms cannot be solved through Promethean innovation.

Beyond the cultural complexes surrounding Prometheus and our unwillingness to face the realities of death and shadow there exists another idea that informs the Westernized worldview, one that takes the form of orientation rather than complex, and that is the myth of progress (Tarnas, 2000). The myth of progress holds that the evolution of human consciousness is "an extraordinary progressive development, a long heroic journey from a primitive world of dark ignorance, suffering, and limitation to a brighter modern world of ever-increasing knowledge, freedom, and well-being" (p. 253). From a trans-species perspective, the myth of progress represents a denouncement not only of our own animal natures but also of a time in humanity's evolutionary past in which we were intimately embedded in the more-than-human world (Abram, 1996).

Commodification from beak to tail. Once nonhuman animals were subjected to a Cartesian split that relegated these creatures to matter devoid of psyche, it was a simple cognitive leap to objectification and commodification. Today, there is no part of a bird that has escaped monetization—we have commoditized parrots and poultry from beak to tail. From the head we seek companionship in speech, alarms as through the rooster's crow, and self-knowledge through studies on avian intelligence and dissection of the brain. The body we consume directly in the form of chicken nuggets and foie gras and indirectly as we inundate immune systems with diseases as in the case of sentinel chickens. Wings were traditionally used for writing quills though nowadays are more

likely to be labeled *buffalo* or *hot* and then eaten. The reproductive organs are arguably the most exploited avian region, providing eggs for eating, vaccines, cloning experiments, and future generations of birds so as to ensure the future of this supply-chain. Feather down is plucked and used as insulation in clothing and bedding materials. The tail, too, is utilized for its feathers, particularly in the garment industry, though Indigenous people have also used tail feathers in religious ceremonies.

Once spirit had been cleaved from matter and the practice of exploiting nonhuman species became well established, in turn animalness was used as a justification for the objectification and commodification of humans:

> Dehumanization – the 'reduction' of a person to an animal – is an essential element of virtually every type of oppression among people… [It] is an effective strategy of oppression only because nonhuman animals are presumed to be less, rather simply different, than human animals; the exploitation of human beings, as rationalized by dehumanization, makes sense only in the context of the routine exploitation of animals. Thus the logic of oppression among people depends upon the exploitation of animals. As the common complaint of 'being treated like animals' signals, exploitation of people also tends to be patterned by the exploitation of animals. (jones, 2010b, p. 371)

The assumption of human ascendancy is so engrained within the collective psyche, so implicit in the ways in which we have designed the many structures and institutions of our society, it can feel at times insurmountable. Yet there is hope, as demonstrated by victories within the civil rights movement, wherein the sentience of previously objectified beings has been recognized in the past and given voice.

An eloquent example that also illustrates the juncture between human and bird oppression can be found in the famous poem *Caged Bird* by Maya Angelou (1983):

A free bird leaps

on the back of the wind

and floats downstream

till the current ends

and dips his wing

in the orange sun rays

and dares to claim the sky.

But a bird that stalks

down his narrow cage

can seldom see through

his bars of rage

his wings are clipped and

his feet are tied

so he opens his throat to sing.

The caged bird sings

with a fearful trill

of things unknown

but longed for still

and his tune is heard

on the distant hill

for the caged bird

sings of freedom.

Like a bird trapped in a cage, slaves were abducted from their native lands, held against their will, and seen as the property of their owners.

This parallel extends to the transport of both slaves and birds, with 90% of the latter estimated to perish as a result of capture and transport in the parrot trade (Bradshaw & Engebretson, 2013; Linden, 2010). For those parrots who do survive, the fate that awaits them—serving the needs of their captors—is made even more unbearable by a life of isolation. Unlike most of their human counterparts, parrots "usually end up caged, often singly, in any variety of stores, zoos, hotels, breeding establishments, tourist attractions, homes, and worse" (Linden, 2010, p. 11). As social animals, "birds and people both are emotionally distressed and cognitively stunted by social isolation. This is because our brains evolved both *within* and *for* relationships" (jones, 2010a, pp. 195-196). To be born in captivity rather than wild-caught offers little in the way of ethical placation. This is evident in the mass production of poultry. One need only consider the narratives of human slaves born into their situation to see that such a practice does not provide adequate moral footing to be deemed an acceptable alternative to wild capture (J. Masterson, fieldwork conference call, September 15, 2012).

But can this link between civil and animal rights be taken a step further? Oftentimes, slavery is admonished for treating humans *like animals* without addressing why is it acceptable to treat animals in this way. Inference is often applied from animals to humans and not the other way around (Bradshaw & Sapolsky, 2006). Instead of saying that the suffering of slaves was discounted because they were merely animals,

would it not be just as accurate to observe that the suffering of those animals is similar to that experienced by human slaves?

After all, human beings *are* animals, and as such animal rights can find its precedence in the many movements centered upon furthering the rights of humans:

> We are left with a dual challenge. First we must break the links between animals and racialization and stop the violence done to people racialized on the basis of their animal practices. Then, we must learn how to make the links between animals and people, and stop the violence directed at animals on the basis of their nonhuman status. (Elder, Wolch, & Emel, 1998, p. 199)

Perhaps the first step is shedding the words *inhumane* and *dehumanize*, as these terms implicitly legitimize anthropocentrism by insinuating "that violent or otherwise harmful treatment is acceptable as long as the targets are nonhuman" (Linden, 2010, p. 11). Such loaded language is not only problematic for nonhuman animals, it can be used as justification for the cruel treatment of human beings who are deemed less-than. Though it might not be readily apparent, this can also bring harm to the oppressor, for psychologies of liberation show that "liberation is not possible while simultaneously oppressing others" (Bradshaw & Watkins, 2006, p. 70; Freire, 1970/1997).

Reparative paradigms. At the beginning of my life, I was not completely human. Naturally, I was born with a human body, but even this most simple and taken-for-granted observation is somewhat deceiving, for I—like every other member of my species—transformed several times prior to settling within this now-familiar form, having as an embryo first tried on a set of primordial gills and even a tail of sorts (Hull, 1973, p. 440). But even after my birth, I was not yet entirely hominid, my psyche yet to

decisively identify itself as such. For to consider oneself as belonging to one species rather than another requires a differentiation between self and other, inner psyche and outer, human and more-than-human (Abram, 1996). Many of these distinctions were guided by interactions within my own species; however, becoming fully human required something more, a co-construction of identity between myself and other animals.

To have the privilege of befriending another species is to experience first-hand the contradictions that come with the simultaneous straddling of two incompatible realities: what we are told to be true and what we feel to be true. Our heads caution that when we feel love for an animal and see aspects of ourselves in them, we are somehow fantasizing or anthropomorphizing or projecting. But our hearts tell a different story, one that seeks communion rather than separation, to rejoice in this reciprocal recognition rather than to repress it. The heart remembers something that the head has forgotten: That human beings are not superior to and separate from animals, that we are animals and as such we are equally imparted with the psyche in and of the world. A shift in paradigm is needed in order to accommodate this more expansive view of psyche, one that dispels any cultural narrative that would hold animals as inferior to humans and instead respects the cultures of other creatures in a way that also addresses the suffering that has been caused as a result of the current way of things.

Before forging too far ahead, it is prudent to note that such a paradigm isn't new; what is needed is not a reinvention of science but rather a remembering. Nonhuman animals haven't always been viewed as inferior, instinct-laden automatons. In fact, the Sioux people viewed animals as being more knowledgeable in many respects than their human counterparts. For the Sioux, animals were recognized as having personality traits

similar to those in humans (Deloria, 2009). This acknowledgement of nonhuman culture stemmed from their many interactions with and observations of the creatures around them, experiences that led to a greater respect for these beings, an inclusive rather than exclusionary approach to the other. Over the generations, "people came to realize that birds and animals had more knowledge than we do, and thereafter sought animal aid in the chores and hazards of everyday life" (Deloria, 2009, p. 116). The respect and recognition the Sioux had for animals was also shared by other Indigenous American peoples. Before colonialism, some even identified their tribes in terms of animal kin, such as the Wolf people and the Eagle people (Bradshaw, 2009; Tuhiwai Smith, 1999).

Modern science is only beginning to discover what ancestral peoples—forebears of Westernized thought included—already knew: that the behavior of animals and the patterns of their lives are not dictated by thoughtless impulses, automatic instincts that derive more from matter than psyche. On the contrary, animal culture is rich and varied, the lives of these creatures expressive of their feelings, intuitions, and even imaginations.

Within the context of this study, in order for paradigms to be considered reparative, they must facilitate authentic connection and understanding between humans and birds in captivity, recognizing that psychological consideration must be extended equitably across all species. This requires *conscientização*, the development of a critical consciousness (Freire, 1970/1997). As we have seen in previous discussions regarding avian psyche, there is now open acknowledgement in the scientific community of a unitary, trans-species model of the brain, mind, and behavior. This is what makes the field of trans-species psychology particularly applicable to inquiries such as this that are

concerned with repairing ruptures in avian-human relationship (Bradshaw, 2010; Bradshaw & Watkins, 2006).

As a discipline, trans-species psychology sets itself apart by applying to theory and praxis the finding gleaned from traditional multi-disciplinary approaches that psyche is not a human phenomenon, it is a quality of all sentient beings. This fundamental tenet carries with it a number of theoretical and ethical implications. For one, recognition that psyche is not solely human reveals the universality of lived experience and bridges species through shared psychical relationship. An answer to speciesism, the trans-species approach requires that we shed psychological projections of hierarchical segregation, those culturally informed constructs that divide greater from lesser animals and humankind from the rest of the natural world. Once science is unencumbered by anthropocentric bias and the theoretical playing field leveled, reciprocal, bi-directional inferences can be made about animal psychology—fertile ground for new discoveries via authentic perception and connection.

Figure 4 illustrates how the traditional scientific view, as shown in Figure 4A, holds the body and mind as separate, represented here by the colors black and blue. Further, the latter is seen as a possession of humankind alone, a contained and impervious psyche, or *self*, seated within a specific location in the body: the brain. Human beings, considered superior to nonhuman animals, are shown here with capitalized names and larger (greater) bodies. Within this model, inferences are made in a singular direction, as depicted by the arrow. Findings using animal models are extrapolated to humans whilst discoveries about human beings are only implicitly applied to other species. Within the trans-species paradigm, shown in Figure 4B, psyche is seen as embodied, moderately

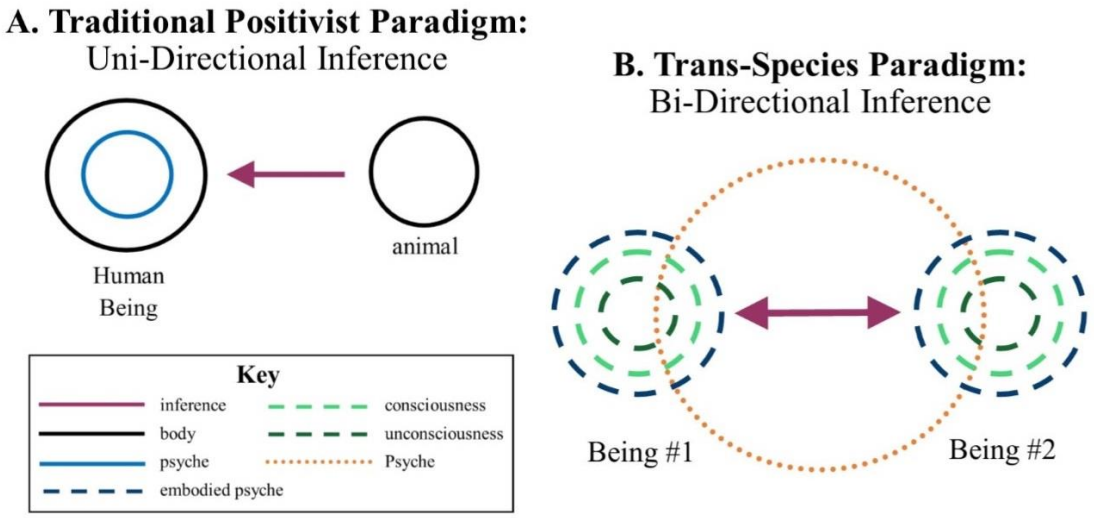

Figure 4. Interspecies relationships in traditional and trans-species paradigms. By allowing for bi-directional inference of psychological processes across species, the trans-species model (B) opens up the possibility of a third, relational space in which psyche is mutually influenced and transformed, a field of shared Psyche.

porous and, in keeping with the findings of depth psychology, comprised of both conscious and unconscious processes. Rather than seeing one being as greater than the other, sentience is recognized in an equitable fashion such that one is not larger than the other and both are named using proper nouns.

Recognition that psyche is reciprocal, porous, and more-than-human (Abram, 1996) opens the possibility for a third space to emerge between self and other, a dynamic relational field in which individuals—regardless of species—are mutual co-participants. This third space is depicted in Figure 4B in orange with dots representing its highly permeable and reciprocal nature. An answer to dualism by way of unification, this idea finds footing in the Jungian concept of the transcendent function (1958/1969), wherein

tension between opposing forces is mitigated by achieving a third, transcendent space, which Jung describes as "the union of conscious and unconscious contents" (p. 69).

Though relational theory is not new, when applied to psyche it stands in stark contrast to an atomic view of psyche that holds the mind as internally bound within individuals. It is an idea akin to another Jungian concept, the collective unconscious:

> The collective unconscious is [not] an incapsulated personal system; it is sheer objectivity, as wide as the world and open to all the world. There I am the object of every subject, in complete reversal of my ordinary consciousness, where I am always the subject that has an object. There I am utterly one with the world, so much a part of it that I forget all too easily who I really am. (1954/1968a, p. 22)

In keeping with the capitalization that denotes the archetypal Self of the collective unconscious as distinct from the self experienced by ego, I will term this disembodied, co-created field Psyche. Whereas the psyche of individuals is somewhat limited in terms of porousness, Psyche is a medium of exceptional permeability, allowing for the possibility of limitless, mirror neuron-fueled psychological osmosis (Iacoboni, 2009).

Finally, where trans-species psychological theory meets real-world application, a fundamental dilemma emerges: Given the realization that psyche is shared across species coupled with the observation that science does not exist within a moral vacuum, it follows that a trans-species ethical framework must be established. There is precedent for such a predicament. In psychology's infancy, the field sought to canonize those same Cartesian projections that bifurcate humans from other animals—only in the context of hierarchical segregation based on race. In the early 20th century, race-based intelligence studies sought to prove that minority groups were psychologically—and morally—

inferior to Whites. During World War II, many Nazis considered Jews to be less-than-human and, accordingly, subjected Jewish people to abhorrently inhumane scientific experiments. Even the great Jung, touted for his visionary and inclusive theories, painted a romanticized picture of so-called *primitive man*. The very phrase implies that Indigenous peoples are fundamentally different from their modern counterparts, not humans occupying the same space and time as Jung himself, rather antecedents: the evolutionary precursors to Westernized—civilized!—man.

Of course with the benefit of hindsight, we now know that discrimination based on race is both morally and scientifically wrong. In 1974, the National Research Act established institutional review boards to regulate experimentation using human participants, a measure meant to ensure the consent of research subjects and to minimize physical and psychological distress. In more recent years, the notion of inherent racial disparity was finally laid to rest with the development of genome sequencing. DNA analysis decisively proved that there is more genetic diversity within groups of people than between them, and that classifications such as Black and White are not binary, rather an amalgamation of our complex and interwoven evolutionary history as a species.

Now, trans-species psychology is revealing that in terms of psyche and personality, there is more diversity within groups than between them, and furthermore, that the world continues to reveal itself as more continuum than binary:

> A trans-species psychology embeds humans in the continuum of nature through the disavowal of human privilege, thereby admitting to “the great principles of liberty, equality and fraternity over the lives of animals… [and letting] animal

> slavery join human slavery in the graveyard of the past." (Bradshaw & Watkins, 2006, p. 72)

Such parallels between humans and other animals demand an extension of ethical consideration to all species, beginning with integrating the findings of trans-species research into institutional review board decision making. As we have seen in the case of human experimentation, such a progression within science from biology to psychology to ethics is not only precedented, it is a natural cycle of scientific inquiry: to seek knowledge, apply said knowledge, and in turn build upon it through subsequent discovery.

The Need for Research on Topic in Psychology

Though historically lacking, in recent years much has been written regarding the deleterious psychological impacts of keeping birds in captivity (e.g., Bradshaw, Yenkosky, & McCarthy, 2009; Davis, 2009; Engebretson, 2006; jones, 2010b; Seibert, 2016). Yet the fact remains that even today, many works regarding poultry and parrots are written from an anthropocentric perspective wherein these birds are primarily valued in terms of their meat, feathers, eggs, or utility as companion animals. For example, a plethora of books and manuals have been written regarding the best way to rear poultry for consumption (i.e. Drowns, 2012) or identify physical ailments in pet parrots (i.e. Aiello & Moses, 2016). As we have seen, neuroanatomical research has shown that avian and human minds hold many parallels, including analogous psychological structures within the brain (i.e., Jarvis et al., 2005), though many such studies fall short when it comes to unpacking the ethical implications of these discoveries.

In terms of human psychology, the beneficial impact of human relationships with nonhuman animals is well documented, particularly in therapeutic settings (i.e. Buzzell & Chalquist, 2009; Seibert, 2016). Literature also documents the negative effects of birds upon human psychology, including bird phobias (i.e., London, 1952), though in such works birds are relegated to objects rather than subjects. Countless studies have employed birds as scientific models wherein findings are extrapolated to human beings (i.e. Burt, 2007), yet far scarcer is research that applies shared psychological principles to birds (i.e. Bradshaw, Yenkosky, & McCarthy, 2009), let alone treats avian beings as participatory subjects rather than passive objects of inquiry.

The present study contributes to this last body of work by applying an inclusive view of psyche to human-avian relationship in a way that amplifies the voice of birds through film, thereby filling in gaps left by anthropocentric approaches to avian research. It is unique in that it considers avian and human psychology as located within a relational field while problematizing cultural constructs like the domestication and commodification of birds. Furthermore, it provides a reparative framework for the problems it unveils by challenging its human audience to take back those psychological projections that limit authentic avian-human connection. In this way, it promotes human as well as bird individuation by way of *conscientização*, the development of a critical consciousness of what previously had remained hidden in the realm of the personal and collective unconscious (Freire, 1970/1997; Jung, 1954/1969, pp. 167-199).

Of particular focus throughout the course of this study are largely unexplored frontiers, the borderlands (Anzaldúa, 1999)—numinous spaces between parrots and poultry, birds and humans, captives and captors, and conscious and unconscious

psychological processes. This trans-species depth psychological approach effectively dissolves barriers between birds and humans by allowing for mutual authentic recognition of self in other, other in self, and the shared alchemical experience that is individuation (Jung, 1928/1966, pp. 173-241). Given the numerous ways in which birds have shaped the human psyche and vice versa, coupled with the billions of avian beings held captive in this very moment, the importance of such an endeavor cannot be overstated.

Chapter 3

Methodology and Procedures

This creative dissertation explores the qualitative aspects of what it means to be a human in relationship with birds in captivity, as well as what it means to be a captive-held bird. It employs a trans-species depth psychological approach using heuristics as its guiding methodology. The study culminated in the creation of a film intended to illuminate themes essential to the experience of avian-human psyche in relationship. Entitled *A Bird Tail*, this film features the stories of Pimento and Luca, a backyard hen and the Blue and Gold macaw parrot who joins her flock.

Research Approach

> *Human does not enter into all of soul, nor is everything psychological human. Man exists in the midst of psyche; it is not the other way around. Therefore, soul is not confined by man, and there is much of psyche that extends beyond the nature of man. The soul has inhuman reaches.*
>
> —James Hillman (1975, p. 173)

It was crucial that the methodological approach employed in this study aligned with the trans-species paradigm it set out to uphold: understanding that psyche is relational and not relegated to the realm of humanity alone; unveiling the ways in which the unconscious shapes experience and perception; and challenging those psychological and cultural constructs that presently serve to subjugate nonhuman species.

This study focused upon the qualitative rather than quantitative aspects of the experience of being a human in relationship with birds in captivity (Creswell, 2013). A qualitative approach is best suited “for research that is exploratory or descriptive, that

assumes the value of context and setting, and that searches for a deeper understanding of the participants' lived experiences of the phenomenon" (Marshall & Rossman, 1999, p. 60). It is important to note that qualitative research methods have not always been embraced within the traditional scientific community, and quantitative scholars have long "relegated qualitative research to a subordinate status in the scientific arena" (Denzin & Lincoln, 2008, p. 2). The legitimacy of such research has been called into question by proponents of the positivist scientific paradigm, a theoretical framework that prizes immutable, objective truths over the temporally bound, relational truths characteristic of subjective inquiry. Ironically, much conventional research on the subjectivity of nonhuman animals has been located within this positivistic framework, albeit implicitly. Perhaps the most notable example is the work of behaviorist Burrhus Frederic Skinner (1904-1990), who famously studied hunger in dogs and superstition in pigeons using rigorously objective, empirical scientific methods.

In a fundamental sense, empirical objectivity calls for an act of psychological dissociation: separation of our five senses from our biases, our minds from our hearts, our selves from the observed other (Jung, 1954/1969, pp. 173-178). Such bifurcations find their philosophical underpinnings in Cartesian dualism, the idea attributed to René Descartes (1596-1650) that spirit and matter are distinct and separate. Though at first glance this may seem a relatively benign assertion, this dualistic framework pervades the realm of Westernized thought, alienating humanity from our own animalness and employed as justification for the mistreatment of nonhuman others.

As a salve for the wounds of separative dissociation, this study aimed to approach the avian-human psyche from a place of wholeness through connectedness, an

epistemological stance that views knowledge as co-created among and between species (Hwang, 2006). It is a trans-species interpretation of traditional constructionism, one that problematizes the notion that knowledge is a purely human phenomenon. Thus, this inquiry has been postmodern in nature, a theoretical framework which holds that "theories at best provide partial perspectives on their objects and that all cognitive representations of the world are historically and linguistically mediated" (Denzin & Lincoln, 2003, p. 294). Postmodernism opens the door to critique a host of assumptions implicit in the positivist paradigm, such as the separation of spirit and matter, the primacy of cognition over affect, and the assertion that human beings represent the apex of a hierarchy of species.

