THE BENEFITS OF LONELINESS

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PhD Thesis: The Benefits of Loneliness

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1.

Chapter One: Project Introduction

The core aim of this project is to create an authentic representation of the loneliness experience in an arrangement that communicates both spiritually and intellectually. To meet this aim I decided on the form of a fractured novel, partnered with a thesis.

The thesis approaches loneliness from a multidisciplinary perspective due to its multifaceted nature. The psychological moves into the genetic, through the evolutionary into the anecdotal and personal, in an attempt to illuminate the greatest number of sides. Loneliness is often oversimplified, represented as a negative emotion; the thesis seeks to undo this common perception. Much of it is dedicated to the beneficial aspects of loneliness, not just the detrimental and the injurious. I hope to demonstrate that loneliness, while frequently harmful, can also be a source of profound artistic expression, and that it can provide an increased awareness of natural beauty, and an appreciation for the world around us.

A working definition of loneliness can be found on pages 19-20. This definition is broken down and explored in more detail in the remainder of that chapter.

The novel, *Ootavid Mann*, aims to communicate this intention through the spiritual and the emotional. It is a companion to the project's academic half, and seeks to convey those aspects of loneliness that cannot be appreciated through rational discussion. The novel is epistolary, written as an assemblage of documents by a shepherd from northern Shetland, and presented by a fictional translator out of chronological order. Unlike most epistolary novels, the documents are, in the main, written not for an audience but for the shepherd himself. They do not seek to convey a narrative, but act as temporal windows that look upon the loneliness of the protagonist, showing how that private emotion affects his perception of Shetland and of the life into which he has been born.

Ootavid Mann exists within a multilevel framework designed to increase the thematic impact

of loneliness. The epistolary is the core. Surrounding is the influence of the fictional translator, who was responsible for taking the originals and presenting them in readable English. An introduction is the outer layer, and implies bias and inaccuracy in the translation. The unreliability of the translation means that the artefacts are seen through a filter and therefore retain a degree of privacy. A person's loneliness is personal, and cannot be fully shared through any medium - this is what the meta layers aim to maintain. This is explored in more detail in the final chapter of this thesis.

The title *Ootavid Mann* contains one of two archetypes identified in the project. Ootavid: one who embodies beneficial loneliness, who leverages loneliness to their spiritual or creative advantage, who is introspective, who finds happiness in nature and the present moment, who maintains honesty with the self and with their loneliness. The opposing archetype is 'attekast': one defined by a lack of control over their loneliness, an inability to understand the causes of loneliness and the emotion itself, and who reacts to isolation with anger and self-delusion. These archetypes, along with their literary precursors, are explored in more detail in the final chapter of this thesis.

2.

Chapter Two: Loneliness in Overview

"It is not enough to say "I am alone". These words do not touch either the positive or the negative dimensions of loneliness." (Moustakas, 1973)

"This morning I had to admit to myself that I was lonely. Try as I may, I find I can't take my loneliness casually. It is too big." (Byrd, 1938)

Loneliness is not a singular concept. Like a stately mansion, loneliness possesses a rich and complex structure with many passages and rooms that is not reducible to a simple definition. The loneliness of bereavement is different in affect to the gentle loneliness we experience when sitting alone, quietly watching sparrows flittering around a garden. And the loneliness of being ignored by friends is again many leagues removed from the spiritual loneliness we feel when we observe the enormity of space through a telescope. Loneliness can differ in quality, intensity, and in how it affects both our bodies and our minds.

In this chapter we will explore this multidimensional nature of the loneliness experience, as well as similar constructs with which it is often conflated. We will examine the concept of loneliness as social pain, as a felt deficiency in one's current social state, including its fundamentally subjective nature. We will examine the temporal aspect of loneliness, how many of the aversive physiological and psychological affects only occur once loneliness goes unaddressed for prolonged periods. And we will explore the three interlocking spheres of our social reality, and examine the subtle differences in loneliness that occur within each.

But before this we must look at the history of loneliness, to how people have thought about loneliness since ancient times. For a common belief is that loneliness is a modern ailment. And while it is true that our lives are more isolated now than ever before, that more of us live alone, and that a growing number of us lack even a single close confidant, the assumption that loneliness is purely a result of modernity is misguided and incorrect (DePaulo, 2014; Buchholz, 1997). Loneliness has been with us since time immemorial. It is a core part of human culture, and as we shall see in the next chapter of this thesis, even our genetic composition. And it shows no signs of going away anytime soon (Mijuskovic, 2012; Cacioppo, Cacioppo, & Boomsma, 2014; Cacioppo, Hawkley, et al., 2006). Yet the question of what loneliness is and where it comes from has only been examined outside the creative arts in recent times, with serious psychological research on loneliness effectively commencing in the late 1950's with the sterling work of Frieda Fromm Reichmann and D. W. Winnicott (Reichmann, 1958; Winnicott, 1958). Prior to this loneliness was most often seen as an epiphenomenon: a secondary facet of something more concrete and more innately understandable. For our ancestors one such primary phenomena was sexual desire, and this is where we shall begin.

Historical Perspectives on Loneliness: Loneliness and Sexual Desire

Plato's *Symposium* features one of the earliest stories to illustrate the connection between loneliness and sexual desire (known as *erôs* within the text). During their gathering, Aristophanes, tasked with explaining *erôs* to Plato and his peers, spins an apocryphal story of human love and separation. He begins by explaining how each human used to be a gender-complete whole, with both male and female halves unified in a single body. This completion bred harmony, but such joy also gave the hermaphroditic humans ambition. After they attempted to climb Mount Olympus and disenthrone the gods, Zeus decided to bisect each member of the human race so their focus and ambition would be curtailed by a driving desire to search out their missing half. This, Aristophanes claimed, was the origin of our species' desire for sexual unification.

Since their original nature had been cut in two, each one longed for its own other half and stayed with it. They threw their arms round each other, weaving themselves together, wanting to form a single living thing. So they died from hunger and from general inactivity, because they didn't want to do anything apart from each other ... That's how, long ago, the innate desire of human beings for each other started. It draws the two halves of our original nature back together and tries to make one out of two and to heal the wound in human nature. Each of us is a matching half of a human being, because we've been cut in half like flat-fish. (Plato, 1999. p.24)

For Aristophanes sexual desire and loneliness were two sides of the same coin. He suggested that we desire physical intimacy because we are lonely, and that we are lonely because we desire physical intimacy with an intimate lover (interestingly, Aristophanes here seems to be advocating for lifelong mutual exclusivity in relationships, a surprising departure from the erotic-education pattern practised by Pausanias and other members of the gathering with their young male pupils). From this perspective it can be argued that loneliness can be overcome through a loving, intimate relationship. This theory does have truth to it. Psychologists have found that married people tend to be less lonely than those without a satisfying, dyadic, romantic relationship (Barbour, 1993; Tornstam, 1992; Olson & Wong, 2001).

Being married protects against loneliness, a finding that has been replicated in many cultures and countries. In older age, when family members, friends, and neighbors are lost to death and geographic relocation, the marital partner becomes increasingly important in maintaining a sense of social connectedness. Nevertheless, about 1 in 6 older married men and women report moderate or intense feelings of loneliness. (Hsieh & Hawkley, 2018. p.1319)

But this isn't always the case. Marriages can fall apart, and when someone experiences such a collapse loneliness often results. Aristophanes' perspective also neglects to explain why many happily married people still feel lonely. This is because a romantic relationship, however wonderful, cannot supplant our other relationships. We also need friends, acquaintances, small groups, and a sense of being a part of something much larger than ourselves to feel wholly socially satisfied, as we shall see when we analyse the tripartite structure of our social realities. Indeed, these relationships are picked up by other members of the symposium, and are weighed against Aristophanes' tale about the source

of *erôs*, with other variants of intimate relationships proposed. Perhaps the most well known of these is platonic love: a dyadic, intimate relationship between close companions, essentially functioning as an alternative to a romantic pairing (as we shall see when we discuss the social construct of intimate relationships, most people are only capable of maintaining a connection of high intensity with one other individual).