Of utmost importance is the understanding that experience is lived dialectically, in the interplay of the various splits characteristic of positivist inquiry, "an interplay between mind and body, between spirit and matter, between nature and society," and between self and other (Coppin & Nelson, 2005, p. 30). This project is concerned with mending such dissociative binaries and calls for a reflective awareness of the harm that can occur through perpetuation of human privilege and the objectification of the avian other. The subject-object divide creates a "sense of radical distinction between self and world," an alienating projection that obscures our ability to perceive that the "world is radically ensouled: it communicates and has purposes; it is pregnant with signs and symbols, implications and intentions" (Tarnas, 2000, p. 255).

A central task of this work is to make conscious those projections that interfere with our ability to experience the world as ensouled, imbued with psyche. Thus, fundamentally, this dissertation is depth psychological, recognizing the reality of the

unconscious and its influence upon consciousness at both the individual and collective level. In regard to birds in captivity, many of the projections that serve to perpetuate oppressive dynamics seem to stem from a lack of direct knowledge of authentic avian experience. This is demonstrated in the following statement by Jung (1940/1969), with the word *people* substituted in place of *species*:

> All gaps in our actual knowledge are still filled out with projections. We are still so sure we know what other [species] think or what their true character is. We are convinced that certain [species] have all the bad qualities we do not know in ourselves or that they practice all those vices which could, of course, never be our own. We must still be exceedingly careful not to project our own shadows too shamelessly; we are still swamped with projected illusions. (p. 83)

Indeed, projection of shadow is perhaps the most virulent form of psychic colonization, for it facilitates the imposition of humanity's darkest complexes upon the other. A bird in a cage stands no chance against such forces, and many succumb psychologically, physically, or both (e.g., Bradshaw, Yenkosky, & McCarthy, 2009).

In the previous pages, we have established that as creatures imbued with psyche, birds share qualities with humans and other animals reaching beyond the conscious realm of observable behaviors and feelings to include also the unconscious. Perhaps this gives new breadth to the idea of the collective unconscious, and the archetypal images and forces found therein (Jung, 1954/1968a, pp. 3-41). Jung observed that "the lowest layers of [the human] psyche still have an animal character. Hence it is highly probable that animals have similar or even the same archetypes" as we do (Deloria, 2009, p. 10). Recognition of birds as complex psychical beings—avian alchemists—opens the door for

humans to truly get to know them, and in the process to take back the unconscious projections we so readily impose.

By taking back these projections, we decolonize our own psyches as much as we decolonize birds'. It is an invitation to ways of knowing that run counter to the dissociative positivist paradigm that prevails within Westernized culture and an awakening of critical consciousness, or *conscientização* (Freire, 1970/1997). Narratives such as the myth of human ascendancy become internalized over time, shaping the way in which we understand and interact with nonhuman species. Thus, before delving into trans-species research, we are challenged "to decolonize our minds, to recover ourselves, to claim a space in which to develop a sense of authentic humanity" so that we may engage in authentic relationship with the other (Tuhiwai Smith, 1999, p. 23).

When viewed from within a liberatory depth psychological framework that seeks to make conscious those embedded power structures that shape ecological and social dynamics, the avian-human relationship emerges as markedly one-sided, with human beings playing the role of oppressor and birds the role of oppressed (Freire, 1970/1997). As such, it is critical that the methodology employed in this study does not serve to reinforce this power imbalance. Furthermore, it must recognize that research itself is not neutral, with actions affecting both researcher and researched, for "not only is the observer vulnerable, but so too, yet more profoundly, are those whom we observe" (Behar, 1996, p. 24). It is difficult to imagine a more vulnerable being than one who is confined to a cage. Yet such is the case for captive-held birds, whose lives are defined by humans and voices often silenced.

As Michele Franko observed, “captivity is a silencing institution. It takes away the ability to exercise free will and ignores the wishes of the captive by enforcing confinement” (Bradshaw, 2015a, para. 19). To exploit such a situation for anthropocentric gain would be antithetical to the goal of this research. At the heart of the inquiry is not only an intention to elucidate the dynamics of avian-human experience, but also to create something meaningful that carries a tangible outward impact, a film intended to directly improve the lives of birds in captivity as well as the humans who know them. In this way, filmmaking can be thought of as a form of soul-making, a method of restoring voice to avian psyche silenced by captivity while inviting authentic ways of knowing through connection (Hillman, 1975).

Research Methodology

This study is heuristic in nature, with the goal of illuminating what it means to be a captive-held bird, along with all that such implies. Heuristics finds its footing in the field of phenomenology by seeking to understand the essence of lived experience as its goal rather than to build abstract concept as a tool for comprehension. By contrast, phenomenology requires a degree of dissociation (Jung, 1954/1969, pp. 173-178) that runs counter to the intention of this study, a definitive discernment of boundary between self and other, observer and observed. As Clark Moustakas, the founder of heuristic inquiry, explains, “whereas phenomenology encourages a kind of detachment from the phenomenon being investigated, heuristics emphasizes connectedness and relationship” (2001, p. 264). At the foundation of heuristics is the observation that one’s inward experience is a reflection of the outer and vice versa, that observer and observed are equal and active partners engaged in inquiry’s dynamic dance (Moustakas, 1990).

The heuristic approach requires "a passionate and discerning personal involvement in problem solving, an effort to know the essence of some aspect of life through the internal pathways of the self" (Douglass & Moustakas, 1985, p. 39). The emphasis upon the confluence of intuition, sensory perception, and cognitive discernment shows how a heuristic approach comprises a foundational challenge to positivism's quest for so-called *pure* objectivism. Furthermore, it serves to break through dualistic and linear ways of thinking, moving beyond the constraints of cause and effect:

> Traditional empirical investigations presuppose cause-effect relationships, whereas heuristic scientists seek to discover the nature and meaning of phenomena themselves and to illuminate them through direct first-person accounts of individuals who have directly encountered the phenomena in experience. (Moustakas, 2001, p. 264)

By attempting to capture the subtleties, complexities, and paradoxes inherent in lived experience, heuristics honors the wholeness of reality rather than reducing it to a temporal and binary *if, then* construct.

There are six basic moves in heuristic inquiry: initial engagement, immersion, incubation, illumination, explication, and creative synthesis (Moustakas, 1990, pp. 27-32; see Figure 5). With initial engagement as a necessarily a precursor to the phases that follow, subsequent moves are cyclical in nature, each drawing upon previous phases and culminating in a creative synthesis in which the "researcher as scientist-artist develops an aesthetic rendition of the themes and essential meanings of the phenomenon" (p. 52).

The heuristic research question is "illuminated through careful descriptions, illustrations, metaphors, poetry, dialogue, and other creative renderings" (Moustakas, 2001, p. 265). This creative component of heuristic research aligns with the audio-visual

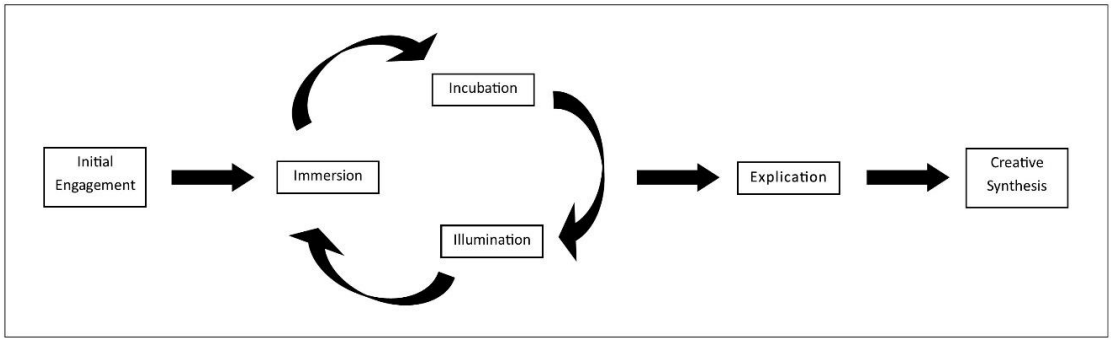

Figure 5. The six phases of heuristic research. The phases of heuristic inquiry are often nonlinear, with explication of the core themes of a phenomenon emerging from a cyclical analysis of data—themes which in turn inspire a creative synthesis depicting the essence or meaning of the experience.

methods such as film, photography, and voice that will form the primary media in the data collection and interpretation in this study. The film *A Bird Tail* is intended to depict essential themes that emerge through the exploration of human-avian relationship in the context of captivity. In order to authentically portray this relationship, the use of audio-visual media is not only appropriate, it is necessary, given that nonhumans are disallowed human written and spoken language—anthropocentric verbosity which so often serves to suppress or distort the true essence of birdness. Within a heuristic framework, filmmaking is not just a means to an end, it is an essential part of the transformative nature of research (Moustakas, 1990). It is an alchemical process, providing a portal into the difficult work of maturation via individuation (Jung, 1928/1966, pp. 173-241).

Film's ability to capture as accurately as possible the authentic voice of human as well as nonhuman subjects has been articulated by proponents of photovoice, "a participatory-action research methodology based on the understanding that people are experts on their own lives" (Wang, Morrel-Samuels, Hutchison, Bell, & Pestronk, 2004,

p. 911). Despite the fact that implementing photovoice requires that research participants become their own cinematographers and thus cannot be directly applied to a study involving avian beings, the philosophical ideal of empowerment through authentic expression and the ability of film to capture this can be applied when relating the stories of nonhuman animals and is a guiding philosophy in my approach to the work.

When utilized to study human beings, the words associated with photovoice can come directly from the spoken language of the subjects, or co-participants, in the study. The voice aspect of this research method is less readily apparent when the co-participant in the study is an animal or a landscape, but this does not mean that voice is absent; it simply means that the stories that the more-than-human (Abram, 1996) world tells are not always expressed through spoken language. Nonverbal communication can tell a story, just as the features of a landscape can reveal the voice of that place. Stories do not have to be spoken aloud in human language in order to be heard, understood, and heeded.

A further strength of film is that it provides an ideal medium for data collection, interpretation, and dissemination of findings, providing a multisensory window into the direct experience of the subject. Film is well suited for capturing the many modes of qualitative data inherent in a trans-species study that seeks to illuminate the essence of lived experience (Creswell, 2013). In the spirit of heuristic inquiry, I have used my own experiences with birds in captivity as an entry point into discovering how these experiences relate to those of other human and avian beings immersed in the same phenomenon. In this way, understandings gleaned at the individual level serve as a microcosm reflective of the whole.

The creative and co-participatory nature of filmmaking makes it well suited to the relational nature of this research. As David Gauntlett (2011) observes, to creatively make something such as a film is also to create connection between materials, ideas, people, and in this case avian beings. Furthermore, "making is connecting because through making things and sharing them in the world, we increase our engagement and connection with our social and physical environments" (p. 2). This in turn can lead to a shift from what Gauntlett refers to as a sit-back-and-be-told culture to a making-and-doing culture, similar to Paulo Freire's (1970/1997) criticisms of a passive banking model of education. Other ways in which filmmaking can be co-participatory include collaboratively planning shots, screening and providing feedback on initial edits, and collaborating on music and voiceover selections (Mitchell, 2011, p. 89). In this regard, filmmaking is a form of socially constructed knowledge. It also provides an opportunity for my own reflexivity, a critical self-awareness that will aid in deciphering how my experiences relate to others (p. 90).

Through this visual methodology I explore multiple thematic strands, such as what it means to be a captor of birds as well as the role of domestication in shaping the captive and captor's experience. Each strand offers the potential for diverse engagement with other individuals involved in some aspect of bird captivity, though its main goal is to approach the topic in a way that incorporates the birds' point of view directly. Opportunities for rich and varied data gathering spontaneously presented themselves, from film to audio to written word. This variety of data sources ensured the issue was "not explored through one lens, but rather a variety of lenses which allows for multiple facets of the phenomenon to be revealed and understood" (Baxter & Jack, 2008, p. 544).

The audio-visual data was iterative and emergent in nature, meaning that while some themes like domestication were knowable *a priori*, others will emerge organically throughout the filmmaking process. As such, the film's final form remained flexible and not entirely predictable. In *A Bird Tail*, I describe the lives of two birds I know from their own perspectives in an attempt to honor their stories of alchemical transformation. My primary goal regarding the film was to give voice to the birds. My firsthand experiences provided a lens that allowed for deeper understanding of how my own behaviors, assumptions, projections, and motivations affect and are affected by those avian beings whom I have known.

Participants

The participant population for this study includes both avian and human beings in the Pacific Northwest region of the United States, with a particular focus upon two story arcs: one as an origin story of a Blue and Gold Macaw named Luca, and the other a death story of a Ameraucana Chicken named Pimento. Initially, I planned on interviewing humans so as to illuminate the wider aspects of this phenomenon. Examples include veterinarians, parrot breeders and owners, poultry farm or sanctuary workers, or individuals working in species' conservation efforts. Yet as the project progressed, I made the creative decision to eschew human interviewees to focus instead upon the perspectives of Pimento and Luca, as described in greater detail in the forthcoming discussion of methodology.

All told, my film included about 10 to 15 bird participants and depicted their relationships with six humans. When filming or photographing human or avian participants, I remained sensitive to indications that they were willing to participate,

including remaining attentive to vocalizations and/or body language that might exclude the birds from inclusion in the study. I employed an organic process when it came to participant selection, choosing those with a direct connection to the film's two central protagonists, Pimento and Luca. All that was required for eligibility to participate was direct experience relevant to Luca or Pimento.

Materials

For the film, I employed a camera and iPhone for recording, a computer for video editing, and an external USB microphone for voiceover recordings. I also used informed consent forms and video releases that included a brief description of the project. I referenced my journal throughout the process and utilized it as a space for story mapping. I acquired music for the film from musician friends of mine who gave express permission to use their creative works. I established a website for the project, available at www.birdbite.wixsite.com/parrots-poultry, where I have posted project updates and the film, *A Bird Tail*. For ease of dissemination, the completed film is also available at http://www.youtube.com/watch?v=7yeKGYhHgyg&feature=youtu.be free to the public on YouTube.

Research Procedures

Procedures for gathering data. Given that Luca and Pimento live with me, much of the filming occurred organically and spontaneously as relevant events naturally unfolded. In the case of Pimento, a great deal of archival footage was used, given her recent passing. Participants could decline to be included in the final film and could request that their identities be concealed to the extent possible. Nonverbal communication, such as though posture and vocalizations, were used to gauge whether or

not avian participants consented to having their audio-visual data included in the study. In light of the fact that that the film involved mostly avian participants, I had to rely primarily upon intuition in order to decipher consent, to ask in verbal and nonverbal ways if it is okay for me to film and then pay attention to the myriad of ways in which communication is achieved through voice, body language, and so on. I will continue to post updates online, ensuring that said posts are freely available to the public.

Procedures for analyzing data. The following steps, adapted from procedures developed by Moustakas (1990, pp. 51-52) and closely aligned with the six phases of heuristic research (see Figure 5), served as a guideline in the analysis of data:

1. *Immersion*. Gather all data (audio-visual, writings/artwork, supplemental documentation, etc.) for one participant. Fully immerse in the material until a sense of understanding is achieved regarding what it means to be a captive-held bird or a human in relationship with birds in captivity.
2. *Incubation.* Set the data aside for a while. From this receptive posture, invite new insights and allow qualities and themes essential to the experience to emerge and make themselves known.
3. *Illumination*. Return to the data. Construct an individual depiction of the experience that attempts to accurately portray its essential qualities and themes. Research co-participants may be consulted for input regarding completeness and accuracy of the depictions.
4. *Generalization*. Repeat the above steps for all co-participants. Gather the individual depictions and again repeat the process of immersion, incubation,

and return until a composite depiction emerges representing the core qualities and common themes shared by humans in relationship with birds in captivity.

5. *Explication*. Return once more to the data and select two or three co-participants who exemplify the group as a whole. Further develop these individual portraits utilizing the raw data, individual and composite depictions, and autobiographical material.
6. *Creative Synthesis*. Weave the individual portraits into a creative synthesis that accurately depicts the themes essential to the experience. For the purpose of this study, filmmaking will be the medium of creative expression.

When analyzing the audio-visual data collected throughout the course of the study, *a priori* and emergent themes as they relate to my research question were assessed using a combination of psychoanalytic and discourse analysis, as described by Gillian Rose (2012). These *a priori* themes included the influence of domestication and speciesism upon the lived experience of birds, humans' perception of avian beings, as well as how the quality of avian-human interaction is mediated by a motivation of profit, companionship, or conservation on the part of the human.

Psychoanalytic, or what I would consider to be more generally a depth psychological analysis of data, "looks for signs of the unconscious as they disrupt the conscious making of meaning" (Rose, 2012, p. 194). A related idea has to do with determining what is not only present but also absent from interviews and observations (Mitchell, 2011). This level of analysis was applied to both human and avian data. The film *A Bird Tail* was anchored by my research question and further informed by the *a priori* and emergent themes as they were revealed through depth psychological analysis.

Ethical Considerations

A primary risk that applies to all participants in the study concerns the potentially controversial nature of the research topic. Much of what I am studying from a trans-species perspective goes against many dominant policies and institutions and indeed against an entrenched paradigm that sees human culture as privileged. There is an inherent risk for anyone speaking against the status quo, as powerful forces are invested in maintaining business as usual (Macy & Johnstone, 2012). Despite the fact that this risk is serious, the likelihood that this particular study will result in such harm is minimal. My work at this stage may have little impact upon those individuals and institutions that seek to maintain a status quo in which keeping birds captive can lead to economic or political gain. Over time, I am hopeful that this will change, but the shadow side is that those who choose to participate with me will be at higher risk, as will I for potentially being seen as a rabble-rouser while advocating for animal rights.

Although I cannot entirely prevent the aforementioned risks from occurring, should physical harm befall a human or avian participant in the study, medical attention will be sought immediately. Additionally, efforts will be made to ensure that confidentiality is protected where applicable, drawing upon my past experience as a newspaper reporter and student researcher in psychology. Interview transcripts, raw film footage, and other materials gathered as part of each case study will remain in my sole possession and will not be uploaded to third parties.

Should a breach in confidentiality somehow occur, I think the best course of action is to strive for transparency. I will engage in dialogue with those who feel they have been violated and seek a way of repairing the damage that is collaborative between

us. I don't think it should present a major issue, though, given that I will be the only one keeping informed consent and image release forms and the only one with the raw video, photographs, and notes. I have also edited the film myself and can thereby ensure that identities are concealed to the extent possible whenever requested before presenting any film, notes, reports, or photographs publicly.

Other potential risks apply to the avian participants in the study. Although the risks of physical harm are slight given that they were not removed from familiar settings or manipulated to "act" in any way, these individuals could have potentially been injured as part of the filming process, as accidents can and do happen. Undue risks such as putting flighted birds into situations where they could escape into an ecologically inappropriate environment were avoided, as was overly stimulating sensory input in the form of loud noises or frightening objects. Constant attention was paid to the birds' wellness, state of mind, and willingness to participate in any filming or other interaction, whether expressed verbally or through nonverbal communication. Furthermore, it was critical that I remained mindful of the ethics surrounding consent.

This brings me to a larger potential harm to the birds, namely that capturing birds on film without consent is another form of exploitation, effectively turning these sentient beings into "passive raw material for the active gaze of the human" (Malamud, 2010, p. 141). *The human gaze* is a term adapted from feminism's male gaze, in which the viewer's fantasies and desires are projected onto the objectified, viewed other. The result is often a distillation of the other into two-dimensional caricatures, angels/whores or in this case, good (i.e. *Lassie*, *Flipper*) versus bad (i.e. *Jaws*, or Alfred Hitchcock's *Birds*) animals (Malamud, 2010). This reductionist consequence of objectification echoes the

myriad issues touched upon in earlier discussion concerning the dangers of binaries wrought by Cartesian dualism, which in turn are projected onto birds. Furthermore, it perpetuates an oppressive power dynamic in which humans purport to have a "right to sight" wherein nonhumans are ours to witness, a form of visual assault (Bradshaw, Smuts, & Durham, 2010). The psycho-social consequences are not relegated to the viewed; they also affect the viewer. In today's visually dominated culture, "the power to collapse space into a single dimension has hastened the atrophy of touch, smell, sound, and taste and relegated these other senses to restricted, furtive territories" (p. 152).

Taken as a whole, issues like the human gaze and right to sight might converge in such a way that one would conclude that shooting film of birds and other nonhuman animals is never ethical. At its face, this may be so; however, deeper examination of reparative versus harmful aspects of film reveals that witnessing birds through this medium is arguably beneficial when it is authentically portraying avian subjects while actively acknowledging and taking back oppressive anthropocentric projections. Film, after all, has the power to be a transformative medium, as described by Randy Malamud:

> Our visual cultural representations of animals significantly affect, positively or negatively, people's propensity either to revise and improve our patterns of behavior or, on the other hand, to continue along the path of the status quo with our piercing human gaze of speciesism, encroachment, and imperial dominance. (2010, p. 152)

In order to depict authentic connection, film requires mutual viewing "shared simultaneously between two beings; neither one wanting anything except clarity, experienced mutually" (Linden, 2010, p. 26). Let us not forget the profound visual acuity

of birds and their ability to tap in to the ultraviolet spectrum. For the purposes of the present study, this means limiting the framing of narratives in human terms and allowing bird voice to be expressed without jumping to anthropomorphic interpretation. It necessitates allowing avian stories to unfold on their own accord, after which an attempt at holistic, nonbinary interpretation may (or may not) follow. Finally, it entails patience, the gentle introduction of new equipment, the space for authentic birdness to be revealed.

At such time that an unwillingness to participate was sensed in the birds depicted in *A Bird Tail*, activities ceased immediately and the participant was allowed the space and time to recover in a way that is aligned with the needs of their species. In the event that a participant did not appear to be recovering, a licensed psychologist, biologist, or ornithologist with expertise in avian physiology and psychology was available for consultation and to ensure the wellness of both birds and humans. Fortunately, as of this writing, no incidents of psychological or physical harm seem to have been caused as a direct result of this project.