Historical Perspectives on Loneliness: Loneliness and Punishment

Beyond sexual desire, loneliness was also considered a facet of punishment. Solitary confinement is our first example. By depriving an individual of social connections, the logic dictates, their chaotic or transgressive behaviour will lessen or disappear and they will become calm. Many schoolteachers will be familiar with this method of punishment. When a schoolchild starts playing up during class, perhaps attacking other children, yelling their head off or eating things they shouldn't, they are made to sit alone in a designated naughty corner. By being removed from schoolmates they are deprived of membership in the wider group. In such a way their behaviour is calmed and controlled.

Punishment by solitary confinement is not a modern idea. It can be seen as far back as the stories of Greek mythology (Graves, 1955). Consider the myth of Asterius, the minotaur. Asterius was the bastard offspring of Pasiphaë and a white bull, and as divine consequence was born with the head of a bullock. Despite his physical otherness Asterius' mother Pasiphaë attempted to raise him as a normal child, and while his infancy passed without event his early childhood was marred by his aggressive temper. To quell his rage King Minos had Asterius removed from society and relocated to the isolated centre of a labyrinth. In solitary confinement Asterius lost what humanity he possessed and became the monster that King Minos had supposed him to be – an outcome that is substantiated by modern reports of the lasting affects of solitary confinement in the prison system.

Isolation can be psychologically harmful to any prisoner, with the nature and severity of the impact depending on the individual, the duration, and particular conditions (e.g., access to natural light, books, or radio).

Psychological effects can include anxiety, depression, anger, cognitive disturbances, perceptual distortions, obsessive thoughts, paranoia, and psychosis. (Metzner & Fellner, 2010. p.104)

Historical Perspectives on Loneliness: Loneliness and Exile

There is another aspect of loneliness that we have historically feared beyond solitary confinement: exile. Our fear of exile can be traced back to early tribal societies, where being banished was akin to a death sentence (Cacioppo, Cacioppo & Boomsma, 2014). When a person transgressed against the tribal rules and was sent into the wilderness he soon discovered how difficult life alone could be. An exiled person had no tribe mates to watch his back. When he went out hunting or gathering, his success determined whether he would live or die. When he curled up alone at night and fell asleep he became more vulnerable than ever, and his sleep would be punctuated with nervous microawakenings as his terrified brain sought to identify approaching danger. A vestige of this can be experienced today. When we are lonely we do not sleep as well as when we feel socially connected. This is because our brains remain alert, seeking out danger, keeping watch over our fading firelight (Ohayon, 2005). They know that we are isolated, and they know that we are never as vulnerable to annihilation as when we are asleep.

But our fear of exile runs deeper than a concern for physical safety. Exile can strike at a person's identity and cause great turbulence in the heart (Said, 2001; Erikson, 1968). Dante Alighieri, the 14th century Italian poet and author of *The Divine Comedy* discovered this when he was exiled from his beloved Florence. This time spent in exile was one of great sorrow but also one of incredible creative expression for the poet (Mondschein, 2013).

Dante's exile was a result of several political missteps, the most serious being his involvement in the Guelph–Ghibelline conflict. Deciding to side with the White Guelphs rather than the Blacks, Dante found himself on the losing side and, in 1302AD, after the Black Guelphs took total control of Florence, Dante was thrown out of Florence and cast into exile (Davenport, 2005). Banished and ashamed, Dante could no longer define himself as a man of Florence without feeling fraudulent, nor could he feel the pride of belonging to his city. He had become ostracised from the group which had given his life anchorage, and from all that had given his identity foundation. During this exile Dante found himself adrift both physically and spiritually, and spent the ensuant years as a mendicant, offering his services to whichever powerful figures happened to offer sanctuary. This pain of being torn from his home clearly never left his thoughts, for exile, and the loneliness of being cast from the familiar into lands frightening and alien, remains a dominant undercurrent in his greatest work, *The Divine Comedy*, which was written during these long years of banishment, and which occupied him until his death.

But exile does not need to be geographically literal to impact one's character or perception of one's place in society. It can be felt subjectively, as a consequence of one's own perceptions. This type of exile can be found in the final work of the great Genevan philosopher, Jean-Jacques Rousseau; a man who believed himself exiled from the society which once embraced him.

Having spent the productive part of his adulthood lauded by scholars and the public for his philosophical writings and romantic fiction, Rousseau found himself suddenly castigated from those same quarters due to a philosophical section in his work, *Émile, ou De l'éducation*, which contained provocative sentiments upon the subject of religion. This sudden reversal in his social standing dealt a powerful blow to Rousseau's ego, and over the subsequent years he engaged in several behaviours which sought to restore his good name, but which to an objective observer appear both pathetic and mad. These behaviours included a bungled attempt to smuggle the manuscript of his *Dialogues* onto the high altar of Notre Dame, and several days spent out on a Parisian street disseminating a hand-scrawled circular to anyone who would accept one from his trembling hand:

To all Frenchmen who still love justice and truth. People of France! Nation that was once kind and affectionate, what has become of you? Why have you changed towards an unfortunate foreigner who is alone, at your mercy, without any support or defender... (Rousseau, 1979. p.8)

While it was true that France's religious authorities had turned against him, as well as a few former friends, the black abyss of exile in which Rousseau saw himself was largely the result of his

own corrupted perception, as well as several cognitive biases operating on a subconscious level (one such bias, the spotlight effect, in which a person overestimates the frequency that they are noticed and judged by strangers, regularly appears within his *Reveries of the Solitary Walker* as a catalyst for solitude-seeking). In truth, the vast majority of those who had lauded him and praised his works had continued to do so, and were often taken-aback by Rousseau's perception of his social condition.

[Rousseau's] existence had become one of wandering and self-justification, haunted by a growing sense that he was the victim of a universal conspiracy. Much of this was the work of his frenzied imagination; at a time when he saw himself as cast out from human society, he was in fact loved, admired and revered by many of his contemporaries. (France, 1979. p.7)

We shall come to better understand Rousseau's behavioural responses when we discuss the impact that loneliness - especially its chronic kind - can have on an individual. But now let us turn to contemporary views on loneliness, starting with the most common hurdle to a full understanding of the loneliness experience: its relationship with depression.

Contemporary Misunderstandings of Loneliness: Loneliness and Depression

In contemporary research loneliness has often been miscategorised as a facet of depression (Weeks, Peplau, Michela & Bragg, 1980). This misinterpretation, far more than those discussed above, has caused the greatest block to an accurate understanding of the loneliness phenomenon, and continues to cause difficulties for researchers today, as the psychologist David Weeks confirms below.

Correlation between variables that purport to measure distinct constructs is a common occurrence in personality research and all of psychology. Such correlation must in general be considered part and parcel of the phenomena under consideration, rather than a by-product of some defect in design or instrumentation. The constructs that populate a given domain often overlap (leading to correlated measures of these constructs) due to the variety of causal relations among them. Loneliness is an important area for research

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that has been seriously hindered by such problems. Although loneliness is a common and distressing problem for many Americans, relatively little empirical research on loneliness has been conducted. A barrier to research has been the problem of distinguishing loneliness from depression (Weeks, Peplau, Michela & Bragg, 1980. p.1238)

The cause of this confusion isn't mysterious: those experiencing loneliness often show similar symptoms to people experiencing depression. For example, both lonely and depressed individuals commonly report lethargy. Both find talking to others aversive. Both tend to be awkward or distant in social situations. Both express despair for the future. And both tend to feel miserable the majority of the time. These overlaps, and others, are discussed in detail in the paper quoted above. But what is important is that the similarities between loneliness and depression are skin-deep. They appear to be the same to an outside observer, but to the affected individual, they are drastically different. To make this difference clear, we have to look at the motivating function of depression versus loneliness: one holds you back, and the other pushes you forward.

Depression is a negative force (Weiss, 1973). People suffering from depression often report a great feeling of weight, both upon their body and their thoughts. They claim that life seems to lack colour, that what once gave them pleasure now fails to do so. Apathy and forlornness set in as traits that fundamentally alter their personality. Depressed people often state that they feel they shall never shake their depression. This sense of hopelessness serves to reinforce their depressive state, leading to a self-perpetuating spiral of negative feedback (Weeks, et al., 1980).

Unlike depression, loneliness pushes people forward. As behavioural motivation, loneliness is a driving, positive force (Weiss, 1973; Cacioppo, Hawkley & Thisted, 2010). In this way, loneliness is analogous to hunger. When we experience hunger we feel a pain within us that drives us to seek food so that this pain can be alleviated. Loneliness does the same thing, but with social pain. When we are afflicted with loneliness, our minds push us to adopt behaviours that increase the likelihood of social reintegration. Often this takes the form of a two-step dance; we retreat into solitude to reassess our damaged social tie, and then step forward to repair that frayed bond, perhaps with a heart-felt sorry or some behaviour that shows our desire to reconnect. This first step, retreat, can easily look similar to behaviours undertaken during bouts of depression. But the motivating force behind the behaviour is fundamentally opposite, as the sociologist Robert Weiss notes:

In loneliness there is a drive to rid oneself of one's distress by integrating a new relationship; in depression there is instead a surrender to it (Weiss, 1973. p.15)

Contemporary Perspectives on Loneliness: Loneliness as Existential Concern

As we have seen in previous sections, loneliness has been an emotion worthy of consideration and exploration for many historical authors and philosophers. For Aristophanes loneliness was bound to the experience of intimate relationships. For Dante, loneliness was the pain of being removed from a place of beloved familiarity, and condemned to never return. But how have more recent authors felt about loneliness? How have they incorporated this emotion into their works and stories? For many authors, especially those writing after the wars of the early 20th century, loneliness was emblematic of existential pain - it was the emotion of recognising that one is alone in the universe, separated from other living beings by several material layers; what the author James Howard referred to as 'the flesh-coloured cage' (Howard, 1975). One of the first authors to explore this concept in great detail was Thomas Wolfe: a writer from North America whose colossal manuscripts earned him infamy as an undisciplined and unpredictable genius.

The whole conviction of my life now rests upon the belief that loneliness, far from being a rare and curious phenomenon, peculiar to myself and a few other solitary men, is the central and inevitable fact of human existence. (Wolfe, 1962. p.676)

Thomas Wolfe believed that loneliness was the core experience of being human; that to exist as a human was to be alone, and to suffer from an awareness of one's separation from others. Wolfe's interest in this existential element of loneliness caused it to dominate his works, and we see it as the main theme in all of his major novels. But the single novel that best illustrates Wolfe's concern with loneliness is *Look Homeward, Angel*: a sprawling 544 page epic that was the American writer's first, and most personal, long piece of fiction. *Look Homeward, Angel* is a Bildungsroman, with the protagonist, Eugene, being a thinly veiled representation of the author. And while the structure and pace of the novel is more than a little disorganised and chaotic, from preface to final page there lies a single, clear glowing thread that underpins each action: loneliness. Nowhere in the novel is this thread more vibrant than in the fourth chapter, when Eugene experiences his dawning consciousness of self as he lies as an infant in a crib:

And left alone to sleep within a shuttered room, with the thick sunlight printed in bars across the floor, unfathomable loneliness and sadness crept through him: he saw his life down the solemn vista of a forest aisle, and he knew he would always be the sad one: caged in that little round of skull, imprisoned in that beating and most recent secret heart, his life must always walk down lonely passages. Lost. He understood that men were forever strangers to one another, that no one ever comes really to know any one, that imprisoned in the dark womb of our mother, we come to life without having seen her face, that we are given to her arms a stranger, and that, caught in the insoluble prison of being, we escape it never, no matter what arms may clasp us, what mouth may kiss us, what heart may warm us. Never, never, never, never, never. (Wolfe, 1929. p.31)

For Wolfe the human experience was one of imprisonment. Each person is caged within their own body and their own awareness, and set adrift in a hostile world. This is a common theme when loneliness is explored by writers concerned with expressing the existential condition of man. There is often a sense that if we could only step beyond our epidermal envelope and embrace the inner-world of those around us, much of the fear and confusion we experience in life would be dispelled. In this respect, loneliness tends to be portrayed in the negative. It is rarely considered that the alternative to this existential separation, where one would be able to fully share the experience of life with another, to have no boundary between 'me' and 'you', to have no physical nor psychological separation from a stranger on the street, might be far worse, to the point of being maddening. This conceptualisation of loneliness appears repeatedly in literature written in the 20th century, sometimes as a core theme, such as in the self-imprisonment of Lucien Taylor in Arthur Machen's *The Hill of Dreams*, or in the musings of the introspective killer in André Malraux's *La Condition humaine*, and sometimes as just one of many interweaving elements, such as in the modernist epic of T. S. Eliot's *The Waste Land*:

I have heard the key Turn in the door once and turn once only We think of the key, each in his prison Thinking of the key, each confirms a prison. (Eliot, 1972. p.38-39)

However, I believe the best representation of this perspective on loneliness appears in *Pincher Martin*, by William Golding, the Nobel Prize-winning author of *Lord of the Flies*. His novel is wholly concerned with loneliness as imprisonment, but the way that this is represented is unlike most other works that approach this concept. Rather than explore this theme through monologues and internal soliloquy *Pincher Martin* manifests loneliness as a rock in the Atlantic, a rock upon which the novel's protagonist is physically stranded after being torpedoed from the bridge of his ship by a German U-Boat. This allows Golding to explore loneliness in a much more savage and emotional way than his contemporaries. His protagonist Christopher Martin does not engage in over-literary musings on his isolation, such as may be found in Dostoevsky's *Notes from Underground* or Hesse's *Steppenwolf*, but howls and thrashes at loneliness in a manner both uninhibited and animalistic. While this approach may lack the nuance of the philosophical, it can be argued that it is a more apt representation of how one's internal conflict with such loneliness feels.

There is no centre of sanity in madness. Nothing like this "I" sitting in here, staving off the time that must come. The last repeat of the pattern. Then the black lightning. The centre cried out. "I'm so alone! Christ! I'm so alone!" Black. A familiar feeling, a heaviness round the heart, a reservoir which any moment might flood the eyes now and for so long, strangers to weeping.

Black, like the winter evening through which the centre made its body walk a young body. The window was diversified only by a perspective of lighted lamps on the top of the street lamp-posts. The centre was thinking - I am alone; so alone! The reservoir overflowed, the lights all the way up to Carfax under Big Tom broke up, put out rainbow wings. The centre felt the gulping of its throat, sent eyesight on ahead to cling desperately to the next light and then the next - anything to fasten the attention away from the interior blackness. (Golding, 1956. p.181)

This quote, with its outbursts and disorientating prose, exemplifies the chaos and panic of the loneliness Golding struck towards in *Pincher Martin*. There is a rawness of emotion here; rather than dressing up Christopher's loneliness in ornate dialogue, the protagonist gives voice to the simple and unadorned truth of his isolation. The sea and the storm are equally raw. Each stark flare of lightning seems to burn his isolation deeper into his awareness, until he feels his consciousness as little more than a mote floating in orbit around an emptiness more terrible than the night-concealed sea. While fighting to pull his attention from this awareness Christopher undergoes a temporal uncoupling from the present, and fragments of his past intermingle with his immediate present. This is unbalancing for Christopher and for us, as readers, and as a result we are pulled closer to his loneliness.