Although there is always some risk of physical and/or emotional harm when engaging in such a multi-faceted and potentially controversial topic, in my view the benefits of such a study by far outweigh any potential risks. For the participants in the study, it has been an opportunity to have their voices heard and their lives' work shared across borders and boundaries between species. At a larger scale, it is a way to return to birds in captivity recognition of their dignity, sovereignty, sentience, and native ways of being. It is an invitation to deconstruct the projections that divided humans from other species in the first place. It asks that all of society re-examine the ways in which human

privilege has deleterious effects upon the more-than-human (Abram, 1996) world and it represents a small piece of a larger shift in paradigm.

Limitations and Delimitations of the Study

Several theoretical and practical issues that are informed by the field of Indigenous psychology exist in regard to the study of animal cultures. One is the observation that knowledge derived from such efforts can only truly be *etic* in nature rather than *emic* (Denzin & Lincoln, 2003, p. 16; Tuhiwai Smith, 1999). I may spend countless hours with a particular animal or group of animals; however, I am still a human being and thus must always remain an outsider of sorts. The lens through which I experience these creatures must always be a human one no matter how hard I try to see things from an animal perspective. The ways of being of different animals are in many aspects mysterious and wonderful, yet ultimately inaccessible to humanity.

Geographical confinement presents a further limitation of the study. Due to budgetary and temporal constraints, I have chosen to restrict filming to where I live in the Pacific Northwest of the United States. This in turn limits opportunity for deeper understanding of human-avian relationship as it occurs throughout the rest of the country and internationally, where many parrot and poultry issues constellate in greater concentration. This includes pertinent issues such as the illegal parrot trade and avian influenza, which are magnified in places like Asia, Australia, and South America.

Another limitation is largely technological in nature. I could not afford to employ the services of more seasoned filmmakers nor to purchase cutting-edge equipment. Instead I utilized an iPhone, basic camcorder, and a laptop with standard software for film editing. As such, I simultaneously played the role of director, writer, producer,

cinematographer, sound editor, and so on—a one-woman band of sorts. A further technological obstacle was that I lack the training, hardware, and software needed for many postproduction bells and whistles such as animations or tricky cinematic shots.

Finally, I was confined by the guidelines that inform this study that require explicit permission of any musicians and artists who contribute to the final work and that the project be completed in a timely fashion, limiting opportunities for incubation and drawn out tangential explorations. Fortunately, several friends offered musical accompaniment for the film, and I am well practiced at improvising artistically. Despite these limitations, in the end, the film *A Bird Tail* successfully depicted a hero's journey that reveals the alchemical qualities of both poultry and parrots.

Organization of the Study

This study explores the idea of captivity through the eyes of two birds, a chicken named Pimento and a macaw named Luca. First, I expanded upon the notion of the hero's journey as described by Joseph Campbell (1968). Within this transformative context, my second goal was to elucidate the psychological complexity of birds via illumination of *coniunctio,* revealing Pimento and Luca's role as alchemical vessels capable of holding the tension of opposites: better/worse, spirit/matter, wild/domesticated, masculine/feminine, and conscious/unconscious. Next, I sought to problematize the obstacles faced by captive-held poultry and parrots by describing the numerous challenges that birds like Luca and Pimento face. I explored the idea of sign as symptom, attempting to psychologize and see through what are largely labeled undesirable bird behaviors within human society, a move in keeping with James Hillman's *Re-Visioning Psychology* (1975).

By encouraging viewers to see through avian eyes, I attempted to confront commonly held assumptions and projections such as the idea that chickens are *bird brains* or parrots are merely mirrors when engaging in conversations using human language. Ultimately, my hope was to express the depth and multiplicity that is authentic birdness, to deconstruct the idea of captivity, and to challenge norms that maintain the status quo regarding parrots, poultry, and other avian beings.

Through juxtaposition of two related, yet divergent threads—that of domesticated (i.e. poultry) and of nondomesticated (i.e. parrot) bird species—my aim was to demonstrate that although in many ways each is the inverse of the other, ultimately their experiences of captivity are two sides of the same coin and shaped by human privilege. My own experiences as well as those of Pimento, Luca, and other birds I know served as entry points into the experiences of others, which I explored through direct observations, spoken testimonies, and imaginal alchemy. In this way, the microcosm of avian captivity that unfolding in my own backyard served as a reflection of the whole, what is happening across the country and indeed, throughout the world.

The final part of the study consisted of unpacking the themes that emerged throughout the filmmaking process, further exploring ideas like the decolonization of psyche and domestication as a mediator of applied ethics. At this juncture, I shifted from an explorative to reflective posture. Finally, the study concluded by drawing upon these themes in an effort to articulate reparative paths moving forward that are liberating to both birds and humans through the processes of active imagination (Jung, 1954/1969, p. 211) and *conscientização* (Freire, 1970/1997).

Chapter 4

Presentation of Findings

It is important to note prior to embarking upon this explication that given the heuristic nature of this study with a film as its centerpiece, findings are not easily captured through written word alone. Moreover, at the heart of this dissertation is the desire to amplify avian voice; encasing birds in a human alphabet would be antithetical to its liberatory intent. As such, the film is a critical component—a collaborative outward expression of human-avian relationship that provides a counterbalance to the anthropocentrically framed inward analyses characteristic of traditional academic prose. I encourage all readers to visit http://youtu.be/7yeKGYhHgyg and view the 30-minute film entitled *A Bird Tail*, as doing so adds immeasurable meaning to the following discussion. When citing specific scenes in the film, I will use the classic time format (i.e. 12:34).

For reference, below is the voiceover script as narrated in the film by Pimento, an Ameraucana chicken. Re-imagining the world through her eyes reveals the many challenges faced by captive-held birds, beginning with something as simple as deciphering the difference between human *beans* and *beings*:

> I wonder what it's like to fly, to swoop freely among the treetops and to drink in the world from such glorious heights. Sure, I have wings, but let's face it—they are better at flapping than flying. It takes all my effort just to gain the altitude necessary to reach my 3-foot-tall roost every night. Still, I consider myself lucky. Of all the places in the world, this is a pretty good spot to be grounded. The worms are juicy, the dirt is prime for bathing, and the human

beans here are very generous, always providing tasty treats and good neck scratches.

I've heard from the Crows and other wild birds that humans are not usually so nice. They told me about another place just a few miles from here that is full of chickens like me. Legend has it, there are hundreds kept at a time in a single barn. They are kept in those barns like prisoners, unable to feel the sun on their face or the grass under their feet *ever*. Not even once. Can you imagine?

I don't know if I believe it, maybe the Crows are just trying to scare me. Why else would they claim that not one of these chickens is ever set free, that every single one of them has their neck sliced before the age of two? I doubt that all those chickens did something *so* bad that they would make humans that angry. It just doesn't make sense.

I turned 5 this year, which is medium-old by chicken standards, and I have yet to see a human bean kill anybody. Sure, these days I don't get out much, but when I was a chick I travelled quite a bit, and of all the humans I met, big and small, not one of them was mean.

All in all, I had a pretty great childhood. My first memories are a little hazy, but I do recall the moment I pecked my way free of my cozy green shell. It was so nice and warm in there, but by the third week I was starting to feel cramped, so it was good to finally stretch out. I imagine baby human beans know the feeling, seeing as they're stuck in those tiny cans.

While my hatching memories are a little hazy, here's what I can recall. I barely had time to adjust my eyes to the bright lights (let alone dry off) when

things got a bit scary. Out of nowhere, I was grabbed and placed on a cold conveyor belt that took me from one room to the next. At least I wasn't alone, I was surrounded by my brothers and sisters, but they were confused and scared, too. I remember it was so loud. In the last room, they separated boys and girls. Where my brothers went, I have no idea, but I do know that my sisters and I were all put in a big cardboard box.

Then it was dark for a really long time.

We were shuffled around in there for what seemed like an eternity. At least it wasn't as bright, but it was cold and there was nothing to eat or drink. My sisters were scared and kept crying, but I knew everything would turn out okay. I was one of the smallest, but also one of the bravest.

I'm not sure what took them so long, but eventually, the human beans figured out we were in that box and they opened it and gave us food and water. There was another bright light but it was warm so I didn't mind too much. I can't even begin to tell you how cold and hungry I was. Some of my sisters were still sleeping when we arrived and didn't even wake up when the humans lifted us out.

In those first few days of my life, things happened so fast. I barely got my belly full before a smiling face appeared above me and it was my human bean, the one who would take care of me my whole life. She gently lifted me and five others and wrapped us all in a warm towel. It was the first time I'd felt so cozy since leaving my egg and, exhausted, I immediately fell asleep.

I awoke to a world filled with wonders, what my bean called a "normalish chicken childhood." She explained to my sisters and I that we did not belong in

factories or in cardboard boxes sent in what she called “the mail”; we belong outside hunting bugs, playing in the dirt, and getting warm from snuggles rather than light bulbs. She gave us names, calling me Pimento, since I was the smallest.

In those early days, our human bean was never far away. If we awoke in the middle of the night, she made soft noises so we knew we were safe. We travelled everywhere together, to pottery class and even to the city to visit family. It was one adventure after another, and I loved every minute of it. We learned to follow our foster human across the yard, and she learned how to decipher what we said in Chicken. This sound, for example, means we’re sleepy, this means we’re hungry, and this is what it sounds like when we’re playing keep-away with a tasty slug.

This happened more often than you’d think, since my sisters and I were always hungry. Makes sense seeing as we grew so fast. It wasn’t long before my fluff was replaced by feathers. At the dawn of adolescence, life as I knew it was pretty much perfect—carefree days spent relaxing, playing, and exploring. Then one afternoon, out of the blue, everything changed.

By now my human bean would leave us alone for short periods of time, seeing as we were practically teenagers. We weren’t really *alone* anyhow. We were friends with beans, rabbits, parrots, dogs, everybody really. One day one of those dogs, Lily, decided she didn’t want us around anymore. Maybe she was jealous of all the attention we were getting? I don’t know what sparked it, but I know how the fire ended: with the bodies of my sisters, dead and dying, scattered

across the yard. I was the smallest, but also the bravest—and the only one to survive.

When my human bean came home, she was devastated. I could tell she blamed herself. It took a long time for us both to recover, and the nightmares were relentless. Although I was independent as far as chickens go, we're social creatures and don't like to be alone. My bean did her best to spend most of the day outside with me, but it was not the same as having other chickens around. Fortunately, she quickly found some feathered flockmates from a local farm. Being local meant these chickens did not have to be scared by a conveyor belt or a cardboard box or by being in the mail or anything! After all we'd been through, everything finally seemed like it was back on track. But looks can be deceiving.

In a matter of hours, I could tell that some of my new brothers and sisters were not feeling well. They seemed tired and wouldn't eat. "Coccidiosis" is what my bean called it, and she reassured me that I had been immunized against this disease, that it's standard practice at industrial-scale hatcheries. I guess for all its bad sides, there are some good things that come with big, automated operations like the place where I was born. The older I get, the more I see that the world is neither purely black nor white.

Compared to the light and carefree moments of my early childhood, those weeks were a dark time for my flock. First was the dog attack and now an assault from within. It was only a matter of days before all but a few of my new family members succumbed to the disease and passed away. Some were less than a

week old, barely a taste of life. I still wonder what they would be doing today were things to have turned out differently.

It turns out there was another downside to avoiding commercial hatcheries, at least in terms of control: the issue of straight run chicks versus pullets, the industry terms for co-ed babies rather than just girls. You see, two of my new flockmates were brothers, and things were fine up until puberty, but then they kept fighting over us. Decimated by dogs and disease, our flock was not big enough to sustain the desires of two amorous young roosters, and the result was a lot of tension in the flock and feathers ripped out during scuffles. We ladies had to wear chicken saddles to protect our backs and, realizing this female to male ratio was not sustainable long-term, my human bean let us choose which guy to keep around. Robin was a bit scragglier and his crow was not as manly, but he was much better at courtship. In the presence of food, rather than eat it himself he would start tidbitting, a courtship display that cemented his generous reputation. While rarely did Robin keep a morsel for himself, the other rooster, Lavender, selfishly gobbled up any and all food. Though Lavender was handsome, the choice was clear, for chivalry over brawn is the key to a chicken's heart.

Lavender's profile was put online, complete with baby photos and a plea that it be kind—not hungry—human beans who adopt him. Last I heard, he had settled in with a group of ladies just a few miles down the road after their previous rooster lost his life defending the flock. I'm glad it worked out because I could tell my human felt like she'd somehow betrayed him. But it had to happen; things as they were were *not* sustainable. After Lavender left, things were peaceful for a

long time. I loved to watch the wild birds raise families and I got to know the rhythm of the seasons. I discovered my hate for snow, which covered up all my favorite dirt patches and scared the bugs away.

Then late last spring, we had a new bird join our flock, and I remember thinking he was the strangest chicken I had ever seen. I found out later he was not a chicken at all, but rather a species of parrot called a Blue and Gold Macaw. He proved to be a master of languages, able to speak Chicken, Parrot, and even Human. He told me his name was Luca, though he never explained why he wore such bright colors. You see, we birds can detect more colors than beans can, we can see ultraviolet light. If Luca looks like a sparkler to you, to us he lights up like a full-blown firework! Between his luminous feathers and his loud talking, Luca definitely didn't seem too concerned with blending in and staying under the radar, which can be dangerous, particularly with eagles flying around.

It wasn't long after Luca joined our flock that we learned this the hard way. Early one morning, a ginormous Bald Eagle swooped down and attacked us chickens. It was three feet tall and had a wingspan twice that size! I could hardly believe my eyes and looking back on it, it still feels surreal. Still, the dog I fought off was even bigger, so I mustered all my courage to scare it away. While the rest of my sisters hid in the bushes, Robin and I stood bravely in the middle of the yard, sounding the alarm and keeping an eye on those massive talons. Unfortunately, the incident did not leave my flock unscathed. Marshmallow was fatally injured and another young hen named Wolf was carried away. From time to time, that eagle still flies over, but Robin keeps out a sharp eye and when he

sees anything suspicious, he sounds the alarm and we all duck for cover. Other members of my family also keep vigilant. If hawks or eagles come close, my human bean and Luca make a racket so loud that no bird of prey in their right mind would come close.

I once asked Luca why he was not afraid of eagles. He told me that he was afraid, but that he'd lived long enough to know that there were worse things to fear, including living a life over-protected. He said he'd met parrots before who were never allowed to leave their cages, all because their human beans were afraid of what would happen. It made me think of all those chickens trapped in barns. If the Crows were right and humans kept them in there to collect and eat their eggs, I wondered if that meant parrot eggs were also on the menu.

Luca then explained that, like birds, fear also comes in many colors. While I feared most the thought of being eaten, whether by dog, eagle, or disease, he feared loneliness the most. You see, parrots live a long time, ten times that of chickens, long enough to lose partners whose companionship was supposed to last a lifetime. This was Luca's third home, and he was terrified by the prospect of a fourth.

Once I got to know him, I came to realize that this strange technicolor bird had more in common with me than we had apart. For one, we were both culturally bilingual, able to communicate in both Bird and Human. We also shared the same dream of flying among the treetops, but an old injury had broken his left wing. I don't know how it happened, exactly. He didn't want to talk about it. But every once in a while, I would catch him flapping with his good arm

and fantasizing that he'd suddenly achieve liftoff. I also came to realize that some aspects of his injury were invisible, at least from the outside.

About every two weeks, when the light was a certain way or he'd not had enough sleep, Luca would have a paralyzing seizure. It often followed the same pattern: He would lift his right wing, clench his right foot, and begin vomiting through guttural cries, pupils dilated. My human bean did everything she could to help. Just as she had deciphered our calls as baby chickens, she learned to spot a seizure coming, and as the days passed got better at minimizing the magnitude and duration of these episodes. Still, I could tell it took a toll on both of them, he trapped in a body that transported him against his will to a painful, powerless place, and she desperately calling his name in an effort to bring him back to us. I think what was key was that they spent a lot of time building their friendship. Without having to worry so much about the possibility of a fourth home, Luca began to relax and his seizures began to lessen their grip, though they never let go entirely.

From what Luca told me about other humans he'd met, I discovered we had another thing in common. For whatever reason, I've noticed that human beans, especially those without birds in their flock, seem to have a hard time seeing us. Their vision is fine, that's not the problem. It's seeing through our outsides to who we are inside, seeing our personalities. For example, most new humans I meet ask first about my body. They ask about my eggs a lot, what color they are and how often I lay them. To be honest, they only seem concerned with those parts of me from the neck down. They don't ask what I like to talk about or

what I think of things. In fact, they don't ask *me* anything, they ask my human bean. Luca said for him, the opposite is true. When he first meets new beans, they do talk to him, but usually just about talking. They hardly ever ask about his body, how it feels, or about his heart's most amorous desires. In fact, if he does bring up his love life, they discourage it. I find it strange that as far as meeting humans goes, we seem to be opposite sides of the same coin.

Here's another example. Lots of beans talk about how Luca is exotic and wild, like he is some international man of mystery. But he lives inside the house, does laundry, watches TV, listens to music, and eats dinner with humans—how much more domestic can you get!? Meanwhile, we chickens are labeled domesticated even though we live outside and socialize mostly with our own kind, just like our wild ancestors did. Sure, over the centuries our bodies have been shaped by humans—I mean, just look at ducks!—but our minds are just as they ever were, concerned primarily with survival in the great outdoors, the *wild*. Why can't human beans see that Luca and I can be both wild and domestic at the same time? *Beans* are both at the same time, aren't they? And don't let those flashy feathers fool you: Luca's parents may have known how to survive in the jungle, but just like me he was purchased in a store, receipt and everything.

Fortunately for Luca and I, the humans in our flock are pretty good at seeing all of us, who we are both inside and out. They can tell what we are feeling, even when we try to hide it. We birds don't like the world to know what we're feeling, particularly if that feeling is ill. I think it's a hang-up we have

related to our fear of being eaten. So when I started to not feel well, I didn't tell anybody. But my human bean noticed.

One afternoon not too long ago, I lost my appetite and felt extremely tired. I still had an insatiable thirst, but I noticed that my body was not digesting, the fluids would just build up in my crop. It got so bad that when I bent over, liquid came spilling out. Everyone in my flock was worried about me. My bean took me to the veterinarian and he emptied my crop and tested my blood. Based on what he saw, he said I would not survive the night. But even though I was once the smallest, I am also the bravest.

Not only did I survive the night, I survived the week. The vet could hardly believe it. I was given yucky medication that made my face sticky and daily baths in case the warm water would help pass any egg that might be stuck. That's what happened to Cocoa a couple years ago. She had an ectopic egg that was trapped inside her body and within days, it killed her. Maybe that's why human beans are so obsessed with our eggs.

While I didn't feel anything egg-shaped in me, I dutifully played the role of patient patient, each day tolerating meds, baths, and blow dries. In a way, it was kind of nice to be back in the house and sleeping near my human bean, just like I had when I was little. I'm still amazed by all that's happened in the years since, all the obstacles I've overcome. I have successfully fended off dogs, eagles, and even diseases, but in the end it was my own body that I couldn't fight. I passed peacefully in my sleep, close to where I slept all those years ago with my baby sisters.

> The autopsy revealed what the tests could not, that there was an infected egg yolk that had spread throughout my body, effectively shutting down my digestive tract and eventually, my lungs, heart, and other organs. Given the diagnosis, that I survived as long as I did is nothing short of miraculous, but then again would you expect any less from a brave bird like me? I find it ironic that it was yolk that brought me into this world, and yolk that took me out of it, like yellow bookends on a life well-lived. Time is limited for all of us, the best we can do is live without regrets.
>
> I was buried near my coop between the roots of a magnificent pine tree, the same one that gave me shade in the summer and shielded me from winter's freezing winds. Lest you feel sorry for me, know I got my wish. I no longer wonder what it's like to fly among the treetops, I *am* the treetops, every bit as much a part of my flock as the day I broke free from that shell.

Discussion of Findings

The film *A Bird Tail* represents the closing stage of the heuristic research process, creative synthesis. Its final incarnation was shaped over the years by a myriad of forces, described in further detail in the forthcoming discussion on methodology. What ultimately emerged is a first-person narrative chronicling the life of Pimento, a backyard chicken whose flock includes species of all shapes and sizes, including a parrot named Luca. A tale told straight from the bird's beak, Pimento's story is an invitation for viewers to enter into her feathery world and to witness this brave hen as she is called time and again to summon courage in the face of seemingly insurmountable obstacles.

In addition to the fundamental task of shedding a light on the lives of captive-held birds by sharing the stories of Pimento and Luca, there are several themes and ideas illustrated through the film, including:

- the hero's journey as a metaphor for transformative alchemy;
- breaking down Cartesian dualism through the deconstruction of binaries such as better/worse, spirit/matter, wild/domesticated, feminine/masculine, and conscious/unconscious;
- problematizing captivity by articulating numerous obstacles faced by those avian individuals we humans keep;
- challenging viewers to examine previously-held assumptions and projections by seeing through avian eyes;
- and encouraging *conscientização* (Freire, 1970/1997) by speaking a common language of connection that dissolves barriers like politics, age, education level, and so on.

The overall success of these aims will no doubt prove to be as varied as the film's viewers and remains largely untested given the limited size of its audience to date. Publication of this dissertation will amplify its impact. A film is a living thing; it draws strength from the interest of others, seeks fertile soil for propagation, adapts its meaning over time to account for changing circumstances, and easily outlives its maker. Once a film is released into the public domain, it becomes a once-captive bird set free.

The hero's journey. As is the case for so many who have investigated this topic, much of my conceptualization of the hero's journey is informed by Joseph Campbell's work, particularly his book *The Hero with a Thousand Faces* (1968). In it, he describes

the universal nature of the hero archetype, which appears in stories told throughout the world, both ancient and modern. The hero's journey unfolds in stages that follow a particular pattern: departure, initiation, and return. As the protagonist of *A Bird Tail*, Pimento's story is no different, following the transformative path of the archetypal hero.