One aspect of this moment that requires context to understand is the use of place-names. The two areas he identifies, Carfax and Big Tom, and not only meaningful places from his past, but are also names he has given to certain areas of the rock upon which he is stranded. This is an attempt to bring order to the chaos of his isolated existence, and this constitutes another theme explored within the novel - the drive towards individuation; the separation of self from other.

As we will explore later in this thesis, the push towards individuation is one of the core goals of development (Marcia, 1980; Erikson, 1968). In quick overview, individuation occurs across four main stages: awareness of body, awareness of consciousness, awareness of other consciousnesses, and production of identity. Golding mirrors these stages in the days and weeks of Christopher's isolation upon the rock. In the opening chapters, the protagonist struggles to fashion self out of the Atlantic's surrounding abyss. Water holds him, sloshes into him and out of him; his thoughts of movement are performed not by his body, but by the waves, and thus the desire to be differentiated from the sea is a near impossibility. Only once his flesh strikes solid rock does he begin to gain (or re-gain) any sense of physical differentiation from the cradling sea - the integrative process of self-definition begins anew from the disintegrative influence of the ocean, and his first few moments seem to mirror those of a newborn:

> Then he was there, suddenly, enduring pain but in deep communion with the solidity that held up his body. He remembered how eyes should be used and brought the two lines of sight together so that the patterns fused and made a distance. The pebbles were close to his face, pressing against his cheek and jaw. They were white quartz, dulled and rounded, a miscellany of potato-shapes. Their whiteness was qualified by yellow stains and flecks of darker material. There was a whiter thing beyond them. He examined it without curiosity, noting the bleached wrinkles, the blue roots of nails, the corrugations at the finger-tips. He did not move his head but followed the line of the hand back to an oilskin sleeve, the beginnings of a shoulder. His eyes returned to the pebbles and watched them idly as if they were about to perform some operation for which he was waiting without much interest. The hand did not move. (Golding, 1956. p.25)

This process continues throughout the *Pincher Martin*. Each new step towards individuation brings with it a greater recognition of his loneliness, and thus a greater despair. Finally, Christopher comes to fashion himself an identity, one that is inextricably tied to the rock - he sees himself as that ancient giant Prometheus, chained to a great stone for an eternity of suffering - but even this is not enough to hold at bay the awareness of the black centre around which his minute consciousness is in a constant and terrible orbit.

The last point to draw with *Pincher Martin* lies in this final task of individuation: the shaping of an identity. As we shall see in the chapter on identity, there are certain requirements for identity production that are not immediately apparent to the one working the clay, one of the most important being a need for one's identity to be conditioned through another. Christopher recognises that, with no other identity to stand in opposition to his own, he cannot build a strong sense of inner-identity

beyond the immediate and the physical, what might be considered an 'animal' concept of identity. As a blacksmith requires both hammer *and* anvil to shape a tool, so does one's identity need this strong resistant other to find proper definition:

> How can I have a complete identity without a mirror? That is what has changed me. Once I was a man with twenty photographs of myself [...] I could spy myself and assess the impact of Christopher Hadley Martin on the world. I could find assurance of my solidity in the bodies of other people by warmth and caresses and triumphant flesh. I could be a character in a body. But now I am this thing in here, a great many aches of bruised flesh, a bundle of rags and those lobster on the rock. The three lights of my window are not enough to identify me however sufficient they were in the world. But there were other people to describe me to myself - they fell in love with me, they applauded me, they caressed this body and defined it for me. There were the people I got the better of, people who disliked me, people who quarrelled with me. Here I have nothing to quarrel with. I am in danger of losing definition. (Golding, 1956. p.132)

What Loneliness is: A Working Definition of the Loneliness Experience

Now that we've examined what loneliness isn't and how it's been misunderstood, as well as how the experience of loneliness has been categorised throughout history and in literature, it's time to discuss what loneliness actually is.

Loneliness is social pain. It is a felt, aversive reaction to the perception that one's social world has become deficient is some way, such as through rejection from friends or family. This 'pain' aspect of loneliness isn't a mere metaphor either; our feelings of loneliness are processed within the dorsal anterior cingulate, the same brain region responsible for processing physical pain (Eisenberger, Lieberman & Williams, 2003). And just like physical pain, loneliness has a clear evolutionary basis as a system designed to increase an individual's chances of successful genetic propagation:

The social pain of loneliness evolved as a signal that one's connections to

others are weakening and to motivate the repair and maintenance of the connections to others that are needed for our health and well being and for the survival of our genes. (Cacioppo & Hawkley, 2010. p.447)

Perhaps the most difficult aspect of loneliness as social pain to grasp is its subjective nature. Loneliness is a private state that exists within one's mind and subjective perceptions. An individual will only *feel* social pain if he or she *perceives* themselves as having a deficient social environment; if they do not perceive themselves as being isolated in this way, then they will not feel the social pain of loneliness, *no matter the objective truth of their situation*. This is why loneliness is not the same thing as solitude. An individual can be alone without experiencing the social pain of loneliness. Just as a person can feel the pain of loneliness while surrounded by others (Averill & Sundararajan, 2014).

So these are the core aspects that define loneliness: it is social pain, and it is tied to a person's subjective perception.

But as mentioned at the outset of this thesis, loneliness is not so straightforward, and must be recognised as multidimensional if we are to understand it thoroughly and avoid making mistakes in both serious research and creative works. In the following sections this multidimensional aspect will be explored, and the experience of loneliness as perceived social pain will be split to show the atomic elements that contribute to its form.

What Loneliness is: Perceived Social Isolation

Our perceptions shape our personal experience of reality (Gregory, 1997; Snyder & Swann, 1978; Gibson, 1950). While the world you see is mostly similar to the worlds witnessed by others, it isn't exactly the same. Some things differ. This can be hard to believe, so consider this. Time is subjective. If I attend a concert for a musician that I adore, time will fly by. But if you disliked that musician and attended the same concert, time will seem to drag, and each song will take forever to end. Both of us will have experienced the same event, but through our differing tastes in music the length of time that each of us spends listening to the concert will appear to be different. To me, it may seem mere

minutes. To you, it could be as long as a year. Alternatively, think back to when you were a child. Chances are the day before Christmas seemed to go on for a million years while the anticipated day lasted barely any time at all. This is a consequence of the subjective nature of time. And just as time is subjective, so is loneliness (Weiss, 1973).

As previously discussed, to feel the social pain of loneliness we have to be consciously aware of our isolation. We have to notice our separation from others and see ourselves as lonely; we have to be aware of our social environment and notice a disconnect between our ideal social state and our actual social state (Cacioppo & Hawkley, 2009). What this ideal social state consists of differs from person to person. Some people's ideal social state is to be surrounded by lots of friends all day, every day. If this ideal state can't be met – perhaps one day nobody comes around to visit – then loneliness will result. For another person the ideal social state may be a quick phone call with a loved one three times a week, or maybe a chat with the postman every morning. They may not require lots of people visiting all day to feel socially contented, but if they miss their phone call, or if the postman fails to visit, loneliness may still result.

To make the subjectivity of loneliness clearer here is a simple illustration. Imagine a school playground. Asphalt, chalk drawings, a swing or two standing like sentinels on a patch of frost-bitten grass. In one corner, with a cotton doll, we find Abbie, an eight year old girl. Abbie has been playing in this corner by herself for ten minutes, and is quite content. But now two other girls have wandered over and have started to play with her. For a while everything seems to be fine. But then something happens. Another girl tries to take Abbie's doll and Abbie refuses to relinquish control. This girl then calls Abbie selfish, and says she doesn't want to play with her anymore. As these two girls walk away Abbie feels loneliness settle in her stomach. She continues to play alone, but what was previously an enjoyable game has lost its magic. Abbie has been made consciously aware of her exclusion from the other girls, and rather than perceiving her alonetime as a chance to engage in free and creative play, she now perceives it as a punishment for not kowtowing to the demands of her pre-adolescent peer group. This loneliness sits with Abbie for the rest of the day, colouring the remainder of her activities with the blue hues of rejection and isolation.

Perceived social isolation can impact us on three spheres. These spheres are the three

subcategories (or to call-back to a previous metaphor, the atomic elements) that make up our social reality. These spheres are; the intimate, the relational, and the collective (Brewer & Gardner, 1996).

Humans have a need to be affirmed up close and personal, we have a need for a wider circle of friends and family, and we have a need to feel that we belong to certain collectives, whether it is the University of Michigan alumni association, the Welsh Fusiliers, the plumbers' union, or the Low Riders Motorcycle Club. (Cacioppo & Patrick, 2008. p.80)

To feel socially connected, and to avoid the social pain of loneliness, we have to feel satisfied across all three of these spheres. That we only need to be deficient in one sphere to feel loneliness can seem surprising, but if we consider those husbands of happy marriages who miss having close friends, or if we think of the elderly relative who has a big loving family but must return each night to an empty home, it becomes more understandable. In the following sections we shall deconstruct perceived social isolation into these three spheres.

What Loneliness is: Perceived Social Isolation in Intimate Connections

Intimate relationships generally involve just one other person who, echoing Aristophanes, we may consider our other half. They are private, and dyadic. When we think of an intimate relationship we tend to assume a romantic aspect, and in adulthood and late adolescence this is usually the case. Our partner, wife, or husband tends to be our most intimate relation. However, in childhood our intimate relationship is often with our mother or a guardian that we invest with similar importance (Bowlby, 1953; Weiss, 1973).

Our intimate relationships are our dearest social bonds. They are forged from steel, and can withstand forces that would pull lesser bonds apart (Brewer & Gardner, 1996). In our intimate relationships we are free to be ourselves without adopting a mask or facade. Any fear of judgement is usually absent and the possibility of forgiveness is often present even for severe social transgressions. Because of the closeness of this connection, any sense of approval gained from intimate relationships

is felt to be genuine. This does wonders for our confidence and self-worth. Where before we might have seen ourselves as deficient in a personal category, such as attractiveness, the affirmation that we find in an intimate relationship can dispel such delusions making us stronger and psychologically robust (Hawkley, Browne, et al., 2005).

Being fulfilled in this intimate sphere is also a strong predictor of happiness. A recent report undertaken as part of the robust Chicago Health, Aging, and Social Relations Study (a longitudinal, population-based study of African American, Hispanic, and non-Hispanic White men and women born between 1935 and 1952 in Chicago, USA) demonstrates this through an analysis of people both with a strong intimate connection (usually a sexually intimate connection, such as a spouse, due to the adult-age sample) and without a strong intimate connection:

Approximately 65% of the participants in the CHASRS reported being in a current sexual relationship, and those who were in such a relationship reported higher levels of happiness than those who were not. [...] Intimacy is an important component of feeling connected to others, and analyses of the CHASRS data confirmed that feeling connected to others is an important contributor to happiness. Accordingly, intimacy was also related to happiness in both male and female middle-age and older adults. That it is intimacy and not simply sexual activity is suggested by the strength of the association between happiness and the emotional satisfaction associated with one's sexual partner versus the physical pleasure associated with one's sexual partner. (Cacioppo, Hawkley, Kalil, et al., 2008. p.209-210)

The report continues on to discuss how the quality of this intimate relationship had a direct influence on how satisfied individuals felt in other, less-intimate relationships. This was likely due to the mood-boosting affects of a positive, intimate relationship, which better enabled those individuals to approach other people in a more positive manner, increasing the chances of forging further bonds in their wider social groups.

The reciprocal nature of the temporal associations between happiness and [intimate] relationship satisfaction indicate that each feeds forward to foster spirals of positivity in terms of ongoing happiness and good quality social

relationships. (Cacioppo, Hawkley, Kalil, et al., 2008. p.213)

Our intimate connection tends to be the most important one we hold. Therefore when such an intimate relationship collapses the feeling of loneliness (social pain) can often be catastrophic. We might feel as if we have lost a part of ourselves, as though Zeus had split us down the middle. The identity we had built up through the closeness we shared with our significant other suddenly cracks, and we often feel that we are no longer the same person as we were before our bereavement (Storr, 1988; Moustakas, 1972; Marcia, Waterman, Matteson, Archer, & Orlofsky, 1993).

Furthermore, when an intimate relationship concludes the task of building a replacement of similar intimacy can seem an insurmountable challenge. Some refuse to try. This resigned attitude is often seen in elderly people when a long-lasting marriage comes to an end (Carstensen, 2006). But people who choose this fate, especially those who have no other close relationships, risk a descent into chronic loneliness: a state that leads to severe health issues including a weaker immune system, higher blood pressure, reduced executive control, and an increased likelihood of a premature death (Hawkley, Masi, et al., 2006; Baumeister, et al., 2005).

Intimate loneliness, that which occurs when we perceive ourselves to be socially unsatisfied or deficient in our intimate sphere, can be fatal if left unchecked.

What Loneliness is: Perceived Social Isolation in Relational Connections

The next social sphere is that of our relational connections. These social connections are not quite as unique as our intimate connection, but they are still important, and serve to define us in a broader social context. The relationships we foster with our friends and work colleagues fall into this sphere, as do the relationships we share with family members (Brewer & Gardner, 1996; Hawkley, Browne, et al., 2005). On a day to day basis these relationships provide us with a good deal of happiness (Kahneman, et al., 2004). They provide casual companionship and support, introduce us to new experiences and ways of thinking (Sippola & Bukowski, 1999; Marcia, 1980), and they make us feel

safer in dangerous or unpleasant situations. In evolutionary terms, our relational connections are our tribe mates: by maintaining strong relational bonds we can feel confident that others have our back.

When we perceive an absence of quality friendships or familial relationships, or if we become aware that we have been rejected from a friendship or colleague-centric group, we experience a form of social pain known as relational loneliness. This variant of loneliness possesses an aspect of socialcontrol that is not seen so frequently in the intimate variant, and which harkens back to our brief examination of loneliness as social punishment. As the University of Chicago's John and Stephanie Cacioppo note (we return to these researchers, and the reasons for their frequency, on page 48), this is likely due to its evolutionary basis:

> The relational connectedness aspect of the phenotype of loneliness may have a different evolutionary basis than the intimate connectedness aspect. For instance, loneliness not only serves to signal the prospect that our social connection is at risk or absent and to motivate us to repair or restore the safe, collaborative social surround we need to ensure a genetic legacy, but it may also provide incentives to become more compassionate and empathic members of our social species (cf. time-out, shunning, ostracism). That is, loneliness serves as a punishment for selfish behaviour and a negative reinforcer for more socially positive behaviours. The general principle is that when an individual in a social setting is made to feel isolated, he or she is compelled to change his or her behaviour toward others. (Cacioppo, Cacioppo & Boomsma, 2014. p.15)

Relational connections and the loneliness derived from their perceived absence or deficiency are especially salient during adolescence. One of the core goals of adolescence is the development of an individuated identity: a strong sense of who you are, and how you as an individual relate to others (Marcia, 1980; Erikson, 1968). We will return to the relationship between identity and loneliness in a later chapter, but for now it's enough to recognise that for most adolescents, the main avenue for this identity-building work tends to be the relational connections established with peers.