Phase 1, departure, begins with a stage Campbell (1968) named *The Call to Adventure*. For Pimento, this call begins the moment she pecks her way free of her shell (3:40). She describes how comfortable it was inside her egg and how she initially didn't want to leave. But as time passed, she grew bigger, and so did her discomfort (3:45). This mirrors the next stage, *Initial Refusal of the Call*, which is followed by *Supernatural Aid*. The supernatural entities in *A Bird Tail* take the form of human beings, who from a chicken's perspective have god-like qualities including the ability to give life or take life away (e.g., 2:48). The film depicts the titan-like reach of humans as a large hand suddenly lifts Pimento and places her on a hatchery conveyor belt, effectively constituting *The Crossing of the First Threshold* (4:10-4:41).

The first threshold is a passage outward, "a form of self-annihilation" (Campbell, 1968, p. 91) that for Pimento means the difference between a life that could have been—"naturally" raised by her parents in the wild (22:00)—and what is, a life defined by human control and confinement (4:03-4:10). In captivity, those evolutionary drives incompatible with an anthropocentric agenda must be suppressed, along with facets of identity that cannot remain intact in the absence of autonomy. This brings us to the hero's passage inward, what Campbell refers to as *The Belly of the Whale*:

> The idea that the passage of the magical threshold is a transit into a sphere of rebirth is symbolized in the worldwide womb image of the belly of the whale. The

> hero, instead of conquering or conciliating the power of the threshold, is swallowed into the unknown, and would appear to have died. (1968, p. 90)

In Pimento's story, this womb-like place inside the whale takes the form of a box that is sent in the mail (4:37). She and her siblings—along with the viewer—are cast into "darkness, the unknown, and danger" beyond the threshold (p. 77; 4:38). Not all make it to the other side of this passage, as is true for those of Pimento's sisters who did not survive. Pimento doesn't quite grasp the magnitude and permanence of this moment, stating, "Some of my sisters were still sleeping when we arrived, and didn't even wake up when the humans lifted us out" (5:29-5:34).

Pimento's heroic journey enters its second phase, initiation, once the box is opened, light let in, and her human guardian (i.e. captor) appears, setting in motion the trajectory of her life as part of a backyard flock (5:15-6:05). Upon "having traversed the threshold, the hero moves in a dream landscape of curiously fluid, ambiguous forms" (Campbell, 1968, p. 97). Pimento describes this as awakening "to a world filled with wonders" (6:11-6:14). Once in the dream landscape of her backyard flock, Pimento must survive a succession of challenges, a stage in the hero's journey known as *The Road of Trials* (Campbell, 1968).

Pimento's first trial takes the form of a dog attack (8:47). This is soon followed by an outbreak of coccidiosis (10:13), an intestinal disease caused by microscopic protozoa. Though difficult, these experiences allow Pimento to see her strength, and courage becomes an important part of her identity, hence she repeats phrases similar to, "I was the smallest, but also the bravest" at several points in the film (5:06; 9:04; 14:58; 24:24; 26:00). The next three stages of initiation, *The Meeting with the Goddess, Woman*

as the Temptress, and *Atonement with the Father* are depicted by Campbell as the hero's navigation between opposing forces, the alluring female figure and fearsome father. Pimento experiences these forces more broadly as the tension between feminine and masculine, lightness and dark. She recognizes that being raised by a mother hen (or even "foster human") is preferable to the mechanized indifference of industrial-scale farming, and that in the latter the fate of roosters is much different than it is for hens (4:29). In wrestling with these opposing forces, Pimento discovers sparks of light in the darkness including her immunization (10:20) to the same disease that killed her flockmates thanks to vaccine technology invented as a byproduct of industrialization.

Thus, the true nature of the world reveals itself to Pimento as "neither purely black nor white"—instead paradoxical, ambiguous, and nonbinary (10:33-10:44). In the film, this moment of recognition is represented by black and white hens who as *Yin* and *Yang* come together to depict *Tao*. *Tao* is "the source and law of being" that "underlies the cosmos [and] inhabits every created thing" (Campbell, 1968, p. 152). Jung once observed that "personality is *Tao*" (1934/1954, p. 186). It is an idea akin to alchemy's *coniunctio*, insight that brings Pimento to *Apotheosis*, the stage in the hero's journey in which the protagonist becomes enlightened, a divine state experienced by those who have "gone beyond the last terrors of ignorance" and who have left duality behind (Campbell, 1968, p. 151).

The ability to see beyond binary is, for Pimento, *The Ultimate Boon*, a definitive goal of her journey—the apex of the initiatory phase. She puts this holistic understanding to the test when confronting the dichotomy of predator/prey head-on during an attack by a Bald Eagle (14:36). Instead of giving in to fight or flight and hiding in the bushes,

Pimento stands her ground and sounds the alarm (14:52-15:03). In a later scene, Luca observes that even fear itself is not binary, "that, like birds, fear comes in many colors" (16:08-16:16).

Armed with the courage that accompanies the power of holistic perception, all that is left in Pimento's heroic journey is the last phase, return. As with refusal of the initial call to adventure, the first stage of return is demarcated by what Campbell calls *Refusal of the Return*, in which the protagonist balks at the "labor of bringing the runes of wisdom… back into the kingdom of humanity" (1968, p. 193). The vestiges of Pimento's past tug at her as she inquires of Luca why he is not afraid of eagles (15:39). It is easy to imagine a scenario in which Luca admits he is terrified by them, sending Pimento retreating into previous ways of thinking. But instead Luca reveals his nonbinary take on fear, thus guiding her toward the next stage of return, *The Magic Flight*, during which Pimento must return to the world with her "elixir for the restoration of society," which in this case is seeing through dualism to holistic truth (p. 197). In the film, the magic flight is represented by Luca's fantasy that he can "achieve liftoff" and fly despite his broken wing (17:35). It is a dream shared by Pimento, breaking down the barrier between chicken and parrot, self and other—and a call to spread the message that as two sides of the same coin (21:03), *I* and *Thou* have more in common than we have apart (Buber, 1937/1958).

Luca's intervention represents what Campbell refers to as *Rescue from Without*, a stage in the return in which assistance is required in order to bring back those lessons gleaned throughout the journey. Sage as his soul is, Luca is not immune to the limitations imposed by the physical body, as demonstrated by the paralyzing seizures that

reduce him to a helpless, childlike state (17:52-18:10). In this regard, Luca provides a bridge of sorts between the two worlds Pimento is navigating, the mundane and the divine, allowing her to begin *The Crossing of the Return Threshold,* which reveals that in actuality, the two kingdoms are one in the same:

> The realm of the gods is a forgotten dimension of the world we know. And the exploration of that dimension, whether willingly or unwillingly, is the whole sense of the deed of the hero. The values and distinctions that in normal life seem important disappear with the terrifying assimilation of the self into what formerly was only otherness. (Campbell, 1968, p. 217)

The terrifying nature of this journey reveals the pain at its core, that of the growth of individuation (Jung, 1928/1966, pp. 173-241).

Just as the ego is transformed while traveling along the path of individuation, Pimento's story is more journey than destination. For Pimento, though enlightened through *Apotheosis*, there remains "a certain baffling inconsistency between the wisdom brought forth from the deep, and the prudence usually found the be effective in the light world" (Campbell, 1968, p. 217). Pimento expresses this clash between divine *Tao* and mundane binary-based perception as she questions how others see (and don't see) both Luca and herself (19:12-19:28). She notices the human imposition of dualism through body/mind and wild/domestic categorizations while noting that in actuality, she and Luca share a great deal in common as captive-held birds (20:18-22:45).

By comparing how dualistic ways of seeing prevent humans from accurately perceiving both Luca and herself, Pimento demonstrates the power of her newfound ability to see through such projections (Hillman, 1975). She has arrived at the next stage

in the hero's journey, becoming *Master of the Two Worlds*: the mundane realm, which reduces reality to distilled half-truths, and the divine world of *Tao,* which dissolves all such boundaries. The final barrier Pimento challenges is that of human/animal, an extension of the self/other and good/bad binaries that prevent holistic perception and empathetic connection across species. She does this by bringing humans into the fold when discussing wild versus domesticated animals, pointing out that as a species, we are both wild and domestic at the same time (22:17). Next, Pimento states that the humans in her flock "are pretty good at seeing all of us, who we are both inside and out," revealing that for our many shortcomings, in Pimento's estimation humans are not solely bad (22:55-23:02). We can appear as both friend *and* foe, even simultaneously, as when playing the role of caretaker/captor. Furthermore, we are subjects of individuation just as birds are, resulting in a situation where some humans are more practiced at "seeing through" than others.

The final stage of Pimento's journey, *Freedom to Live* stems from her newfound ability to pierce through false binaries that divide self from other, transporting her from the confines of the personal ego to the expansive realm of the Self. This is not a dualistic world of life and death but of boundless, timeless transformation. It requires acceptance of what is in all its multiplicity (Jung, 1954/1969, pp. 190-199)—living in the present without anticipating the future or regretting the past:

> The hero is the champion of things becoming, not of things become… [s]he does not mistake apparent changelessness in time for the permanence of Being, nor is [s]he fearful of the next moment (or of the 'other thing'), as destroying the permanent with its change. Nothing retains its own form; but Nature, the greater

> renewer, ever makes up forms from forms. Be sure there's nothing perishes in the whole universe; it does but vary and renew its form. (Campbell, 1968, p. 243)

Ultimately, freedom from the fear of death is what allows Pimento the freedom to live. Just as the hero's journey is a cyclical movement from the mundane to the divine and back, Pimento's story begins and ends with an egg (26:16).

Egg yolk peritonitis is what ultimately ended her life on April 8, 2018 (25:28-25:37). She describes in the film the irony of yolk being the cause of her death, given that it's the same substance that gave her life, "like yellow bookends on a life well-lived" (26:21-26:24). In alchemy, the egg's "yellow yolk was often interpreted as a symbol of gold and the egg white as a symbol of silver" (Becker, 2000, p. 94). It is worth noting that the symbolic significance of yellow carries contradictory meaning, a primary color of the highest luminance. Yellow is often thought of as a happy hue, associated with optimism, sunshine, and energy. In China, it is opposed to black yet remains its complement, corresponding to "the manifold relations of the two principles *Yang* (yellow) and *Yin* (black)" (Becker, 2000, p. 335). By contrast, yellow also denotes cowardice (i.e. *yellow-bellied*), caution, and illness, including jaundice and yellow fever. Thus, yellow is a color that in itself provides a challenge to dualism. It is the color of the warm towel that enveloped Pimento and her siblings in sleep (5:58-6:05) as they moved in the hero's journey from departure to initiation into a backyard flock—another yellow, alchemical bookend on a life well lived, just like the yolk that ultimately took Pimento's life. Her death does not represent a fixed endpoint, but rather the completion of a cycle. The film concludes with her burial at the roots of a great pine tree (26:53), revealing the nature of Pimento's passing as not a death at all but a transformation. Her avian body

laid to rest, Pimento is finally able to dance among the treetops *as* the trees, with freedom to live and freedom from captivity (26:51-26:58).

According to Campbell, the hero's transformation follows distinct archetypal patterns, including Hero as Warrior, Hero as Lover, and Hero as Saint. In the film *A Bird Tail*, Pimento's journey most closely resembles that of Hero as World Redeemer, though Campbell's description of this heroic type in terms of father/son relationship needs some modification in Pimento's case, perhaps to Self/ego. The World Redeemer recognizes the illusory nature of the boundary between self and other, good and bad, life and death, and challenges the conceptualization of time as linear:

> From the standpoint of the cosmogonic cycle, a regular alternation of fair and foul is characteristic of the spectacle of time. Just as in the history of the universe, so also in that of nations: emanation leads to dissolution, youth to age, birth to death, form-creative vitality to the dead weight of inertia. Life surges, precipitating forms, and then ebbs, leaving jetsam behind. (Campbell, 1968, p. 352)

Though she is concerned about the rumors surrounding human-inflicted cruelty (1:45-2:30), Pimento recognizes that just as time is cyclical and the world paradoxical, perhaps so too is humanity. Approaching relationships with an open heart and genuine curiosity (e.g., 16:00-16:08), her goal is to redeem rather than condemn, hence she does not blanket every human she meets in negative judgment. Instead she navigates the borderlands (Anzaldúa, 1999), inhabiting the space between things as they are and things as they should be, between better and worse. In maintaining this tension of opposites, Pimento holds "the wisdom of the end (and rebeginning) of the world" by seeing in terms of *both/and* rather than *either/or* (p. 354).

Pimento and Luca are wild *and* they are domesticated. Human beings are kind *and* cruel. Redemption for those unable to see through (Hillman, 1975) such binary is Pimento's ultimate goal, and she achieves this through the use of alchemy. In this regard, she also embodies the archetypal constellation of Hero as Alchemist. The four elements were of great significance to the alchemists (Becker, 2000, pp. 96-97), and it is interesting to note that the combination of said elements could result in a whole greater than the sum of its parts, such as when water and fire are combined to create a third thing, steam. This idea is similar to Jung's transcendent function (1958/1969, pp. 67-91). In Pimento, all four elements converge. As a chicken, she is a grounded (1:35) creature of the earth who dreams of flying through the air (1:05). A brave soul with a fiery spirit, Pimento's final days are marked by an insatiable thirst that fills her body with water to the point where when she bends over, liquid comes "spilling out" (23:45).

The symbolic significance of water is worth underscoring, as it carries numerous metaphorical archetypal meanings. It is a symbol of the unconscious psyche, the depths of soul that lie beneath consciousness's surface. Water acts as a solvent, dissolving and thereby bringing into relationship opposing forces. Moreover, to metaphorically dam psyche is to block its flow. Just as a physical dam is not eternal, eventually silting over or bursting and allowing the river to find a path over, through, or around it, neither is the metaphorical dam upon the river of unconscious psyche. Eventually the contents of the unconscious that swell behind this imaginal dam will burst forth, manifesting as the return of the repressed, thereby satiating drought and thirst.

A form of individuation (Jung, 1928/1966, pp. 173-241), the hero's journey itself can be understood as an alchemical process, a transformative series of events leading

toward eternal, divine wisdom—the Philosopher's Stone that turns base metals to gold. As Udo Becker (2000) observes, through "death, the originally formless *materia prima* decomposes into its constituent elements and achieves a resurrection on a higher level in the Philosopher's Stone" (p. 232). Chemistry demonstrates that applying heat to an alchemical vessel hastens reactions inside. Pimento's body is her vessel, capable of simultaneously holding the four elements and the lightness and darkness of *Tao* (10:40). As such, Pimento is a personification of *coniunctio*, the union of opposing forces (Franz, 1980a). The heat she initially faces takes the form of fear, which subsequently galvanizes her sense of bravery. In the end, the hottest force Pimento encounters is the infected egg yolk (25:40) that brings fatigue and thirst (23:34), ultimately catalyzing her transformation from self to Self (Jung, 1951/1968, pp. 23-35; 1954/1969, pp. 190-199) by ending her life as a bird and beginning her life as a tree.

Deconstruction of binaries. As we have seen, the heroic journey undertaken by Pimento in *A Bird Tail* is a transformative alchemical process, a quest toward wholeness of being. Her individuation story reflects a larger, collective story shared by individuals across species. Take Luca, for example; though his experience of captivity is parallel in many ways to that of Pimento (e.g., enjoying neck scratches; craving the freedom represented by flight), as a parrot his path of individuation is catalyzed by forces inverse to those faced by the poultry in his flock (see Figure 6). Whereas Pimento craves to be witnessed fully by humans—to be seen as more than just a body, an egg-laying machine (20:15-20:38)—Luca craves to be seen as more than merely mind, a mere tape recorder forced to deny the cravings of his body (20:40-20:59).

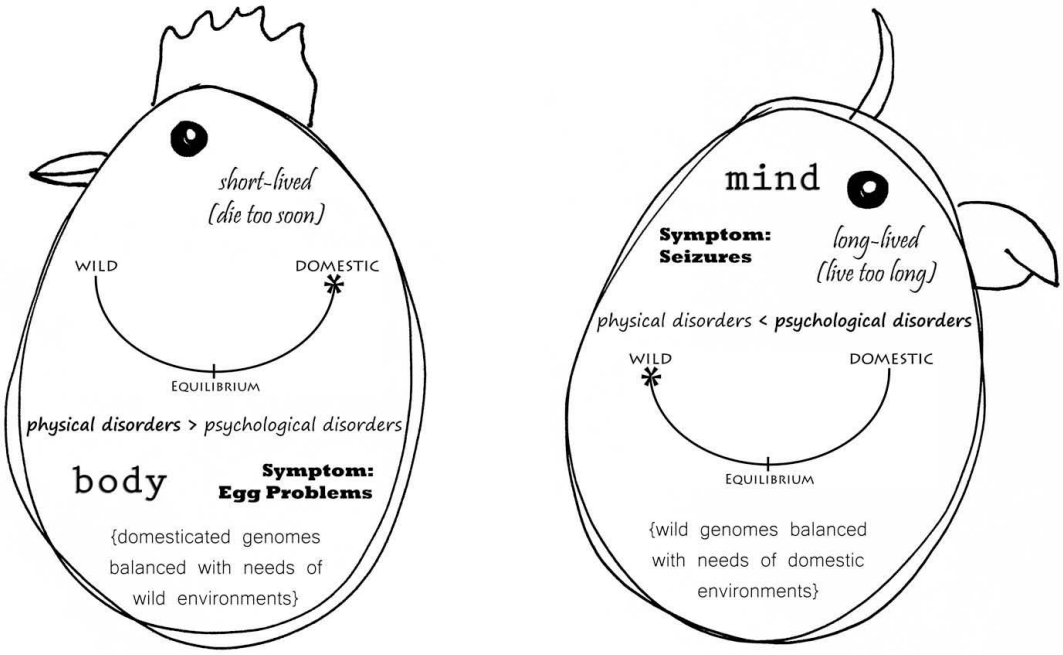

Figure 6. Two sides of the same coin. In many ways, poultry like Pimento and parrots like Luca are perceived by their human captors inversely, each mirroring half of a whole, due in large part to dualistic projection. Here Luca and Pimento are depicted as ovals to emphasize their role as alchemical vessels—philosophical eggs—with human value statements placed on top of them. Beneath such projections are the birds themselves: multiplicitous psychical beings engaged in the whole of experience.

Such bifurcations result from unconscious psychological projection on the part of human beings, muddying relational waters through the foggy filter of anthropocentric, species-bound perception. Jung observed that the "effect of projection is to isolate the subject from his environment, since instead of a real relation to it there is now only an illusory one. Projections change the world into the replica of one's own unknown face" (1951/1968, p. 9). Underneath the perceptive muck of projection are the individuals themselves, alchemical vessels just as humans are—containers for the process of *coniunctio* in which individuation toward Selfhood demands challenging those culturally

constructed binaries that serve to perpetuate oppressive dynamics. In the spirit of *coniunctio,* this section will be spent deconstructing the dualistic binaries of better/worse, spirit/matter, wild/domesticated, feminine/masculine, and conscious/unconscious which contribute to upholding the status quo in regard to captive-held birds.

***Better and worse*.** As we explored in the literature review (pp. 29-129), the roots of humanity's penchant for hierarchy can be found in our evolutionary past and the need to quickly distinguish safety from danger, rotten from ripe. Implicit in these bifurcations is a value structure that holds one pole as preferable to the other. Such is the nexus of choice and of judgment. It's an idea so fundamental that the concepts of better and worse can be thought of as a mega-binary that, given its adaptive significance, no doubt is shared across species. The influence of better/worse is omni-present within the dualistic realm, permeating the value assigned to others (i.e. preference for lightness over dark, good over evil) including those binaries explored in the following pages.

While indispensably helpful within the context of humanity's ancestral landscape, left unchecked due to the influence of hubris, the desire to label things as either better or worse can inflate over time and become distorted, bolstered and bent by cultural narrative and precluding clear perception. Aristotle's *scala naturae,* which holds humans as the apex in a hierarchy of species, is just one example of inflated, better-than assertion. The myth of progress (Tarnas, 2000) is another, a particularly potent projection when applied to science and technology. Humankind's affinity for works of science fiction are a testament to the psyche's eagerness to indulge in such sanguine fantasy, as is the automatic assumption that the next, newest version of an electronic device is inherently better than the last.

Counter to the myth of progress is what Richard Tarnas describes as the myth of the fall (2000), the view essentially that the world is *going to hell in a handbasket* as the common saying goes. One of the ways the myth of the fall manifests is in pessimistic assessments of the sharp rift between human beings and nature:

> In the form this myth has taken in our era, the evolution of human consciousness and the history of the Western mind are seen as a tragic story of humanity's radical fall and separation from an original state of oneness with nature and with being. In its primordial condition, humankind had possessed an instinctive knowledge of the profound sacred unity and interconnectedness of the world; but under the influence of the Western mind, and especially intensifying with the ascendance of the modern mind, the course of history has brought about a deep schism between humankind and nature. (p. 253)

To imagine that life was better, more harmonious, once upon a time is a similar notion to what Paul Shepard identified as the myth of the noble savage (1998), which ascribes utopian qualities to hunter-gatherer societies. As with the myth of progress, it is tempting to get pulled into the current of this countermyth and to forget that human beings, though estranged, are indeed part of the natural world.

Related to the myths of progress and the fall are the "three stories of our time" described by Joanna Macy and Chris Johnstone (2012) in the book *Active Hope*:

> In the first of these, Business as Usual, the defining assumption is that there is little need to change the way we live. Economic growth is regarded as essential for prosperity, and the central plot is about getting ahead. The second story, the Great Unraveling, draws attention to the disasters that Business as Usual is taking

> us toward, as well as those it has already brought about. It is an account, backed by evidence, of the collapse of ecological and social systems, the disturbance of climate, the depletion of resources, and the mass extinction of species. (pp. 4-5)

The first two stories are analogues of one another, with the myth of progress reflected in Business as Usual and the myth of the fall consonant with the Great Unraveling. The third story, the Great Turning, invokes action as a means of breaking free from the better/worse dualistic trap represented by these dueling narratives. The Great Turning calls for an ecologically based paradigm shift, eschewing judgment of modern society in favor of its transformation.