> The imperative to social connection in Western adolescence is largely oriented to the domain of peers. Adolescents do not evidence an increased

desire to be more closely connected to their families; if anything the reverse is true. [...] Adolescents often show limited concern with defining psychological boundaries between themselves and their friends and often throw themselves into relationships of wholesale merger. Peers, then, are the domain in which adolescents pursue the imperative of social connection (Larson, 1999. p.248)

As Larson notes, these relationships are often powerful, imbued with a passion that can seem absurd or even dangerous to older observers. Adolescents perceive their relational connections to be high risk and high reward, with failure to maintain positive connections carrying a degree of social shame not experienced prior to this stage of life (Larson, 1999). Common thought usually assumes that the elderly are those who experience loneliness most acutely; however it is adolescence that is the loneliest period of most people's lifespan, largely due to this high risk, high reward perception of relational connections, and the fragility of the individual's inchoate identity (Marcia, 1980; Sippola & Bukowski, 1999).

Even in adulthood relational connections are essential to the feeling of social satisfaction, and to keeping the social pain of relational loneliness at bay. Many adults tend to imbue their relational connections with far less importance than in adulthood, and this is usually due to the demands both of work and of family development. Often-times the relational connections that one has established in adolescence will fray and eventually break from neglect in adulthood, and a person who was once surrounded by friends will find themselves bereft of any close confidants, with no real strategy for restoring their snapped bonds or for creating new ones. Indeed, this pattern has become increasingly prevalent over the past forty years as captured in a report on social isolation in North America, with the number of close confidants dropping from three in 1985, to zero in 2004:

In 1985, the General Social Survey (GSS) collected the first nationally representative data on the confidants with whom Americans discuss important matters. In the 2004 GSS [we] replicated those questions to assess social change in core network structures. Discussion networks are smaller in 2004 than in 1985. The number of people saying there is no one with whom they discuss important matters nearly tripled. The mean network size decreases by about a third (one confidant), from 2.94 in 1985 to 2.08 in 2004.

The modal respondent now reports having no confidant; the modal respondent in 1985 had three confidants. Both kin and non-kin confidants were lost in the past two decades, but the greater decrease of non-kin ties leads to more confidant networks centred on spouses and parents, with fewer contacts through voluntary associations and neighbourhoods (McPherson, Smith-Lovin & Brashears, 2006. p.353).

In the age of digital media and Facebook friends, it might seem surprising that so few people have close confidants (strong relational connections). After all, social media pushes us to accumulate as many 'friends' as possible, with the number of friends we attain on a platform demonstrating how socially connected we are. But it isn't the number of friends we have that predicts whether or not we experience the pain of relational loneliness: it is the quality of those friendships, how we subjectively perceive them, and whether or not we meet with these connections in a local shared physical space (this last point relates to how our bodies produce oxytocin - the chemical of social bonding - when in close proximity with a liked other, and is something that will be returned to in the next chapter of this thesis).

Relational loneliness, that which occurs when we perceive ourselves to be socially unsatisfied or deficient in our relational sphere, appears to be on the rise in our increasingly online-centric lives, and this has become plainly apparent during the 2020-2021 coronavirus pandemic, in which large swathes of the world's population were locked into quarantine and denied social connection beyond the confines of their home. The spike in relational loneliness that occurred as a result of measures to control the pandemic did not go unnoticed, as captured in this report on loneliness within the Office for National Statistics:

> Levels of loneliness in Great Britain have increased since spring 2020. Between 3 April and 3 May 2020, 5.0% of people (about 2.6 million adults) said that they felt lonely "often" or "always". From October 2020 to February 2021, results from the Opinions and Lifestyle Survey (OPN) show that proportion increased to 7.2% of the adult population (about 3.7 million adults) (Office for National Statistics, 2021).

What Loneliness is: Perceived Social Isolation in Collective Connections

When two gunmen stormed the Parisian offices of the political magazine Charlie Hebdo in early 2015 and killed twelve people in the name of the prophet Muhammad, it was taken not just as an attack on a satirical French magazine, but on free speech as a whole. Being a terrorist attack its prime intention beyond retaliation was the promotion of fear. And in this aim it was unsuccessful. Rather than driving people to hide in their homes, the attack made people bond together in public. And not just in Paris, but across the entire world.

Under the slogan "Je Suis Charlie" similar-minded people came together to display their support for both free speech and those who lost their lives in the attack. These demonstrations were tremendous in size. On the night after the attack more than 100,000 people gathered in Paris and across France. Similar demonstrations took place in London, Amsterdam, Copenhagen, Washington DC, and even as far away as Australia. The feeling of unity under a common cause was encapsulated by the mayor of Montreal, who, while attending his town's demonstration proclaimed; "Today, we are all French!" (Muise, 2015).

What the mayor of Montreal and those who attended the demonstrations were experiencing was collective connectedness, the third of our social spheres, and the broadest circle of which one's social reality is comprised. While our intimate sphere might contain just one other person, and while our relational might contain a small handful of people, our collective sphere can encompass millions of connections. Despite the size of our collective social sphere we often proceed through life unaware of our collective connections until something forces us to recognise their existence. In the case of the Je Suis Charlie demonstrators this was a brutal terrorist attack, but it can also come about through departure from an unrecognised group, such as when we emigrate to another country and miss our homeland even if we had never previously considered our feeling of national belonging (Brewer & Gardner, 1996; Hawkley, Browne, et al., 2005).

The scale of collective connections vary quite considerably. When you are a pupil at a school, the wider school network (including teachers, other pupils, and the handyman) becomes a collective connection. When you are a Catholic, the broader religious network, which contains both thousands

of religious professionals and millions of worshippers, becomes a collective connection. Generally, a collective connection is one in which you are a part, providing a (however minor) contribution to its incorporation and its continued memetic existence (such collective groups have no true existence in physical space, instead existing within a shared narrative, for which the members of the group hold a responsibility for both maintenance and propagation - in this manner the growth or reproduction of collective groups has much in common with the systems employed by viruses; instead of a sneeze, a collective group such as a corporation or religion maintains itself through the vector of proselytism, for instance (Harari, 2014)).

When we perceive an absence of collective connectivity, or if we become aware that we are no longer inside a certain group, or if the collectives we belong to collapse due to a sudden war or a slow disintegration, the social pain that results is known as collective loneliness (Hawkley, Browne, et al., 2005). In terms of affect, collective loneliness is qualitatively different to that of the social pain experienced in intimate and relational loneliness. For one thing, as this feeling of loneliness can often lack an immediately apprehensible concrete reason for its existence, the person suffering from this form of social pain may experience anger or confusion, and might misattribute their disquiet to other phenomena. Homesickness is a pertinent example. Homesickness is collective loneliness, but if we aren't aware of what the feeling relates to we may seek to rationalise our social pain by claiming we miss something less abstract, like our bedroom or the weather in our homeland, when what we really miss is the sense of belonging we feel by being within our home country (Stroebe, 2015).

Collective loneliness is most pronounced in people who belong to only one or two collective groups. When the number of collectives that a single person belongs to is increased, the social pain felt when just one of the groups collapses is mitigated by the continued sense of belongingness from their other collectives:

> The best (negative) predictor of collective loneliness found in middle-age and older adults was the number of voluntary groups to which individuals belonged: The more voluntary associations to which individuals belonged, the lower their collective loneliness. (Cacioppo, Grippo, Goossens & London 2015. p.241)

Collective loneliness, that which occurs when we perceive ourselves to be socially unsatisfied or deficient in our collective sphere, may not seem as aversive as relational or intimate loneliness, but it can have a profound affect on our well-being, as well as our identities. When threatened with such an abstract notion as collective loneliness (either through exile or collective annihilation), members of threatened groups will often go to extremes in an attempt to ensure both the continued cohesion of their collective and their place within it, consciously or subconsciously. It could be argued that the often violent rhetoric and behaviour of certain historically dominant groups against those who seek to challenge their social status-quo is partly founded in a desire to avoid the collective loneliness that will accompany their dismantling.

These three forms of social pain - the intimate, the relational, and the collective - tend to be what the majority think of when it comes to loneliness. And, indeed, in the scientific literature, this tripartite structure of loneliness is the version most commonly accepted and referred to in research, especially in the fields of social psychology, clinical psychology, and evolutionary biology (Heinrich & Gullone, 2006; Baumeister & Leary, 1995; Cacioppo & Cacioppo, 2012).

But the multidimensional nature of loneliness goes beyond this. So far in this thesis, we have analysed loneliness as *perceived social isolation:* the subjective sense of being deficient in one's social reality. Now we shall turn to the other side of this coin, and the loneliness of *objective social isolation*: the objective truth of one's separation from others in physical space.

For ease of understanding, later in this thesis when loneliness is mentioned, this will refer to *perceived social isolation*, and its accompanying feeling of social pain. When *objective social isolation* is discussed, it will be referred to by its common name: solitude.

Objective Social Isolation: Solitude

At a basic level, solitude is a term describing the objective state of being in physical separation from other people, hence its more academic name, objective social isolation. But this basic understanding

doesn't fully capture what solitude means. For most people, solitude carries an element of cognitive freedom, such as the ability to modulate the amount of incoming information (both from social and non-social sources), as well as behavioural freedom, in which time to pursue private hobbies or self-centred tasks can be found. This conceptualisation of solitude has been captured by many artists and authors, but is perhaps best summarised by the following quote from Michel de Montaigne:

We should set aside a room, just for ourselves, at the back of the shop, keeping it entirely free and establishing there our true liberty, our principal solitude and asylum. Within it our normal conversation should be of ourselves, with ourselves, so privy that no commerce or communication with the outside world should find a place there; there we should talk and laugh as though we had no wife, no children, no possessions, no followers, no menservants, so that when the occasion arises that we must lose them it should not be a new experience to do without them. We have a soul able to turn in on herself; she can keep herself company; she has the wherewithal to attack, to defend, to receive and to give (Montaigne, 2009. p.5-6)

At the same time solitude carries a degree of risk, especially for a person who has not spent time alone in earlier periods of his or her life, and even more so for a person who has developed a fear of the self-integrative work that often accompanies time within physical isolation (Larson, 1999; Winnicott, 1958). People who are haunted by traumatic memories also tend to avoid solitude, as the silence that is frequently found in periods of aloneness, as well as the lack of distractions, can cause these unaddressed memories to bubble to the surface of one's consciousness (Ainsworth, 1965; Storr, 1988). Solitude can also be a defence mechanism for repeated social rejection, and in that regard can contort from being a healthy behaviour for creativity and self-integrative work (this self-integrative aspect of solitude will be returned to in a later chapter on identity) into one of fear-motivated retreat, and passive coping.

Solitude can therefore be glorious for some people, but terrible for others.

As a result of this inner complexity, solitude (objective social isolation) can be broken down into two primary variants: *authentic solitude*, in which alonetime is used productively, and the focus of one's thoughts is not centred on social connections, and *inauthentic solitude*, in which alonetime has an aversive aspect, and one's thoughts are centred on social connections (or more accurately, the deficiencies within one's social connections). In the following two sections, we shall examine the two variants of the solitude experience in greater depth.

Objective Social Isolation: Authentic Solitude

Authentic solitude is not just the objective state of being physically isolated from other people. It is the objective state of being physically isolated from others while one's thoughts are not focused upon those others from whom one is separated.

The most influential situational aspect that determines whether or not a solitude experience is authentic or inauthentic tends to be whether or not one's isolation is volitional (Storr, 1988). If we lock ourselves in a room for an hour to be alone with our thoughts we will likely view our temporary solitude in a positive light, as well as derive significant benefit from it. But if someone else locks us away in that same room for an hour we will likely view our physical solitude as imprisonment, and spend the majority of our alone time feeling anxious, lonely, isolated, and desperate to escape.

Individuals who report spending time alone frequently but who do so for self-determined reasons appear to be intrinsically motivated to spend time alone for reasons such as seeking insight about their thoughts and feelings, getting in touch with their spirituality, or engaging in creative pursuits. Importantly, individuals who engage in self-determined solitude do not appear to face the same risk for negative psychosocial outcomes as their not self-determined counterparts. [...] One's motivation to be alone appears to be a crucial factor in determining whether or not solitude is a positive experience with beneficial outcomes. (Thomas & Azmitia, 2019. p.39-40)

As Thomas and Azmitia note above, when solitude is volitional (or is self-determined to use their terminology), it is often personally beneficial. Solitude can be restorative, giving us time apart from our social environment to focus on ourselves, whether that be for the pursuit of creative works or hobbies, to plan solutions to the challenges in our lives, or to engage in self-development through self-communion, meditation, or other spiritual activities (Moustakas, 1972; Averill & Sundararajan, 2014; Storr, 1988)

Solitude is highly valued within the creative fields, which considering its tendency to increase one's focus and concentration, is hardly surprising (Goossens, 2014; Long & Averill, 2003). Many of these artistic individuals have attributed their creative success to their time spent alone in authentic solitude. It isn't just writers and artists who extol the virtues of time alone either; we often see similar sentiments from people in other fields, such as psychologists, mathematicians, and physicists:

The fruit of solitude is originality, something daringly and disconcertingly beautiful, the poetic creation. (Mann, 1998. p.218)

Originality thrives in seclusion free of outside influences beating upon us to cripple the creative mind. Be alone – that is the secret of invention: be alone, that is when ideas are born. (Tesla, 1934. p.9)

Authentic solitude can also help alleviate the pain of a bereavement (Storr, 1988). Our social environment is often thrown into chaos when we lose a close loved one (especially so if that person was our sole intimate connection). The future that once seemed certain is now anything but, and we need time to recalibrate. While being surrounded by friends and family during this time can be beneficial, solitude provides far greater rewards. By removing from sociability, and retreating into a private instance of solitude, we gain the freedom to confront grief without altering our behaviour to satisfy social etiquette (Moustakas, 1973). Generally, a careful balance between social support and solitary experiences is necessary for a successful recovery from the grief of bereavement. If the grief-affected individual is denied solitude, perhaps due to its cultural status within a certain community, then the one suffering from grief will be unlikely to recover as quickly (or at all) and may even adopt disconnection-type behaviours (such as social coldness) or wear a socially-appropriate persona (false identity) as a coping mechanism (Storr, 1988; Smith, Wild & Ehlers, 2020).

While holding and managing the difficult emotions associated with grief, individuals engage in emotional suppression in the company of others for fear that their grief would be unacceptable to others or would reflect negatively on them. As a result, individuals "perform" emotional expressions that are incongruent to those held internally, and the associated discomfort resulting from this process motivates a preference for solitude, reduced social engagement, or both because of the cognitive and emotional demands necessary to emotionally suppress their grief. The repeated process of grief concealment may lead to an altered sense of self in social situations. (Smith, Wild & Ehlers, 2020. p.472)

In authentic solitude, one is able to air their grief without fear of social reprisal or judgement, and is thereby able to better proceed along the path of recovery.