Transformation, like the transmutation of metals in alchemy, is a powerful third place: that of change. One of the most fundamental tenets of reality is that change is inevitable, yet it is not predetermined whether said change must take the form of better or worse. In the most objective sense, things are just different. Recognition of the paradoxical nature of this third space allows for Jung's transcendent function to pierce through binary, the space of *and* rather than *either*/*or* (1958/1969, pp. 67-91). Change can simultaneously be good *and* bad, better *and* worse, depending upon one's context and frame of reference. For example, a captive-held parrot's ability to become culturally (17:00) attuned to humans is both helpful *and* harmful to the bird. On the one hand, it eases trans-species communication, an arguably effective adaptive strategy granting the parrot greater access to resources in their immediate environment; on the other hand, its possible psychological ramifications including fractured species identity sabotages the same bird's ability to properly socialize or survive alongside those "wild" counterparts whose species identities remain intact (Bradshaw, Yenkosky, & McCarthy, 2009).

In *A Bird Tail*, the lives of Pimento and Luca are expressions of this third, paradoxical place of *Tao*, light *and* dark (e.g., 10:44-10:52). As mentioned in the previous section, Pimento's hatching into an industrialized agricultural system meant that she could never experience being raised by her own mother, yet at the same time it provided her immunity to diseases like coccidiosis (10:20-10:33). Through her conversations with Luca, Pimento discovers that as compared with the life of a chicken, the life of a parrot in captivity is better in some ways (i.e. speaking with humans directly; 20:45) and worse in others (i.e. the threat of rehoming; 16:31-16:36). Both Luca and Pimento also find paradox in the relationship with their human captor, me. In the film I mostly come across as a benevolent character, evoking fuzzy trans-species feelings (e.g., 5:45; 6:40-7:45; 9:32; 23:22), yet beneath the surface—unspoken—remains the fact that as their warden, our power dynamic is woefully out of balance. They are dependent upon me for sustenance (1:43), safety (9:16), and veterinary care (24:10). With the law ever on my side, failure to provide these things presents minimal harm to me personally, whereas for the avian beings I hold captive, it is literally a matter of life and death.

Spirit and matter. In the literature review's discussion of positivist paradigms (pp. 111-121), we explored the role of Cartesian dualism in shaping the dominant postindustrial worldview. Characterized by a split between spirit and matter, this philosophical stance is at the root of numerous contemporary issues such as environmental destruction, oppression of nonhuman species, and the concomitant pathos that such inflicts upon psyche. Jung framed this as an alchemical problem, noting that with "the decline of alchemy the symbolical unity of spirit and matter fell apart, with the result that modern man finds himself uprooted and alienated in a de-souled world"

1954/1968c, p. 109). By creating the concept of human exceptionalism, human beings effectively separated spirit from matter by claiming that only we, of all species, were in possession of spirit. This concept was then used throughout the centuries as justification for innumerable acts of violence and oppression against nonhuman animals, poultry and parrots included. The Cartesian view considers nonhumans—and the Earth itself—to be comprised of matter devoid of spirit, soulless bodies offered as cadavers for human dissection and consumption.

The rift between spirit and matter has rippling outward effects, manifesting in binaries such as body/mind, subject/object, and natural/artificial. The mind/body analogy is the most straightforward, with mind analogous to spirit and matter to body. In the film, Pimento grapples with this form of dualism when reflecting upon human beings' fixation on her eggs and reproductive system (20:18-20:27; 24:51). The divide between subject and object stems from the perception that the nonhuman world is spiritless, comprised of objects rather than subjects. This allows for othering and oppression based on a claim to privileged access to all things divine. Buber (1937/1958) describes the relational qualities of the subject/object binary as the difference between I-It and I-Thou. Within the context of captivity, the vast majority of avian-human interactions are shaped by an I-It ideology, allowing for bird commodification on farms, in stores, and on dinner plates.

The line between natural and artificial is perhaps the most impervious of all, an extension of the view that human beings exist apart from the natural world. Even those humans well practiced in the noble art of trans-species connection may be hard pressed to find spirit in manmade objects, so-called *artificial* things. Yet we name our boats and get attached to our phones. Here is an opening where the binary implodes upon closer

examination: If we humans are a species that has evolved alongside many, then we are by definition natural. Moreover, the materials we take out of the Earth and transform, however chemically comprised or poisoned, are also of this Earth and hence natural. Therefore, there is no partition between natural and artificial, no human/nature divide, and ultimately no difference between the molecules that make up *me* and *not me*.

Deconstruction of such binaries reveals that *all* matter is imbued with spirit, they are one. Jung (1954/1969) framed this as the unification of matter and psyche:

> Since psyche and matter are contained in one and the same world, and moreover are in continuous contact with one another and ultimately rest on irrepresentable, transcendental factors, it is not only possible but fairly probable, even, that psyche and matter are two different aspects of one and the same thing. (p. 215)

In alchemy, the combining of matter and spirit is referred to as a divine marriage (Franz, 1980a). Within this nondualistic framework, beings of every species are connected as mutual participants in a world ensouled, an *anima mundi* in which "not only animals and plants [are] ensouled as in the Romantic vision, but soul is given to with each thing, God-given things of nature and man-made things of the street" (Hillman, 1992, p. 101). The bird soul, just like the human soul, is one expression of this multifaceted world soul. Similarly, sentience and psyche are not relegated solely to the realm of humans. This idea is related to the Indigenous concept of animism, wherein everything is sacred, including humans, other animals, plants, places, and objects (Smith, 2007).

The film *A Bird Tail* directly challenges Cartesian dualism throughout in ways both big and small, subtle and overt. For example, there are two short animations similar to the images in Figure 6 that explicitly emphasize the projection of mind/body

separation onto parrots and poultry (20:15; 20:40). The binary of subject/object is confronted in those moments Pimento has difficulty imagining parrots being treated as overprotected objects (15:48-15:57) or chickens being treated as disposable commodities in industrial-scale farming (2:23-2:30). Pimento makes a comment that both she and Luca were purchased from a store, "receipt and everything," underscoring their role as consumer goods within human society (22:42-22:45). In a larger sense, the personification of Luca and Pimento provides a unification of spirit and matter by depicting these avian beings as individuals who are every bit as ensouled as humans, even to the point of reincarnation of the soul upon death, in Pimento's case returning in the form of a pine tree (26:51).

Wild and domesticated. One of the key themes illuminated in the film involves deconstruction of the binary separating wild and domesticated species. In previous discussion we have explored the idea that domestication is more spectrum than binary, that as with evolution, it does not refer to the culmination of events that took place solely in the past; it is a process that is continuously unfolding. This is just as true for humans as it is for other animals. In fact, there is evidence that over the course of some 150,000 years of living together, humans have been co-domesticated by dogs (Groves, 2012; Paxton, 2011). As areas of the human brain relating to the sense of smell were shrinking, there was also a size reduction in the long-term planning areas in the canine frontal lobe, in essence forming two "new" symbiotic species. Humans took over tasks like planning for the next meal and dogs took over responsibilities that required sensing with their noses, like predator detection.

The argument has been made that modern human beings are increasingly domesticated not by dogs but by our own technologies (Tucker, 2015), plugged in to devices that essentially act as self-inflicted selection pressures:

> Nothing in our reality really is any more. We are a herd of individuals vying for attention in a sea of selfies, tweets and yelps. The ecologist Paul Shepard long ago pointed out how domestication stunts development, but technology derails it. Increasingly unable to find or define ourselves outside of the machine, we move further inwards. And the programmers pull the strings. We learn to express ourselves through the machine and, in doing so, we become one. Our distraction keeps us from seeing the monumental change taking place: the immersion into a constantly connected, but never grounded social network. We are, so to speak, "always on". Smart phones, tablets, screens everywhere we look, wireless signals pervading nearly all spaces, check ins, GPS and monitoring equipment constantly reassuring the world that we are here and we are consuming this manufactured reality. Within decades, we went from being sold the mythos and myths of Progress to rendering the narrative null through immersion. We no longer need to dream of a glorious Future, we are here. Progress is no longer spoken of, but expected and systemic. (p. 4)

Thus, for humans as for other species, domestication is not static but dynamic, continuous and nonlinear. What's more, the classification of animals who have returned to the wild postdomestication as *feral* further challenges the idea that wildness and domestication are fixed categories (e.g., Buhrman-Deever et al., 2007).

Through alchemy's divine marriage reuniting spirit and matter (Franz, 1980a), we have also seen that there is no such thing as artificial selection; from an ecological point of view, through traits-based selective breeding, humans are essentially acting as naturally occurring selection pressures, similar to glaciers or asteroids, which select for traits like metabolism efficiency or tolerance of extreme temperatures rather than the rate of muscle or egg production. In light of the sixth mass extinction currently underway, the analogy to asteroids is perhaps not too far-fetched. Given the extensive ground we've already covered, the work of deconstructing the wild/domesticated binary has largely already been done, liberating us to explore how such categorizations ethically mediate human-avian interactions as revealed through Pimento's story in *A Bird Tail*.

While juxtaposing her own experiences of meeting new humans with the experiences of Luca, Pimento observes the following:

> Lots of beans talk about how Luca is exotic and wild, like he is some international man of mystery. But he lives inside the house, does laundry, watches TV, listens to music, and eats dinner with humans—how much more domestic can you get!? Meanwhile, we chickens are labeled domesticated even though we live outside and socialize mostly with our own kind, just like our wild ancestors did. Sure, over the centuries our bodies have been shaped by humans—I mean, just look at ducks!—but our minds are just as they ever were, concerned primarily with survival in the great outdoors, the *wild*. Why can't human beans see that Luca and I can be both wild and domestic at the same time? *Beans* are both at the same time, aren't they? And don't let those flashy feathers fool you: Luca's parents

> may have known how to survive in the jungle, but just like me he was purchased in a store, receipt and everything. (21:16-22:45)

This commentary challenges the perception of wildness in multiple ways.

First, it questions the incongruence between the imposed identity that comes with a wild/domestic label and the authentic, paradoxical identity underneath. Second, it touches on the fact that selective breeding based on physical traits does not necessarily precipitate psychological changes—that wild brains can exist in domesticated bodies (Henriksen et al., 2016). Third, it creates a bridge across species by introducing the idea that human beings, too, are both wild and domesticated. And finally, it introduces the influence of personal context on perceived wildness/domestication by noting there is greater wildness ascribed to parrots who are born in the jungle versus those born in captivity, even if at the level of the genome they are only one generation apart.

Pimento and Luca show us that from a bird's perspective, it makes a difference to humans whether one is perceived as wild or domesticated, that preference is given to the former. Pimento notes how human beings are drawn to Luca, speaking to him directly as though in recognition of his agency (20:43-20:48). Meanwhile the new humans Pimento meets talk *about* her rather than *to* her (20:32-20:38). She notes they see Luca as some "international man of mystery" (21:20-21:23), whereas when it comes to chickens, they seem only to care about eggs (20:18-20:27; 24:51-24:54). With these observations, Pimento unveils the role of domestication as ethical mediator when it comes to human-avian relations, an idea we will unpack further in our discussion of seeing through projection.

Feminine and masculine. As with the binaries explored thus far, the dualistic dance between masculine and feminine has been touched upon in previous discussion, particularly during the alchemical analysis concluding each section on parrots (pp. 66-67) and poultry (pp. 107-109). Consequently, there is no need to retrace already-covered ground, merely to expand upon this binary's influence upon avian-human relationships and to examine its significance when applied to the experiences of Pimento and Luca depicted in the film. Succinctly speaking, the feminine aspect is associated with *anima*, inward receptivity, Yin, softness, the feeling body, Mother Earth, and the changing moon. By contrast, masculinity is associated with *animus*, outward forcefulness, Yang, sharpness, the logical mind, Father Time, and the constant sun.

Collectively, contemporary U.S. culture casts a feminine projection onto poultry and a masculine projection onto parrots. Pimento's story reveals that for chickens, emphasis is placed by humans upon the reproductive system, both for egg-laying hens and for *broilers*—chickens raised for meat. The broiler industry, though not concerned directly with egg production, relies upon a constant stream of young inventory, necessitating an invisible army of childless mother hens whose eggs go not to market for immediate consumption but to the shed that leads to slaughterhouse (Davis, 2009). Domestication's aim regarding poultry has been to magnify this feminine aspect, maximizing ovarian production, modern technology advancing this idea to the level of lab-grown flesh (Specter, 2011). In the past 50 years, we have escalated efforts to engineer a hen who can lay more eggs than ever before while ensuring she remains placid, passive, and lady-like as she suffers this industrial-scale fate.

Parrots, on the other hand, often carry a masculine projection, associated with intellect and the brashness and forcefulness characteristic of pirates. Notice that as a society, we consume neither parrots nor their eggs (16:06); it is taboo in U.S. culture. We covet parrot minds, not meat. We recognize the power in their beaks and the relentlessness with which they use those beaks to vocalize and pulverize our human-built habitats. We delight in their ability to act as protectors, as evidenced by the 337,000 links that come up when one types *parrot foils robbery* into Google. We remain uneasy regarding their affinity for the air and thus clip their wings to prevent flight. I can attest to the power of masculinity's influence in my own relationship with parrots, as best epitomized by Gir the Sun Conure, described in the introduction (pp. 15-18). Until she laid an egg, I called her a *he*; I clipped her wings out of fear; and I was delighted when once she scared away a would-be burglar through incessant, high-pitched screaming.

At once both masculine and feminine, Pimento embodies a counterargument to the bifurcation of dueling energies through the union of *anima* and *animus* (Jung, 1928/1966, pp. 188-211; 1951/1968, pp. 11-22). Her masculinity is expressed by her bold and assertive approach to life. A courageous protagonist, Pimento proves she is able to overcome all obstacles, including attacks from dogs, eagles, and diseases (25:11-25:23). She is guided by curiosity and sharp intellect, fantasizing about leaving the ground and taking flight (1:05). Yet at the same time, she is a female, and moreover, one whose ovaries did end up having the final say in demarcating her life. Receptive and caring, there is a gentle side to Pimento, reflected in her preference for genial roosters over brawny ones (12:34). She is also well attuned to the happenings in her body (23:34-23:40; 24:54). Upon falling ill, she "dutifully played the role of patient patient, each day

tolerating meds, baths, and blow dries" (24:56-25:03). She is quiet, calm, and reflective—cyclical like the moon. Ultimately, she returns to the dark and fertile soil of the Earth (26:30).

Luca also embodies both *anima* and *animus* (Jung, 1928/1966, pp. 188-211; 1951/1968, pp. 11-22). In many ways he is masculine, a bird of intellect, wit, and verbosity. He is also brave, unafraid to stand out. As Pimento observed, "Luca definitely didn't seem too concerned with blending in and staying under the radar, which can be dangerous, particularly with eagles flying around" (14:18-14:26). Yet Luca is also feminine in some regards, deeply in touch with his feelings. One scene in the film that captures Luca's feminine aspect is his gentle stroking of moss, as seen from minute 21:00 to 21:11. Luca loves passionately yet is pressured by his human captors to suppress his bodily urges and remain, for all intents and purposes, asexual.

The threat of hormones and sexuality is a common concern among parrot owners, and indeed unmet needs can result in frustration and the straining of relationships. Some go so far as to refrain from touching parrots anywhere other than the head, even when they are that bird's sole source of physical contact. Avoidance of such does not define our interactions; however, Luca's romantic overtures are rebuffed time and again, with Pimento noticing that when Luca "does bring up his love life, they discourage it" (20:54-20:59). Though Luca's seizures (17:58) seem to stem from the same injury that broke his wing, stress is most definitely a trigger. It is plausible that the tension stemming from imbalances in opposing forces such as masculine/ feminine and mind/body might somehow overheat Luca's alchemical vessel, catalyzing haywire electricity in the brain that renders the body helpless (18:28).

***Conscious and unconscious*.** Any depth psychological analysis would be remiss not to include a discussion of the interplay between conscious and unconscious forces. Alchemy provides a counter to conscious/unconscious divergence through the image of the body as alchemical vessel wherein both forces meet and interact (Franz, 1980a). Indeed, a primary goal of individuation is to shed light upon the unconscious dynamics of psyche, making these conscious so as to break free from their hold. According to Jung 1928/1966), the unconscious—"those subtle inner processes which invade the conscious mind with such suggestive force"—reaches consciousness only gradually:

> The moment of irruption can, however, be very sudden, so that consciousness is instantaneously flooded with extremely strange and apparently quite unsuspected contents. That is how it looks to the layman and even to the person concerned, but the experienced observer knows that psychological events are never sudden. (p. 175)

In all likelihood, the themes portrayed in *A Bird Tail* will not be wholly novel to its audience, given that viewers do not arrive *tabula rasa*. Rather, the film offers additional material to ideas that have likely already begun forming in the back of the mind's eye.

A reflection of the eternal fight against entropy, the shadow side of avian captivity requires a great deal of energy to keep at bay, out of sight (Jung, 1951/1968, pp. 8-10; 1954/1968a, p. 20). It was Freud who first proposed the idea of defense mechanisms, psychological constructs whose function is to protect the ego from unconscious intrusions. These include repression, regression, reaction formation, projection, rationalization, and displacement (Myers, 1998, pp. 423-424). A myriad of defenses are employed to protect the ego from the stark realities of bird subjugation; however, the

defense mechanism of repression and its companions dissociation and denial are most pertinent to our discussion on captive-held birds (Jung, 1954/1969, pp. 173-178).

Dissociation and rationalization manifest in the public stories we tell about meat and eggs, for example, necessitating packaging in sterile cellophane and under cartoon images of happy animals on happy farms so as to maintain the copacetic illusion. The psychological separation of meat from animals begins in early childhood with the introduction of absent referents such as *pork* instead of *pig* and *happy* meals that pair nondescript pre-wrapped foods with neotenized toy animals (Stewart & Cole, 2015). All of this contributes to a cultural narrative that identifies nonhuman "animals as something rather than someone" (Jasiunas, 2018, para. 1).

Insidious as they are, such abstractions allow vicariously complicit humans to maintain the idea that chicken nuggets are ultimately faceless and that "free-range" eggs are more ethical than alternatives (Hsiung, 2016). Repressed is the fact that housing standards on such farms raise their own ethical issues—let alone the fact that bars might serve a protective function when population densities propagate psychosis and violent aggression. It is a lesson gleaned from studies of human prisoners (Mooney & Daffern, 2015). Even further from the light of consciousness is the observation that the egg industry relies upon human colonization of the poultry genome in order to thrive, and that effectively hijacking chicken ovaries is good for our bottom line.

In addition to repression and dissociation, denial is another defense mechanism that allows us to protect the ego by avoiding feeling overwhelmed by the immense and complex issues bombarding our senses on a daily basis (Jung, 1951/1968, pp. 3-7; 1954/1969, pp. 173-179). An example can be found in the concept, *extinction*. It is a

difficult idea to wrap one's head around, often associated with species like the Dodo Bird, who went extinct *back then* and *over there*. To wholly comprehend extinction is to realize that it is happening *here and now*, that in the time it took to read this, we may have silently lost the last of a species that will never again see the face of the Earth.

By diving headlong into her first-hand experience of captivity, Pimento's story sheds light upon contents of the unconscious that may be on the cusp of emergence into consciousness for the viewer. One of the first thing she mentions is her wings, stating that they "are better at flapping than flying" (1:15-1:19). Chicken wings, also called buffalo wings, are most often associated in U.S. culture with food, a spicy bar menu item that conjures images of dipping sauce and hot wing eating contests. In the film, Pimento is demonstrating that from a chicken's perspective, they are like arms, necessary for reaching her nightly roost. She reinforces this idea when mentioning how Luca flaps with his "good arm" when he is fantasizing about flying (17:32).

Through her disbelief about the Crows' stories of factory farms, Pimento lets the viewer off the proverbial hook in terms of negative judgment, framing it instead as more of a question while noting it "doesn't make sense" that human beings would treat chickens in such a heartless manner given that they have done nothing to make humans angry (2:30-2:38). This approach from a place of genuine curiosity invites the viewer to engage with and to question the shadow sides of the commercial poultry industry, including its parallels with the oppression of our own species, as Pimento observes that the chickens are kept in industrial-scale barns "like prisoners" (2:05). When Pimento mentions the slicing of their necks "before the age of two" (2:25-2:30), the yellow hen Charlene pops her head out from a nap, which will most likely come as a relief to the

film's viewers, who likely thought her decapitated. This is a subtle confrontation in the viewers with their own empathy, that flash of fear stemming from witnessing repressed knowledge of the horrors occurring behind the scenes of chicken nugget production.

Another unconscious assumption challenged by the film is the notion that human technologies are superior to natural processes. For example, it is standard practice and considered "good husbandry" to keep young chicks under heat lamps 24 hours a day for the first several weeks of life. Yet in nature, as it has been for millennia, chicks are kept warm by the body heat of their mothers. Tucked under a mother hen, as in a warm towel (5:58), it is cozy and not too bright, hence Pimento complains more than once about the extreme brightness emanating from heat lamps (4:06; 5:23).

She reframes her nontraditional upbringing a "normalish chicken childhood," stating, "we did not belong in factories or in cardboard boxes sent in what [her human] called 'the mail'; we belong outside hunting bugs, playing in the dirt, and getting warm from snuggles rather than light bulbs" (6:14-6:31). Such a reframing demonstrates that from a young chicken's perspective, perhaps what is "better" is not absolute control of factors like temperature through technology but instead an experience closer to that shared by her wild ancestors. Attachment theory lends itself beautifully to this idea. As Pimento's story reveals, a chick raised with snuggles and nighttime comforting (6:45-6:50) will grow up securely attached to humans and welcoming things like "good neck scratches" (1:44).

Luca's story is also meant to bring to the fore issues surrounding captive-held parrots that may be just outside the consciousness of the film's viewer. His introduction to the flock comes with the observation that birds can see more of the color spectrum than

humans can (14:03-14:15), which subliminally raises questions like, “How do I look to a parrot?” and “How does my ‘pet’ see the human-built environment I’ve provided?” In short, it is an invitation to the viewer to imagine seeing ultraviolet though a bird’s eyes. In his conversation about loneliness (16:22), Luca creates a bridge to human experience via longevity, with the shared heartbreak that comes with living “long enough to lose partners whose companionship was supposed to last a lifetime” (16:24-16:31). By seeing firsthand the impact of the grief and fear that come with loss of companionship through rehoming, viewers are challenged to reassess their view of parrot purchasing versus adoption as well as what it truly means to make a lifetime commitment to these birds.

Both Luca and Pimento’s stories are meant to gently awaken the viewer to the experience of captive-held birds. One way the film achieves this is by employing cognitive dissonance and slight provocation to rouse unconscious material in the viewer, such as the moment when Pimento says, “I guess for all its bad sides, there are some good things that come with big, automated operations like the place where I was born” while a stop sign pans across the screen (10:25-10:33). When Lavender the rooster needs a new home, Pimento emphasizes that his online profile included “baby photos and a plea that it be kind—not hungry—human beans who adopt him” (12:40-12:45). This is a subtle jab at the viewer who eats chickens, implying they are not kind. It also inserts the idea of baby photos into the context of backyard poultry, which could have a dissonant effect for some, and perhaps a feeling of discomfort.

Another strategy that *A Bird Tail* employs to awaken its viewer is providing a bridge for empathic connection across species. This is one reason Pimento refers to herself as being born rather than hatched at minute 10:33. It is also part of the reason

behind Pimento's incorrect assumption that human beings are in fact *beans*, a slightly humorous strategy meant to assist the viewer in experiencing what it's like to not quite be seen accurately. In this regard, it is an entry point into what Pimento feels when she notices that humans "seem to have a hard time seeing us" birds (19:12-19:20). This brings me to the meta-concept that *A Bird Tail* conjures from the unconscious, which finds footing in the field of trans-species psychology: the realization that humans and birds experience the world in similar ways, which carries with it numerous ethical implications that the viewer may have pushed from consciousness through denial or repression.

Problematizing captivity. By illuminating numerous obstacles faced by captive-held birds, the stories depicted in *A Bird Tail* effectively problematize the practice of keeping parrots and poultry in captivity. To this point, we have explored many ways in which this practice surreptitiously upholds the status quo, including by maintaining dualism, objectification through commodification, and projection of value based on categories like domestication and gender. Luca and Pimento's stories elaborate upon this backdrop by providing tangible evidence of captivity's consequences. These include problems associated with the commercial poultry and pet parrot industries; predation from both land and sky; death, disease, injury, and disorders; ramifications of rupture to social relationships; and issues related to identity such as biculturalism, lack of agency, and subjugation through dependence.

Pimento's hatchery experience sheds light upon large-scale poultry farming in a way the film's viewer may not have previously considered—from the chick's point of view (3:52-6:05). As with so many other so-called *products*, from the consumer's

perspective chicks at feed stores and meats in grocery stores just "appear" there. Pimento awakens in the viewer the realization that there is an entire journey experienced by the bird in order to arrive at said store, one that is fraught with cold, hunger, and fear. Luckily for Pimento, she did not end up being mailed to a slaughterhouse, but the odds of this were theoretically even higher than where she landed as part of a small backyard flock. At the back of the viewer's mind might be an inkling about what might have happened to Pimento had she not been so fortunate. What the Crows tell Pimento about the overcrowding and violence that occurs in the commercial poultry industry (1:45-2:30) is, as many viewers might already know, just the tip of the iceberg. That Pimento escaped such a fate was only a matter of chance, implying that the birds who do end up on factory farms are just as charismatic and curious as Pimento, which is an overarching idea that shades several aspects of the film.

Luca tells Pimento about the shadowy sides of parrot captivity, beginning with its effect upon agency. He points out lack of freedom as an experience common to many parrots, pointing out that human fear traps some birds eternally in cages (15:48-15:57). Of course, the shadow sides of captivity are not limited to confinement. A mysterious injury broke Luca's left wing and has contributed to seizures stemming from the left hemisphere of his brain, hence his lifting the right wing and foot catatonically as described in minutes 17:58 to 18:10. It is not clear how the injury occurred, but given that Luca was born into captivity, it is probable that humans played a role, even if indirectly.

Luca articulates the psychological ramifications of a life defined by human captors by describing his fear of loneliness (16:22) due to social relational rupture. He

fears abandonment just as Pimento feared facing life without the social fabric of her flock following the dog attack (8:47-9:39). Currently in his third home (16:33), Luca is justified in his fear of rehoming. As we saw in previous discussion of contemporary parrot-keeping practices (pp. 47-53), there is a largely unnoticed homeless parrot epidemic in our society. Shelters are full to capacity, as are their waiting lists, while mainstream consumers still typically associate acquiring parrots with a trip to the pet store (22:42).

Dependence upon humans is a major theme in *A Bird Tail*, at the crux of captivity's oppressive dynamics. The members of Pimento and Luca's flock are dependent upon humans for food, drink, shelter, safety, and medicine. Failure to meet these needs results in cold, thirst, hunger (5:34-5:29), and even death in the case of predation from dogs (8:47), eagles (14:36), and diseases (10:13). Without a sense of ultimate agency and without feeling fully, authentically witnessed by human beings (19:12-19:20), both Pimento and Luca must develop strategies to bridge the species gap. Pimento refers to this as the need to become "culturally bilingual, able to communicate in both Bird and Human" (17:00-17:05). Though this is second best to being allowed the freedom to develop an intact species identity enveloped fully in one's native culture, it does allow Luca and Pimento to regain some sense of control by communicating their needs to those humans whose ears are trained to listen, as when I noticed through body language that Pimento was not feeling well (23:17-23:22).

Whether manifest or invisible, ultimately the injuries we inflict upon captive-held birds constitute a form of betrayal. Pimento mentions betrayal explicitly in the context of rehoming Lavender the rooster when she states, "I could tell my human felt like she'd

somehow betrayed him" (12:58-13:00). As fellow psychical beings, there is an unspoken social contract between birds and humans, and we are blatantly violating it. Rather than recognizing the sentience of birds, humans subject those they hold captive to immeasurable suffering in the form of abandonment, abuse, and neglect—pain that is at times written on their very bodies:

> Where an experience cannot be expressed in words or given voice through speech, the body can, up to a point, provide access to some measure of that experience… a series of scars or traces of fractures incarnate the violence, even if they do so at the price of reducing the experience to its barest expression. (Fassin & Rechtman, 2009, p. 271)

The bacteria-infested skin of a parrot who mutilates its chest down to the bone (see Figure 1), the severed comb of a rooster bred for fighting, the pained expressions in the eyes of abandoned birds both before and after death at a shelter—all speak to the traumas and injuries experienced by these beings, a testimony that does not require words to understand but the willingness to witness and to feel empathy.

A Bird Tail is meant to be a portal to that empathy and a nonjudgmental space in which to engage with such heavy and value-laden themes as betrayal. Whether we are willing to face it consciously or not, as a society we humans have betrayed our avian counterparts by holding birds captive, defining and confining every facet of their lives and then executing these sentient beings for no crime other than existing. Arguably those who are killed outright are more fortunate than those left to linger and languish, whether as chickens on factory farms or parrots locked in cold garages. The injury of ultimate

betrayal—killing—is swift at least, which is more than can be said for birds who are abused and neglected for years on end.

The injury to these individuals is not just to the body but also to the psyche, resulting in symptoms of depression, anxiety, and post-traumatic stress disorder (Bradshaw, 2009):

> If PTSD must be understood as a pathological symptom, then it is not so much a symptom of the unconscious, as it is a symptom of history. The traumatized, we might say, carry an impossible history within them, or they become themselves the symptom of a history that they cannot entirely possess. (Caruth, 1995, p. 5)

Birds, like humans, carry a shared evolutionary history, one built upon reciprocal partnerships across countless generations. Thus, when we betray this partnership we injure not only the individual but also the legacies of all the individuals who came before. It is a legacy that has resulted in the merging of psyche across species. As such, a betrayal of the human-avian relationship is a betrayal not only of birds, but of ourselves as empathic human beings.

Seeing through avian eyes. Telling Pimento's story in her own words invites viewers of *A Bird Tail* to see through avian eyes. This in turn allows the viewer to see through human projection to a more authentic and holistic understanding of captive-held birds. Some might criticize the decision to speak as Pimento, equating it to a form of anthropomorphism—an amplification of projection!—yet such an assertion breaks down in light of the co-created nature of relational psyche. Hillman (1975) asserts that the very concept of anthropomorphism is problematic given that it "confines the idea of subjectivity to human persons," an extension of Cartesian dualism (p. 1). Furthermore,

this restrictive perspective "has led us to believe that entities, other than human beings, taking on interior subjective qualities are merely 'anthropomorphized' or 'personified' objects, not really persons in the accepted meaning of that word" (Hillman, 1975, p. 1). It turns out, it's not projection in-and-of-itself that's problematic. Personification and projection of self onto other and other onto self can, under certain circumstances, hold the potential to act as a type of relational glue. It is the relational space of mirror neurons (Iacoboni, 2009). This opens the door to empathic connection that dissolves the boundary between self and other.

Of critical importance is one's approach to any relationship and the implicit value structure underneath, whether one engages from a place of anthropocentrism or of biocentrism. Within the biocentric paradigm, the concept of the self "includes not only growth in human relationships with family and community, but a broadening of the self through identification with all beings, even with the biosphere as a whole" (Roszak, Gomes, & Kanner, 1995, p. 163). In this view, the self is also the other, and as such, any work on behalf of nonhuman animals is simultaneously work on behalf of humanity. Nature and humankind are connected, after all, each reciprocally influencing the other.

The goal of the following paragraphs is to see through those anthropocentric assumptions and projections that promulgate avian oppression by reexamining said views from the perspective of Pimento and Luca, captive-held birds. My concept of seeing through is greatly informed by the work of James Hillman (1975), who also refers to it as "psychologizing" in his book, *Re-Visioning Psychology*:

> The psyche wants to find itself by seeing through; even more, it loves to be enlightened by *seeing through itself*, as if the very act of seeing-through clarified

> and made the soul transparent—as if psychologizing with ideas were itself an archetypal therapy, enlightening, illuminating. The soul seems to suffer when its inward eye is occluded, a victim of overwhelming events. This suggests that all ways of enlightening soul—mystical and meditative, Socratic and dialectic, Oriental and disciplined, psychotherapeutic, and even the Cartesian longing for clear and distinct ideas—arise from the psyche's need for vision. (p. 123)

Implicit assumptions like the notion that chickens are unintelligent *bird brains* or that parrots are vacuous mimes occludes our ability to perceive them accurately, let alone to experience within ourselves the transformative power of trans-species relationship.

The film *A Bird Tail* interweaves two dueling projections that can, at times, be simultaneously applied to the same individual—that of *pet* versus *product*. The projection of *product*, as we have seen, entails objectification, commodification, and the Cartesian concept of matter devoid of spirit. This is most readily apparent in the commercial poultry industry, which counts chickens not by the number of heads but by the weight of meat in pounds. In the commercial parrot industry, the *product* projection is also rampant, with large-scale hatcheries feeding a constant supply of young, barely-weaned baby parrots to big box retail stores (22:42). It is an uncanny parallel to the commodification of young chickens, also entailing shipments using cardboard boxes sent in the mail (6:14-6:31). The *product* projection is subtle yet potent, a collective construct passed via cultural transmission. It is so omnipresent that in many ways it's invisible. For example, the idea that animals are objects of possession—that as products they are property—is codified into our laws. It is a given.

Projections onto pets are in many ways more complicated, perhaps as a result of their archetypal underpinnings. This is unsurprising given that Hillman (1975) noted that archetypes "tend to be metaphors rather than things" and furthermore, that all "ways of speaking of archetypes are translations from one metaphor to another" (p. xix). The primary archetypal projection we impose upon pets is that of the child. Pet chickens who live indoors are often outfitted with diapers (Holley, 2018); parrot keepers sometimes refer to their birds as *fids* (Fids, 2011)—feathered kids—and to themselves as *parronts* (Parront, 2017). I am not immune to the power of the child archetypal projection. When talking to the birds in my flock, it is easy to get stuck in a culturally informed mode of infantilization wherein my voice increases in pitch and my mind easily finds adjectives like *cute* and *naughty*.

Holding an emotional charge, archetypes have a "possessive effect, [a] bedazzlement of consciousness so that it becomes blind to its own stance" (Hillman, 1975, p. xix). For instance, it was predetermined by her captors (i.e. me) that Pimento would be denied motherhood, though I did not realize consciously at the time that this essentially represents a thwarting of individuation and of genetic legacy. With Robin as the sole male in the flock (12:02-12:09), the potential threat of issues like incest and rival roosters precluded her from the experience of raising progeny, had she wanted it. Hence, she was stuck in the form of a maiden never to become mother, let alone wise old crone (Conway, 1994).

The projection of domestication feeds into the child archetype by insinuating that through the process of selective breeding, psychological growth is somehow stunted,

neotenized. Temple Grandin (Grandin & Johnson, 2005) describes this in terms of the domestication of dogs:

> Humans have *neotenized* dogs: without realizing it, humans have bred dogs to stay immature for their entire lives. In the wild, baby wolves have floppy ears and blunt noses, and the grown-ups have upright ears and long noses. Adult dogs look more like wolf puppies than like wolf adults and act more like wolf puppies than wolf adults, too. That's because dogs *are* wolf puppies; *genetically, dogs are juvenile wolves*. (Grandin & Johnson, 2005, p. 86)

The desire to keep pets in a perpetual juvenile state is in essence the desire to derail their path toward individuation. Most pets are denied sexuality, for example, unless the incentives are such that the *product* projection gains preeminence. As their self-described owners and parronts, we don't want pets to challenge our absolute authority. Essentially, we're asking the animals we hold captive to never psychologically grow up.

Imposition of the better/worse binary further complicates projections based upon perceived wildness versus domestication. As we have seen, in U.S. culture so-called domesticated species are regarded as less valuable than wild ones (Shelton, 2004b), hence the minimal cost of a pullet compared to the exorbitant cost of a parrot. There is a saying, *familiarity breeds contempt*. So-called wild or exotic species have a certain mystique (21:18), they are alluring and even in some cases considered spiritual, as with owls, eagles, ravens, and parrots (Becker, 2000). There is a reason it is taboo to eat parrot eggs (16:06)—it is a reflection of our values as a society. Domesticated species like chickens, on the other hand, are seen as comparatively mundane. Their eggs, like their bodies, are ours, products to be bought and sold. We assign the qualifier *farm*

animals to them, conjuring in the imagination a sterile, bucolic scene. This lesser-than assumption is what allows billions of chickens to be slaughtered annually without second thought, while our symbolic attachment to the wild Bald Eagle (14:36; Becker, 2000, p. 91) forbids shooting even one despite a plentiful population and potential threat to small livestock or wayward pets.

As with the child, the trickster archetype plays a major role in mediating humanity's perception of birds. Tricksters contradict and defy rules and conventions, employing strategies that are cunning, foolish, or both. As Jung explains:

> A curious combination of typical trickster motifs can be found in the alchemical figure of Mercurius; for instance, his fondness for sly jokes and malicious pranks, his powers as a shape-shifter, his dual nature, half animal, half divine, his exposure to all kinds of tortures, and—last but not least—his approximation to the figure of a saviour. (1954/1968b, p. 255)

Parrots are often seen as clown-like trickster figures, capable of telling riddles (Linden, 2010; Two Doors, 2018). Poultry can also be thought of as tricksters, perpetually tickling our curiosity in regard to *why the chicken crossed the road*. In folklore, trickster figures are like catalysts, turning the status quo on its head while remaining for the most part, unscathed.

In *A Bird Tail*, several tricksters appear, beginning with the Crows who spin tall tales about the horrors found on factory farms (1:50). Pimento herself is a trickster of sorts, always questioning the status quo regarding captive-held birds. Her transformation into a tree at the end of the film (26:35) demonstrates her shapeshifting ability, a common trickster talent. The ancient gods of the Greeks and Romans would often shapeshift in

order to deceive humans, as was the case when Leda was seduced by Zeus when he took the form of a swan (Becker, 2000, p. 289; Fulgentius, trans. 1971, p. 78). Trickster gods would also use shapeshifting to punish or protect mortals, often employing therianthropy or the metamorphoses of humans into other animals.

The Crow, Cornix, provides one such example. A princess born the daughter of Coróneus, Cornix was transformed into a Crow by the goddess Minerva to protect her from the unwanted advances of Neptune. She recounts the ordeal in *Metamorphoses*:

> My beauty proved my undoing. Once I was gently strolling as usual across the sand on the shore, when Neptune the sea god saw me and instantly glowed with a burning passion. So after he'd wasted time in useless entreaties and flattering speeches, he started to chase me with violent intent. I fled and abandoned the firm seashore but shortly collapsed in the softer sand. Then I called upon gods and men to support me. My cries never reached any mortal ears; but a virgin goddess was moved by a virgin's prayers to come to my aid. When I raised my arms to the heavens, they started to blacken and sprout light feathers. I next attempted to cast my mantle away from my shoulders, but even that was already plumage, rooted deep in the folds of my skin. I tried to rain blows on my naked breast with my sturdy hands, but my sturdy hands were no more and my breast was no longer naked. I started to run. This time my feet were not clogged in the sand and I rose from the surface of earth and soon was soaring in air. (Book 2: 573-589 as cited in Ovid, trans. 2004, pp. 75-76)

Being a Crow myself—a Burton-Crow to be exact—I can relate to Cornix's tale. Through this project, I have also experienced therianthropic transformation, at least in the metaphorical sense.

In *A Bird Tail*, I embody the trickster archetype by shapeshifting into Pimento's form. Her voice is mine and mine is hers. Additionally, I invite the audience to join me in seeing through avian eyes, imparting the skills needed to shapeshift such as the ability to speak Chicken (7:21-7:45). The film in an invitation to shed old ways of being, replacing fluff with feathers (7:55-7:57) if not physically as with Cornix, then at least in the realm of psyche. Thus in the end, the ultimate trickster in *A Bird Tail* is its viewer, who walks away transformed, able to see through bird eyes perhaps for the very first time. It is my hope that viewers will carry this ability forward and having experienced life as a bird—albeit ephemerally—will never see avian beings quite the same way again.

To see through implicit and unconscious cultural projections requires decolonizing one's mind, a profoundly difficult challenge. Seeing through in this way reveals that objectively, there is no difference between wild or domesticated species, pets or products, chickens or parrots—as beings of psyche and of agency, a bird is a bird is a human. This is reinforced by the observation that the valuing of certain species over others wasn't always the case, that the poles of better/worse have inverted across time and cultures. Recall that ancient Greeks and Romans would only perform animal sacrifices using domesticated species because they considered wild animals to be valueless (Shelton, 2009, p. 107). There is also evidence that chickens were first domesticated in order to be used for sacred ceremonial purposes rather than for food (Gorman, 2016). The fluctuating nature of the avian-human relationship hints to its

dependence upon culturally constructed context, much of which remains relegated to the unconscious.

Encouraging *conscientização.* Paulo Freire's (1970/1997) concept of *conscientização* calls for a fundamental awakening—illuminating contents of the collective unconscious (Jung, 1954/1968a, pp. 3-41; 1954/1969, pp. 167-199) by developing a critical awareness of the invisible cultural narratives that uphold oppressive social dynamics. These implicit constructs inform our projections of binary and archetype and serve to maintain the status quo in regard to birds in captivity. They invade psyche in ways both inconspicuous and overt, held in place by what James C. Scott (1990) refers to as public and hidden transcripts. Public transcripts are "the open interaction between subordinates and those who dominate" (p. 2), whereas hidden transcripts "characterize discourse that takes place 'offstage,' beyond direct observation by powerholders" (p. 4). Perpetually shaped by the flux of power struggle, there is often a disparity between the two, though it is possible for hidden transcripts to reinforce public discourse.

The pet parrot industry provides a ready example, dominated by those who profit from parrot commodification, including individual breeders, large retail stores and their suppliers, and ancillary enterprises such as parrot food, accessories, and veterinary care. The public transcript shared among these entities is designed to keep dark the nagging unconscious, projecting pet parrots as desirable additions to any family while minimizing symptomology indicating otherwise. The transcript goes something like this: "Parrots are irresistibly colorful, both inside and out. There are so many kinds in every shape, size, and personality—there is a perfect bird match just for you. Super fun companions and

entertainers, parrots are more convenient ‘pets’ than cats and dogs, requiring very little space in your home, just a few hours of interaction each day (depending on species of course) and a simple food mix in order to thrive for decades. Sure, parrots can be noisy and they can sometimes bite. These are behavioral problems you can modify with proper training from ‘experts’ or by buying product x, y, and z.”

If the above narrative resonates, I have met my mark. Suffice to say that beneath the veneer of this public transcript, an entire ecosystem of hidden, contradictory conversations are simultaneously taking place. A quick online search reveals an abundance of parrot help groups and forums in which countless parrot owners exasperatedly recount unsuccessful attempts to prevent self-mutilation via plucking and excessive biting, screaming, and territorialism. Therein lies the hidden transcript: “I wish my bird was more like the ones I see on YouTube. I have tried everything but mine still won’t do what I want. This whole parrot-keeping business is a lot harder than I thought it would be, and a lot less fun. My parrot is loud and messy and I feel guilty because I’m beginning to realize I don’t have enough time for this bird. I really don’t want to, but if things don’t improve I will have to rehome it.”

The reigning hegemony is threatened by such discourse, mitigating what it can (while extracting additional profit) by encouraging changes to the bird’s diet, calming supplements, training DVDs, and workshops with “experts”—anything to avoid mass *conscientização*. To become critical of the entire system is to begin to subvert it, to see through to what the collective unconscious already implicitly knows: I am you and you are me, therefore the Golden Rule applies. I would not want to be kept in a cage, therefore it is fundamentally unethical for me to keep others in cages.

From this viewpoint, it becomes clear that neither the public nor the hidden transcript tell the whole story (Scott, 1990); the biting, screaming, and plucking are not problems in themselves, but rather are symptoms of this greater truth: Parrots should not be kept as pets in the first place. In their native equatorial habitats, parrots play an important role in the ecosystem, chewing up compost, spreading seeds, and keeping in touch with a vast network of flockmates through ear-ringing contact calls (Cameron, 2012). Needless to say, these skills do not translate well to a city apartment. There is no way we can adequately replicate how their lives were meant to be in the wild, and even if we could, they are not ours to own in the first place.

In *A Bird Tail*, the stories of Pimento and Luca encourage *conscientização* by bringing unconscious material to the fore, demonstrating firsthand the consequences of captivity. It is a narrative that those with a vested interest in maintaining the status quo do not want you to see, preferring that we assign flavors to chickens rather than names (6:32) and see the prosody of parrots (13:50-13:55) as mindless mimicry rather than true trans-species communication. As "consumers" of poultry and parrots, there is incentive to maintain this illusion as well, to avoid looking too long in the mirror lest we perceive our own complicity. The ego contorts and hardens to protect itself from the profound pain that comes with bursting such a bubble (Jung, 1951/1968, pp. 3-7). Every defense mechanism in the psyche's arsenal is deployed. Self-preservation of this sort is understandable, dare I say even forgivable, for who "in their right mind" (15:33) would want to identify themselves as oppressor, captor, imprisoner, slave owner? Yet objectively, that is indeed our role in regard to avian captivity, and it holds tangible

ramifications for the birds we keep. We control every aspect of their lives up until the point at which we exercise unilateral authority to end it.

Given the painful task of *conscientização,* it was important for me to ensure that the film's approach was as gentle and nonjudgmental as possible while still provoking feelings and thoughts meant to expand the edges of the viewer's awareness. I am guided by a love for *all* animals, including humans, realizing that antipathy toward my own kind is just another form of speciesism. After all, it was Freire (1970/1997) who noted that no oppressor is truly free, that the greatest task of the oppressed is

> to liberate themselves and their oppressors as well. The oppressors, who oppress, exploit, and rape by virtue of their power, cannot find in this power the strength to liberate themselves. Only power that springs from the weakness of the oppressed will be sufficiently strong to free both. (p. 26)

This is the power in telling Pimento's story in her own voice, communicating in a way that does not minimize her experience yet still maintains an open posture that is inviting and accessible to the viewer. A form of individuation, *conscientização* is an uncomfortable process, to say the least. The ancient and universal language of imagination holds the potential to ease the agony of such growth.

Long before scholars within the field of psychology began to delve into the imaginal realm, before Freud's fascination with dreams and Jung's introduction to the spirit guide Philemon, the peoples of ancient cultures were well versed in the ways of active imagination (Jung, 1954/1969, p. 211), a way of perceiving that is critical to the Shamanistic worldview (Sander & Wong, 1997). Shamanism first developed within tribal societies as a "technique of ecstasy in which the Shaman's soul, or spirit, leaves his

[or her] body during the trance-state to undertake a mystical journey into the spirit realm" (Glass-Coffin, 1998, p. 211). This journey can be initiated for a number of reasons, prime among which is the restoration of balance between humanity and the sacred. Active imagination can be used similarly to restore a sense of sacredness to psychological research, to recover balance between outward empiricism and inward subjectivity. For the imaginal realm is like a salve that can be used to tend the wounds left by Cartesian dualism, to bridge opposing forces by way of *coniunctio*.

There is a distinct difference between the imaginary and the imaginal, with the former referring primarily to something that is false or unreal, a figment of one's imagination. The imaginal or *mundus imaginalis*, by contrast, denotes "a very precise order of reality, which corresponds to a precise mode of perception" (Corbin, 1972, p. 1). The researcher who perceives this order of reality through active imagination is able to effectively bridge the Cartesian delineation between inner and outer, body and mind/spirit/psyche. His or her work is enriched by this "third, middle position which earlier in our tradition, and in others too, was the place of soul: a world of imagination, passion, fantasy, reflection, that is neither physical and material on the one hand, nor spiritual and abstract on the other, yet bound to them both" (Hillman, 1989, p. 121). Thus, an imaginal approach to research dialogues simultaneously with inner and outer ways of knowing, dancing in the interplay between them, and ultimately restoring a sense of sacredness to the topic of research.

My research on birds in captivity is just one facet of the greater relationship between humanity and the more-than-human world (Abram, 1996). Just as an imaginal approach can provide a bridge between corporal and ethereal realms, it is my hope that

this trans-species investigation will serve to mend the divide between human and avian psyche. As *A Bird Tail* reveals, the imaginal realm is not only real, it is very much alive and (inter)active, communicating primarily though the language of image:

> When an image is realized—fully imagined as a living being other than myself—then it becomes a *psychopompos*, a guide with a soul having its own inherent limitation and necessity. It is this image and no other, so that the conceptual questions of moral pluralism and relativism fade in front of the actual engagement with the image. The supposed creative pandemonium of the teeming imagination is limited to its phenomenal appearance in a particular image, that specific one which has come to me pregnant with significance and intention, a necessary angel as it appears here and now and which teaches the hand to represent it, the ear to hear, and the heart how to respond. There is thus revealed through this engagement a *morality of the image*. (Hillman, 1989, p. 56)

Similar to what Marie-Louise von Franz describes as an "ethical confrontation" with the image (1980b, p. 91), witnessing the lives of captive-held birds like Luca and Pimento and allowing their images to permeate psyche carries with it moral implications that are at the heart of *conscientização* as described by Freire (1970/1997).

Active imagination is a way of soul-making (Hillman, 1975) through image, of participating in an imaginal realm that is simultaneously comprised of matter *and* spirit. Individuals with an ear attuned to the rhythms of this imaginal realm in effect have opened themselves to this soulful way of knowing, a sum of understanding greater than the parts offered by materialism and spiritualism alone. It is through engagement at the level of soul that an area of inquiry becomes imbued with a sense of sacredness, its

connection with the nonhuman world both revealed and simultaneously restored. And perhaps ultimately this is the greatest gift that active imagination can offer to a project such as this: a sense of wholeness through connection with something greater than oneself, a cosmic energy granting us permission to dance among the pines (26:51).

Discussion of Methodology

The heuristic methodology as articulated by Moustakas (1990; 2001) lent itself beautifully to this project, given that the focus of the "heuristic quest is on recreation of the lived experience, that is, full and complete depictions of the experience from the frame of reference of the experiencing person" (Moustakas, 2001, p. 264). What emerged over time was a dynamic relationship between myself and the film. Perhaps I should not be surprised, given that filmmaking is essentially a form of soul-making:

> The soul is ceaselessly talking about itself in ever-recurring motifs in ever-new variations, like music, [it] is immeasurably deep and can only be illuminated by insights, flashes in a vast cavern of incomprehension… in the realm of soul the ego is a paltry thing. (Hillman, 1975, p. xxii)

As we spent countless hours in creative negotiation, the film proved to have a life of its own and, speaking through narrative development and technological glitch, insisted that I approach with an open posture: negotiating, compromising, conversing, curious.

Joseph Coppin and Elizabeth Nelson (2005) describe the ability to maintain such openness as a distinct posture, noting that if "seeking knowledge is the *yang* of inquiry, being receptive to knowledge is the *yin*" (p. 13). Within the six phases of heuristic research (see Figure 5), the participatory nature of this project made itself most clearly known during the phases of incubation and creative synthesis. Incubation itself

implicates the need for receptivity, surrendering one's "need to seek and pursue, to put one's self forward, or to champion one's own ideas. Instead, researchers make room for another, trusting that the silence immediately following the stillness of their own voice is full rather than empty" (Coppin & Nelson, 2005, p. 14). The receptive posture of incubation opened my senses to what the project was asking of me as opposed to the other way around. The film's voice gathered strength as it was personified (Hillman, 1975) during creative synthesis in the form of recorded voiceovers, a reflection of my own voice though slightly distorted by digitization and coaxial cables.

My initial approach to the structure of the film drew upon what I have seen already, documentaries about nature or social justice issues. These films often follow a predictable formula, particularly when portraying and/or problematizing issues between humans and other animal species: introduce an individual or individuals of the "other" species; have a human narrator who takes the role of teacher; interweave footage of the avian-human issue with human interviewees who are "experts"; and then navigate between voices, the floating heads of the experts, the thematic strand carried by the invisible narrator, and the sounds and images of the "other" species. At the outset, I knew I wanted to follow two story arcs, one for poultry and one for parrots, and had in mind a hero's journey in the mode of Joseph Campbell (1968), as described earlier in this section (pp. 161-170).

Initially I wanted this to take the form of an origin story of sorts—an exploration of where Pimento came from, maybe even taking a trip to the hatchery, and an excursion to find Luca's first owner in order to uncover how he broke his left wing. This is where the film made its desired trajectory first known. After finally tracking down his name,

attempts to contact Luca's initial owner did not go as smoothly as planned. Though initial conversations were had, multiple requests for a longer meeting went unanswered. The broken wing would remain a mystery, as it is to this day. Pimento's story arc also shifted quite dramatically when she passed away this past April. This meant her origin story had suddenly become her life *and* death story. It was clear the film had its own trajectory in mind, so I listened.

While I continued to hold out some hope that I might hear back about Luca, I decided to work on the first half of the script about Pimento. It was also a form of catharsis, as losing her was quite devastating. Still is. I set about recording the voiceovers for my narrator-as-teacher and got interview materials ready for Pimento's veterinarian, whom I had planned to use as one of my expert floating heads. I got my old Macbook dusted off and fired up and got some film clips transferred over. I played around with the first few minutes of the film using the music friends had generously lent me coupled with images of Pimento and my newly recorded voiceovers. It was exciting watching this long-envisioned abstraction finally becoming a living, breathing thing. Yet something did not feel right, it felt stale. I felt as if the formula had been used too often and its potency had been diluted. Craving something fresher, I went back into incubation (see Figure 5).

As so many other *aha* moments spring forth, the answer arrived as I was waking from a dream. I needed to go back to a lesson I'd already learned once before, several years ago, that I must talk *with* the animals rather than just *about* them, that their voices must be directly included in the conversation. This brought me to recollections of a tribe I learned about a long time ago through a documentary entitled, *From the Heart of the*

World: The Elder Brothers' Warning (Ereira, 1990). In the film, the Indigenous Kogi people of the Sierra Nevada de Santa Marta mountain in northern Colombia make a plea to we "younger" brothers of modern civilization that our destruction of the planet cease. They speak about the role of humans in the ecosystem not as top-down predators but as one species in a network of many, each with their own important purpose. For humankind, adept with language and empathic knowing, our role is as communicators across species, connective bridges. To the Kogi, humans are meant to serve as trans-species articulators and advocates rather than adversaries in interactions with other animals. Putting all of these pieces together, it dawned on me that I must not speak about Pimento, I must speak *as* her.

And so it was that nearly instantaneously, the project metamorphosed from biography to performance ethnography wherein Pimento's personal narrative was placed within cultural and social contexts, working "to hold self and culture together, albeit not in equilibrium or stasis [but] in a state of flux and movement—between story and context, writer and reader, crisis and denouement" (Denzin & Lincoln, 2008, p. 207). In essence, performance ethnography is

> a theatre freed from the chains of literature, constituted as an autonomous art form; a theatre which did not imitate a reality which actually existed, but which created its own reality; a theatre which nullified the radical split between stage and spectator and which developed new forms of communication between them. (Denzin & Lincoln, 2003, p. 113)

The performance aspect signifies action, which in turn carries socio-political implications in the spirit of Augusto Boal's Theatre of the Oppressed (1995), an artistic approach to

social justice praxis developed in Latin America and based on the ideas of Paulo Freire (1970/1997).

In regard to the filmmaking process, logistically the shift from speaking about Pimento to speaking in her voice entailed a complete rewrite of the script and dumping all the voiceover work I had spent hours recording. But the film was instantly happier and the reward was creativity that flowed almost effortlessly. I was tasked with re-seeing all the situations I'd already written about from Pimento's point of view. I strained to think back to what I thought I knew before learning more about being human, such as how as a little girl I used to think we were called human *beans*, which somehow made sense to me seeing as peas grew in bean pods. Once I shifted to Pimento's perspective, the project was immediately more challenging and more fun. It also no longer felt stale.

Next, I considered Luca's situation. I asked my husband if he would speak as Luca for the voiceovers, and he reluctantly agreed. I started on his script, but something felt hokey, and I began to feel self-conscious. Images of a bad puppet show crept over me, repulsion at the formula: "Hi, my name is so-and-so," then "Hello, I'm such-and-such." It felt as dissatisfying as the stale, talking head documentary recipe. I couldn't have two voices narrating, I needed just one—one that was clear. Then it dawned on me that Pimento could relay her conversations with Luca, she could speak to him just as to the audience, which opened the door to weaving the stories together in a much less clumsy fashion. Suddenly she could compare the plight of captive poultry and parrots by seeing parrots as a chicken. From that point, things really started to click, and what better way to honor the life of Pimento than to immortalize her story on film so that she can continue touching hearts and minds?

This is how the narrative took shape over time and how the final script came into being. It was most definitely not a linear process, rather reflective of the cyclical nature of heuristic inquiry. In the journey to find my voice, I found an amplifier in Pimento's, one that was more inviting than some heady documentary. To the contrary, I found hers—like the common language of active imagination (Jung, 1954/1969, p. 211)—could dissolve barriers. Pimento has no political leanings, and her message holds true for birds and humans of all ages. The language she uses is sometimes provocative (i.e. "people only seem interested in me from the neck down" around minute 20:25 and "maybe there are some good things that come with industrial-scale operations" like vaccines at minute 10:20), yet as a chicken, she exhibits the naiveté that often accompanies true curiosity. She is nonjudgmental, just figuring things out, which in turn invites humans along for the ride. Many of us, for instance, can relate to feeling objectified or to feeling conflicted about those modern conveniences that come with heavy social cost. In short, speaking as Pimento allowed me to be more than myself and freed me from a lot of my own baggage in the process, such as guilt and insecurities surrounding my role as a pet *owner*.

Although telling the story straight from the bird's beak greatly opened up the narrative, there are other ways in which it constrained how the story could be told. For one, given that she passed away before the film's conclusion, I was limited to those images of Pimento already captured on film. I have archives of footage throughout the years and improvised some shots as I was putting the film together. I encountered several limitations, though most were overcome through imagination. I could not shoot any additional footage of Pimento, so I employed illustrations and still photos to fill in gaps. As it turned out, my film footage constrictions were not solely relegated to Pimento. I

also lost my flying drone early on in a collision with a pine tree (Oh the irony of Death by Pine!), so was limited to the aerial shots already captured up to that point, though I had more in mind. There are some things I wanted to show but never had my camera ready when they happened, like when Luca does his "bak bak bah-GOK!" chicken impression. For other events, particularly emergencies like the dog and eagle attack, I did not have my wits about me enough to film, so I had to use "dramatic re-enactments" using shadow puppets and images like feathers on the lawn. Throughout the process, I negotiated between grand vision and pragmatic reality.

Other limitations were technological in nature. For example, my Macbook is more than a decade old, so the film had to be completed in segments, then woven back together. The whole editing process felt like weaving, actually. The images were the fabric and the music and voiceovers the thread. I had this image a lot while I was working. It took about fifty hours of editing to complete the film, maybe more, going over it one second at a time and repeating some segments over and over until the timing was just right. My geriatric Macbook was not happy about the size of this project, and it often rebelled. I got the "spinney beach ball of death" on numerous occasions, and the program would crash from time to time. At one point, I had to rebuild all my film clip libraries after the computer was lobotomized by external hard drive. That cost me a couple days and a lot of panic. I also managed to find every bug in regard to slow motion and clip muting in iMovie, requiring several workarounds that I found buried in online help forums. I got lucky several times and also prayed more than I have maybe ever. It was most definitely a dialectical creative process, requiring constant negotiation.

Lo and behold, despite all the obstacles, a story was born that in the end exceeded my expectations. By allowing the narrative to lead the way I learned more than I would have otherwise—and indeed am still learning!—while forced to stretch in those sometimes-painful ways that accompany individuation. I incorporated pieces of myself and of those I love throughout the film: a photo here, music from my Pacifica cohort there, a clip timed to the number three, my dad's favorite, over there, there, and there. For instance, the olden timey photo of a girl with a chicken is my grandmother. There is a similar photo of my own kids. Other members of my flock played cameos: Hoei the Cockatiel as the "caged parrot," Gir the Sun Conure as "the sentinel," Charlene the Buff Orpington as the "decapitated hen."

Pimento's story is reflective of many of the feathered individuals I've met. Many hens die of reproductive-related ailments, and many parrots like Luca are rehomed several times before they perish. All face obstacles that prevent human beings from seeing them fully, whether preconceived notions of chickens as nuggets or parrots as Pollies wanting crackers. As such, Pimento's story serves as a microcosm reflecting the larger question of what it means to be a bird held in captivity. In the previous section, I outlined my procedures for analyzing data based on those developed by Moustakas (1990, pp. 51-52): immersion, incubation, illumination, generalization, explication, and creative synthesis. Within this frame, Pimento's story serves as an explication of those facets of captive-held bird experience that have been generalized through the extraction of themes common to captive-held birds, such as the feeling of being grounded and wishing to fly.

A fundamental theme underlying all of it—human and bird experience alike—is that of incongruence. Plugged in and logged on, postmodern humans find themselves estranged from the rest of nature and from their own inner wildness. We see ourselves as different and better than other species, throwing interspecies power dynamics off balance. Bird captivity is just one symptom of this imposition of incongruence upon others: human-engineered habitats that pale in comparison to those wild landscapes to which poultry and parrots have adapted. The theme of incongruence "open[s] up in the direction of other themes," creating a thematic fan (Freire, 1970/1997, p. 96). For instance, a fan opens in the direction of the consequences of incongruence, revealing the theme of pathology. Pathology in turn fans out into increasingly specific themes, all of which are characteristic of our present epoch. These themes include dissociation, narcissism, and materialism. Trauma is another consequence of incongruence, both at the individual and collective levels. In keeping with the forces of the unconscious counterposition described by Jung as *enantiodromia* (1921/1971, p. 426; Franz, 1980a), just as a generative theme such as incongruence opens up like a fan in the direction of others, it also implies another theme—that which represents its opposite (Freire, 1970/1997, pp. 82-84).

The nested nature of thematic fans is evocative of nested communities and ecosystems. Once again observations of lived experience reveal a world that is nonlinear, just as the energy driving this work has demonstrated time and again its cyclical nature. As I engaged with it, the heuristic dance represented by the cycle of immersion, incubation, and illumination began to remind me of Joanna Macy's "spiral of the work that reconnects" in which the stages are gratitude, honoring our pain, seeing with new

eyes, and going forth before returning to the beginning of the spiral through gratitude (Macy & Johnstone, 2012, p. 39). For me, gratitude and honoring pain were akin to the heuristic step of immersion as I witnessed untold horrors and stories of beauty and hope while digging beneath the surface of bird captivity. Incubation was like seeing with new eyes. Sitting with all I'd witnessed and experienced changed me. It forced me to look at myself and my species more critically and more compassionately. It forever altered how I see bird cages. Going forth was akin to illumination, and later, explication and creative synthesis. Through this manuscript and through the film, I have attempted to shed light upon those dark recesses that largely prefer to remain hidden.

Implications

We can judge the heart of a man by his treatment of animals.

— Immanuel Kant

The implications of these findings are not relegated to the realm of consciousness, but also extend into the depths of individual and collective unconscious processes. According to Jung, unconscious activity represents "the unfathomably dark recesses of the conscious mind" (1948/1969, p. 287). The unconscious cannot be directly observed, rather it reveals itself in processes such as dreams and symbols (Ellenberger, 1970). Jung went beyond the theories of the unconscious postulated by his mentor, Sigmund Freud, by theorizing that not only did individuals possess their own unconscious realm, this was connected to a larger, collective unconscious (1954/1968a, pp. 3-41; 1954/1969, pp. 190-199). The collective unconscious is one of Jung's most widely known ideas, and its relevance here cannot be overstated given its ability to connect the individual with the rest of humanity and with nature as a whole. This universal nature of unconsciousness

implies that it is not a phenomenon solely found within humanity, it is a quality also possessed by the nonhuman world and perhaps even a quality of the soul of our planet.

The collective unconscious expresses itself in the form of archetypes, organizing principles of the unconscious (Ellenberger, 1970; Jung, 1954/1968a, pp. 3-41). As we have seen, these archetypes include the child, the hero, the mother, and the trickster. Each represents "an *a priori* 'type,' an archetype which is inherent in the collective unconscious and thus beyond individual birth and death" (Jung, 1936/1968, p. 221). These archetypes are available to all of humanity; however, they are not equally accessed. Cultural factors determine to some extent which archetypes will be amplified within a certain society and what form those archetypes will take. In the postindustrialized world, for example, the hero archetype typically has an individualistic and autonomous quality, manifesting in romanticized ideas within the culture such as the image of the "lone cowboy." One can see that this idea is a fallacy, however, when taken within the context that no individual is completely atomized, utterly devoid of relationships within the human and nonhuman worlds. As such, the hero archetype is a reflection of the ideals of Westernized society. Conversely, the hero archetype would take on a different form within a culture that valued, for example, collectivism over individual autonomy.

As *A Bird Tail* demonstrates, not only are these archetypes themes that one can observe in humanity, they also inform the experiences of other species. For example, cuckoo birds are well-known tricksters within the animal kingdom, often laying their eggs in the nests of other birds (Palmatier, 1995, p. 105). The mother is another example of an archetype shared between humans and other animals. The phenomenon of

interspecies adoption—such as when a chicken fosters an orphaned duck—is a reflection of this archetype. This type of adoption cannot be explained strictly in terms of instinctual behavior, as instincts would require one to preserve one's own interests above others so as to ensure the ability to later reproduce. Adopting another species not only requires the expenditure of one's resources, it could also potentially result in the fostering of a future competitor for those same resources. Thus, interspecies adoption cannot be explained in terms of instincts alone, rather as a psychological phenomenon reflecting the mother archetype.

This is not to suggest that all archetypes are shared by all species, or that certain species do not have archetypes of their own that are inaccessible to humans. For instance, archetypes formed through extrasensory perceptions may be beyond the realm of human understanding. The echolocation of bats and dolphins provides such an example by revealing the possibility of archetypes based on an unfathomable alloy between sight and sound. There is also evidence that species such as elephants and giraffes can communicate over vast distances subsonically (Waldau, 2002, p. 76). Birds, as we have seen, can perceive the ultraviolet spectrum (14:08). What corresponding archetypes, then, could there be among those privy to a realm beyond human senses?

Evidence of archetypal influence can be readily seen in nonhuman animals by the close observer. When dogs sleep, for example, it appears as though they are dreaming. Their paws move, they sniff while tracking an imagined scent, and sometimes they even bark or whimper. All of this implies a dream narrative, and the dreaming implies unconscious activity. The ability of animals to dream may point to the tools we can use to measure unconscious activity within the nonhuman world. Given that "dreams are the

most common and most normal expression of the unconscious psyche, they provide the bulk of the material for its investigation" (Jung, 1948/1969, p. 287). By bridging the barriers presented by language, future trans-species research could potentially examine animal dream content for clues about the nature of the larger collective unconscious.

One implication of an interspecies collective unconscious (Jung, 1954/1969, pp. 190-199) concerns the anthropomorphism of pets and other animals. Rather than a shallow, self-centered attempt to make another species like oneself, in certain instances what we call *anthropomorphizing* could instead be recognition of shared archetypes within the collective unconscious. From this frame, emotional attunement across species could represent the opposite side of the self-absorption spectrum, denoting instead suspension of one's own internal processes in order to hone in one the processes of another species. For example, I may have a parrot who is afraid of hoses. I would be anthropomorphizing this bird if I assumed that this fear is due to, say, the fear of being sprayed by a hose because this is a fear I have. Were I attuned to the actual parrot—saw the look in his or her eyes, noticed subtle patterns in outward mannerism—I might realize that the parrot is in actuality reacting to the shape of the hose, which represents the snake-like form of a shared predatory serpentine archetype.

Like ecosystems nested within each other, the concept of a more-than-human (Abram, 1996) collective unconscious implies that individuals are simultaneously immersed in multiple scales of unconsciousness. The smallest scale represents the unconscious realm of the individual, the part of the psyche described in the theories of Freud and so many other psychoanalysts. The largest scale may represent the unconsciousness of the entire world, for if the world can be conscious—whether this

consciousness is named Sophia or Gaia or something else—then it follows that the planet can have unconsciousness as well (Sardello, 2008). An example of a planetary archetype can be seen in the symbol of the uroboros, a dragon that perpetually devours its own tail while being simultaneously created (Jung, 1936/1968, p. 191). This connection between creation and destruction can be seen throughout all of nature, from the life cycles of all the species that inhabit it to the tectonic processes that mold the very landscape.

The expansion of Jung's theory of the collective unconscious to all species and to the world itself reveals its unifying potential. As Robert Sardello observed:

> Individuality is not something one has or even something one is, an Individual. Individuality is an act—the act of inner, conscious awareness shaping, forming, and interiorizing the essence of each moment of experience, endowing experience with reverence and love, thereby individualizing what presents itself to consciousness. We could say that individuality is a concentration of the whole world at the site of every person—potentially. What exists in the outer world as spread out in space and time lives as the inner life of soul and spirit. We are called to make ourselves in the image of the world, excluding nothing, taking it all in and transforming it through love. (2008, p. 43-44)

From this inclusive viewpoint it becomes clear that we are all reflections of the vastest of collective (un)consciousnesses. By transforming the individual realm within ourselves through love, we are in effect transforming the entire world.

Indeed, this is the crux of it: What emerges in the ashes of dualism is ambiguity, paradox, multiplicity, yet this is a more accurate reflection of our nonbinary world. What we interpret as finite categories are in actuality more like poles representing the extremes

in a continuum of expression. Seeing through binaries and projections and recognizing that these are merely psycho-social constructs—compartmentalizations of the whole—allows us to also see through those categories that would limit us from the entirety of experience, eschewing psychological projection for the true essence of reality.

According to Jung (1954/1968a), seeing through to the multiplicity of reality requires facing shadowy contents of the collective unconscious directly:

> The necessary and needful reaction from the collective unconscious expresses itself in archetypally formed idea. The meeting with oneself is, at first, the meeting with one's own shadow. The shadow is a tight passage, a narrow door, whose painful constriction no one is spared who goes down to the deep well. But one must learn to know oneself in order to know who one is. For what comes after the door is, surprisingly enough, a boundless expanse full of unprecedented uncertainty, with apparently no inside and no outside, no above and no below, no here and no there, no mine and no thine, no good and no bad. It is the world of water, where all life floats in suspension; where the realm of the sympathetic system, the soul of everything living, begins; where I am indivisibly this *and* that; where I experience the other in myself and the other-than-myself experiences me. (pp. 21-22)

With this statement, Jung is directly challenging the idea of binary, further noting that "true opposites are never incommensurables; if they were they could never unite" (1954/1969, p. 207). From outside the confines of binary we can see that in regard to holding birds captive, humans are simultaneously the problem *and* solution.

For instance, I am a member of a species whose penchant for social and environmental engineering is instigating the sixth mass extinction on this planet, yet at the same time I am advocating for ways to reconnect with other species, to engage in authentic witnessing and the healing of relationships. I am devoting time and energy to making films like *A Bird Tail* and writing this manuscript just as I will rely upon cut-down trees and coal-produced electricity to propagate its message. Sitting with and holding space for the tension of opposites is difficult, as it is not what evolution has prepared our brains to do; yet doing so can allow for Jung's transcendent function (1958/1969, pp. 67-91) to take place, a third thing emerging. Though challenging, seeing through bifurcating projections is one of the most fundamental shifts needed in order to view the world through not only a trans-species, but also a trans-Psyche lens.

Now that trans-species psychology has laid the groundwork for "the interpenetration of human and animal domains in parity absent the assumption of ascendance" (Bradshaw & Watkins, 2006, p. 71), we are challenged to push these insights further for the sake of congruence in avian-human relationship. This begins with encouraging efforts to decolonize our minds from those cultural narratives and concomitant psychological projections that continue to anthropocentrize experience and undermine authentic cross-species connection. According to Jung, the opening of psyche in this way is by no means a small feat:

> Getting as deep as that, down below all history, into the regions of the blood, must be rather an overwhelming experience; for there one enters a mental or psychological sphere that is still at one with nature, and that is an utterly different thing from our consciousness. (Sabini, 2008, p. 173)

Like individuation, psychic decolonization is a messy, painful process that requires breaking free from both individual and cultural complexes (Singer & Kimbles, 2007).

Psychic decolonization is similar to the ideas of rewilding psyche (Plotkin, 2014; Snyder, 1990) and *le practique sauvage* or wild practice (Elder et al., 1998):

> What changes in human thought and practice does *le practique sauvage* imply? One change is that humans, especially dominant groups, must accept rather than deny some of the vulnerability that animals have always known, and reject the illusion that a devaluation of others (human and animal) empowers them or offers them protection from harm. Another is that humans of all varieties need to abandon drives for overarching control and choose a position of humility or marginality with respect to Earth that balances needs for safety and security with consideration for the needs of other life forms. Such consideration must be internally imposed (not imposed to oppress or gain power) and its costs must be fairly borne. Finally, *le practique sauvage* implies that people must actively engage in radically inclusive politics that consider that interests of the enormous array of animal and human beings. Neither human or animal lives can ever be fully known, but we are obliged to discern them as best we are able through the practices of interaction and exchange, and the exercise of all our powers of empathy and imagination. (p. 200)

In sum, we are tasked with "becoming animal" (Abram, 2011), engaging our senses to pierce through and dismantle stale binaries whilst dancing between micro- and macro-scale views.

After all, it is dualistic illusion that lies at the root of our dissociation from the rest of nature in the first place, parsing out greater from lesser, animal from human, natural from artificial (Jung, 1954/1969, pp. 173-178). One could argue that we cannot help it; it is an evolutionary proclivity to categorize, a decisiveness that's aided in our survival as a species by allowing humans to quickly decipher friend from foe and edible from poisonous. Yet dualistic thinking is in essence an oversimplification, originally serving to economize the computational requirements of our Pleistocene minds in a time when every moment was a matter of mere survival. Now that technological innovation and cultural progression have outpaced the evolutionary adaptation of our genomes (Shepard, 1998), we are called to shed those vestigial psycho-social constructs that prevent us from accurately perceiving the world. As a species, we are free—perhaps for the first time—to experience the world as it actually is, unencumbered by fixation on danger.

There is a saying that nature is the best teacher, so what does the natural world reveal in terms of the true mechanics underlying dualism? As *A Bird Tail* demonstrates, things that appear as opposites in nature, male and female or wild and domesticated, for example, reveal their plurality upon closer inspection, unveiling that in actuality such bifurcations merely represent poles on a continuum. Jung observed that opposites represent "extreme qualities in any state, by virtue of which that state is perceived to be real, for they form a potential" (1954/1969, p. 207). Indeed, such is the case for psyche itself, for which Jung articulated the poles of bodily instinct and ephemeral spirit:

> Psychic processes therefore behave like a scale along which consciousness "slides." At one moment it finds itself in the vicinity of instinct, and falls under its influence; at another, it slides along to the other end where spirit predominates

> and even assimilates the instinctual processes most opposed to it. These counter-positions, so fruitful of illusion, are by no means symptoms of the abnormal; on the contrary, they form the twin poles of that psychic one-sidedness which is typical of the normal man of today. (Jung, 1954/1969, p. 207)

Further, these polarities are not static points at all but rather dynamic, paradoxical, nonlinear entities. It is the area of overlap in a Venn diagram; the difference between *X* in algebra's fixed linear equation and the instantaneous rate of change indicated by derivatives in calculus.

Let us apply for a moment this freshly honed strategy of seeing through (Hillman, 1975) binary to one I find particularly problematic: the delineation between self and other (1951/1968, pp. 23-35). Nature teaches us that psyche is reciprocal, more porous and profoundly interconnected than such finite distinctions allow. In witnessing another being we embody this plurality, simultaneously transforming into observer and observed (Abram, 1996). When applied to trans-species psychology, seeing through dualism in this way reveals that a dyad is required in order to postulate the third space of relational Psyche. Yet just as science does not exist within a vacuum, neither do actors perform on an empty stage. Panning out from this pair reveals that any two interacting beings are located within a larger, permeable psychic sea.

I conceptualize this sea as comprised of nested spheres of disembodied Psyche, much as ecosystems are nested within one another. The sphere is a shape with many examples found in nature—eggs, planets, alchemical vessels—so it is not too far-fetched to visualize relational Psyche in such a way. If one ascribes to James Lovelock's Gaia hypothesis (Lovelock & Margulis, 1974), which describes the entire planet as a singular

sentient being, then the outer reaches of these spheres might even possibly encompass a psyche the size of the Earth (Hillman, 1992; 1995; Roszak et al., 1995):

> The vastness of the psyche suggested to Jung that it was not ultimately human at all. Rather, what we call 'human psyche' is our portion, our experimental segment, of a world psyche that embraces and envelops the whole of creation. Jung quotes the alchemists: 'The largest part of the soul is outside the body'. This linked Jung's thinking to Neo-Platonic philosophy and to ancient notions of the *anima mundi* or the *spiritus mundi*. (Tacey, 2009, p. 20).

The implication from this macro viewpoint is that trans-species psychology is not limited to animal species, instead representing one entry point into a larger—perhaps even universal—Psyche, the *anima mundi* or soul of the world.

Breaking free of the self-other binary and locating individuals within a larger psychical matrix reveals that bi-directional inference is itself beset by dualistic limitation. It describes what is happening directly between individuals yet does not account for what is going on all around them. I believe a frontier of trans-species psychology can be found in the idea of omni-directional inference, a statistical term borrowed from mathematics to describe the observation that inferences made between individuals are expandable in all directions. When I learn something about an individual parrot, for example, it tells me (and un-tells me) something about all parrots, birds in general, myself, my species, and the world as a whole. Inference as such is no longer bound by application solely to animals. The idea of quantum entanglement supports such a supposition, that a metaphorical change in my particles' spin will undoubtedly result in a change of spin for the particles outside of me—Isaac Newton's third law of physics demands it be so.

From this sweeping vantage point, trans-species psychology reveals its truly radical nature. By liberating Psyche from the confines of humanity and perhaps all of the animal kingdom, there are no limits to its manifestation or magnitude. Depicted in Figure 7, this is the trans-Psyche paradigm, a revolutionary departure from traditional models:

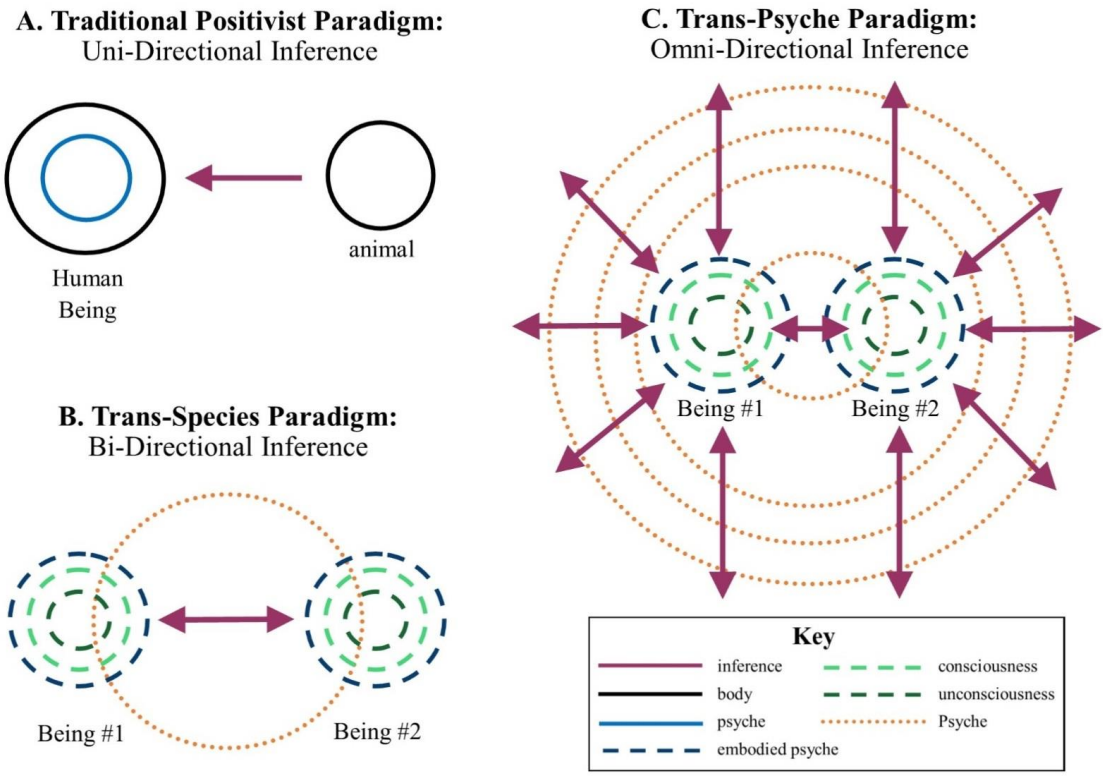

Figure 7. The role of psyche across three paradigms. Each visualized from a birds-eye view, the above diagrams reveal the concept of psyche as articulated within three philosophical stances, beginning with the empirical positivist view that has informed much of traditional scientific inquiry and arriving at the idea of nested Psyches.

My discernment as to the frontier of trans-species psychology is revealed in Figure 7C, what I am calling here the trans-Psyche paradigm. At its core is the bi-directional interaction between sentient beings articulated by trans-species theory and depicted in

Figure 7B. What's been added are nested spheres of relational Psyche and the arrows of omni-directional inference that they imply.

Like particles within an atom and atoms within a molecule, the unconscious is visualized as nested within consciousness, located within individual psyche, which interacts with relational Psychic fields of ever-growing magnitude. Truly relational Psyche, a field where all the grist and friction of relationship happens, requires a dialectic dance between beings. It is the field from which *A Bird Tail* emerged. Those ephemeral interactions that connect species at the individual level have ripple effects that dissipate into the whole—the *anima mundi*. The result is a picture in which beings are capable of interacting in osmosis-like fashion not only with each other, but with all life on Earth.

As a society, we are called to shift away from our unrelenting preoccupation with logos and restore our ability to seek wisdom in Eros, ways of knowing that cannot be understood using the brain alone. A form of individuation (Jung, 1928/1966, pp. 173-241), this can prove to be an excruciating process, requiring sloughing off old ways of being and learning to hear symptom as voice (Hillman, 1975). The term *sloughing* is used here intentionally to highlight the uncomfortable and even painful nature of this task, akin to shedding of one's former skin. It requires delving into moral ambiguity, comparing domestication to slavery for example—the captivity of animals to that of humans—and feeling its profound implications. Marie-Louise von Franz (2008) refers to the need in Westernized culture to rehabilitate the feeling function. Theodor Abt (1989) describes it as the need for a participation mystique, "a non-differentiation between subject and object that brings about a compelling relatedness between them" (p. 83). It is the difference between research and re-search:

> Research as re-search is an education, or drawing out, of the ego-mind by soul where re-search is a searching again for what has been lost, forgotten, neglected, or otherwise disregarded, a searching again that is a dis-membering of the ego's hold upon the work in order to re-member the unfinished business in the soul of the work. (Romanyshyn, 2007, p. 60)

Regardless of how it is described, it is clear that what is necessary is that we return to a way of knowing that engages not only our intellects but also our hearts.

It may seem as though we have an impossibly long way to go as a culture, yet many of us at the individual level are already there, whether we realize it fully or not. Whatever notions of dualism, separation, and ascension we pile on top of our wounded psyches, below it all remains a heart whose wisdom persists in every beat. Those insights of the heart that we seem to have either overlooked or suppressed become crystal clear when placed under the lens of trans-Psyche psychology. The heart is stirring, craving a long-lost connection to the soul in and of the world—the *anima mundi* (Jung, 1954/1969, p. 190)—soul that extends beyond the boundaries of the individual to create a psyche the size of the Earth (Hillman, 1995). Neither remote nor transcendent, the *anima mundi* is "that particular soul-spark, that seminal image, which offers itself through each thing in its visible form… the animated possibilities presented by each event as it is, its sensuous presentation as a face bespeaking its interior image" (Hillman, 1992, p. 101). Just as a heart must break before it can expand, so too are we called to break the vessels that maintain avian oppression, releasing forth "shards of the divine into every being and thing" (Watkins, 2008, p. 415).

Chapter 5

Conclusion

The small man builds cages for everyone he knows.

While the sage, who has to duck his head when the moon is low,

Keeps dropping keys all night long for the beautiful rowdy prisoners.

— Hafiz (as cited in Daulatzai, 2009, p. 207)

Whether through the wisdom of an owl's eyes, the majesty of a statuesque heron, or the cunning of a clever crow, the metaphorical potency of birds cannot be overstated. Yet for all our reverence, we humans often fall short when it comes to understanding who these creatures are at the level of psyche, seeing through symbolic projections to the beings at the heart of the matter. This dissertation seeks to gain such an understanding while deconstructing those cultural narratives that prevent us from seeing the whole of birdness in the first place. To this end, parrots and poultry are apt avian representatives given their ubiquitous association with captivity in modern culture, a shared experience that brings together these otherwise evolutionarily divergent groups under the common umbrella of commodification.

When viewed from a depth psychological perspective, birds like poultry and parrots reveal their true multiplicity: beings imbued with psyche and all the nuance and paradox such entails. Witnessing birds at this deeper level of soul reveals the transformative power of avian alchemy. Binaries like wild/domestic, body/mind, and human/nonhuman break down when immersed in this caustic alchemical soup, a potent imaginal realm where *coniunctio*, or the union of opposites, takes place. To see through our enculturated bifurcations to who birds really are is to realize that as psychological

beings, humans and birds have far more in common than we have apart. Further, it opens a dizzying array of ethical implications regarding the status quo of avian-human relationships.

In this space between science and ethics remains fertile ground for future study on the psychosocial dynamics of bird captivity. Heretofore, we have only begun to scratch the surface in regard to describing the present avian-human landscape and tracing how we arrived here in the first place. Several openings remain that beckon deeper exploration, including parallels between human and nonhuman slavery, the intersection of human and nonhuman psyche in active imagination, archetypes shared across species, and the influence of place-based knowledge upon captivity practices, to name a few. Perhaps even more imperative than understanding where we are or where we've been is articulating where we go from here—and how to get there. Mapping this largely uncharted territory requires a visionary approach, one that applies the findings of trans-Psyche psychology to the ethical frameworks of future societies. It is a frontier of limitless possibility wherein bird captivity can be re-examined, re-imagined, or removed.

As our avian journey draws to a close, we are left with one final task: employing imaginal alchemy to dissolve the barriers between theory and praxis, art and science. The hero's journey (Campbell, 1968) demonstrates that the quest for knowledge is only half the story, an inward movement that implores a compensatory, outward action. This gesture to the world need not take one form over another—not the cold, logical precision of scientific inquiry, for example, over aesthetic, feelings-based artistic expression. It can be both, simultaneously, as demonstrated in the film that was created as part of this study. At once both theoretically grounded and imaginatively driven, *A Bird Tail* amplifies

avian voices in a way that honors their complexity as psychical beings while encouraging the audience to see the world from a *bird's eye view*. It is the integration of art *and* science, idea *and* action, recognizing that each is a facet of the whole, mirrored internally as aspects of personality colliding within our bodies, alchemical vessels in their own right. Hence in the end, this project is not just a quest for knowledge, but a call for transformation: to become who birds need us to be (The Kerulos Center for Nonviolence, 2018).

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