Authentic solitude experiences are usually transitory. While we might enjoy going for a walk by ourselves to reconnect with our thoughts we will ultimately return to our families and friends, and though we may lock ourselves away for a few days to come to terms with a death, at some point we will return to our previous social existence. Transient authentic solitude experiences are relatively common. But sometimes they can go on for a while without transitioning into the pain of chronic loneliness (a form of perceived social isolation that goes unabated for a significant period and carries several physiological and psychological risks). Some have claimed to enjoy an authentic, beneficial solitude for months at a time. One such person is the respected military commander and Antarctic explorer Admiral Richard Byrd.

When Richard Byrd decided to isolate himself in an Antarctic weather station for several months he did so to spend his time in self-reflection, to read creative works, and to feel the peace and tranquillity of being alone with nature (Byrd, 1938). During his isolation he attained these goals and felt richer for them, but he also experienced something more profound. Something that very few people have ever experienced before. Richard Byrd underwent a rare state that the psychoanalyst Sigmund Freud labelled oceanic unity, a sense of being one with the universe (Freud, 1930).

The day was dying, the night being born – but with great peace. Here were the imponderable processes and forces of the cosmos, harmonious and soundless. Harmony, that was it! That was what came out of the silence – a

gentle rhythm, the strain of a perfect chord, the music of the spheres, perhaps. It was enough to catch that rhythm, momentarily to be myself a part of it. In that instant I could feel no doubt of man's oneness with the universe. The conviction came that that rhythm was too orderly, too harmonious, to perfect to be a product of blind chance – that, therefore, there must be a purpose in the whole and that man was part of that whole and not an accidental offshoot. It was a feeling that transcended reason; that went to the heart of man's despair and found it groundless. (Byrd, 1938. p.85)

This sense of oneness with the universe described by Byrd, is a rare facet of authentic solitude known as metaphysical connection, and can only be achieved during extended, unbroken periods of authentic solitude. While an epiphenomenon of authentic solitude (objective social isolation), due to its strong emotional element, this existential feeling is much closer to loneliness from a definitional perspective, even if the emotion it seems most likely to inspire is awe rather than social pain. It is an awareness of one's social relation not just to others but to the elemental structures of either the world or the universe as a whole, and like loneliness it is a subjective awareness. Indeed, this metaphysical connection, which is born from authentic solitude, appears to be the binary opposite of loneliness, as it commonly causes one to replace one's subjective sense of isolation for an equally subjective sense of absolute connection with others (Mascaro, 1965; Merton, 1958; Freud, 1930).

Beyond the pronounced spiritual element of this sense of metaphysical connection, perhaps the most interesting aspect is its parallel with how an individual develops the capacity to enter into a solitude experience without anxiety or fear.

While there is a strong genetic factor in one's perception of solitude (we shall discuss in more detail the genetic question in the next chapter), most of us are not born with an innate ability to be alone, in our own company, for significant periods. This capacity, known as the capacity to be alone, develops during childhood and comes from spending time engaged in solitary play in the presence of a comforting other, such as a mother or father.

Although many types of experience go to the establishment of the capacity to be alone, there is one that is basic, and without a sufficiency of it the capacity

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to be alone does not come about; this experience is that of being alone, as an infant and small child, in the presence of a mother. Thus the basis of the capacity to be alone is a paradox: it is the experience of being alone while someone else is present. (Winnicott, 1958. p.30)

Authentic solitude is inherently social, both from its beginnings in how we develop a capacity to enjoy being alone, through to its ultimate fruit - the cosmic sense of metaphysical connection. But what of solitude experiences that are not authentic or beneficial? What happens when time alone is a painful state, full of anxiety and perceived threat? This form of solitude is *inauthentic solitude*: a state in which alonetime has an aversive aspect, and one's thoughts are often centred on the deficiency of one's social connections.

Objective Social Isolation: Inauthentic Solitude

Inauthentic solitude is the objective state of being physically separated from others while remaining acutely aware of one's isolation from society and maintaining this awareness of one's social condition throughout the period of physical isolation. This can be a difficult state to comprehend, so here are a couple of examples to better illustrate what inauthentic solitude is, and how it differs from its more beneficial cousin.

Solitary confinement is a form of inauthentic solitude that can be greatly detrimental to one's mental health. Generally, when a person is punished with solitary confinement they will be placed in an environment of minimal area and stimulation and prevented from engaging in social interaction (with the sole exception of the occasional appearance of the one imprisoning them or a nominated guard). Such isolation has been shown to have numerous deleterious affects on a person's well-being, including; delirium, hallucinations, self-harm, the exacerbation of existing mental illnesses, and the lasting deterioration of social behaviour upon release (Grassian, 2006). These negative affects of such solitary confinement on individuals are not new discoveries, as highlighted in this extract from a United States Supreme Court document from 1890:

Experience [with solitary confinement] demonstrated that there were serious objections to it. A considerable number of the prisoners fell, after even a short confinement, into a semi-fatuous condition, from which it was next to impossible to arouse them, and others became violently insane; others, still, committed suicide; while those who stood the ordeal better were not generally reformed, and in most cases did not recover sufficient mental activity to be of any subsequent service to the community. (Grassian, 2006. p.329)

Nevertheless, solitary confinement remains common practice within various prison systems around the world (Grassian, 2006).

It should be clear that the experience of solitary confinement is far removed from that of an authentic solitude experience, in which time alone is used for self-improvement or creative pursuits. To harken back to a previous point, one of the main reasons for the detrimental affects of this form of isolation relates to its framing: when one is imprisoned and subjected to solitary confinement, it is very much non-volitional, and the stark awareness that one is being punished through separation is paramount in one's mind throughout the entire ordeal. Objectively, there isn't much of a difference between the physical separation of solitary confinement and that experienced by monks and similar religious anchorites - it is the aspect of framing that determines how physical isolation is processed, and whether it is beneficial or detrimental for the one experiencing it (Storr, 1988; Ainsworth, 1965; Leary, Herbst & McCrary, 2003).

Another incidence of inauthentic solitude is that experienced by an individual who seeks to separate themselves from other people for a socially-directed reason. We see this in those for whom loneliness becomes chronic (we will be returning to the temporal aspect of loneliness shortly), where a common behaviour is to avoid all social interaction due to a self-reinforced expectation of negative appraisal (Cacioppo & Patrick, 2008). For those afflicted with chronic loneliness, solitude-seeking is compensatory behaviour that only serves to compound the negative affects of social pain (perceived social isolation) and reinforce one's negative apprehension of the social world.

One of the distinguishing characteristics of people who have become chronically lonely is the perception that they are doomed to social failure,

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with little if any control over external circumstances. Awash in pessimism, and feeling the need to protect themselves at every turn, they tend to withdraw, or to rely on the passive forms of coping under stress that elevate their total peripheral resistance and, eventually, their blood pressure. The social strategy that [chronic] loneliness induces - high in social avoidance, low in social approach - also predicts future loneliness. The cynical world view induced by loneliness, which consists of alienation and little faith in others, in turn, has been shown to contribute to actual social rejection. (Cacioppo & Patrick, 2008. p.174-175)

We also see this behaviour, this desire to self-isolate for a socially-directed reason, in many creative individuals, especially in creative writers. When a creative writer seeks out solitude to work on their composition, the core motivation behind that desire determines whether they experience authentic or inauthentic solitude, which in turn determines the creative efficacy of time alone. When a writer seeks solitude to work on a composition *for the pleasure of composition itself*, then they are quite likely to experience authentic solitude: they are seeking alonetime in order to pursue a creative task that, no matter the outcome, gives them pleasure. However when a writer seeks solitude to work on a composition *of the final work*, then they are far more likely to experience inauthentic solitude, as the flow of their thoughts is other-directed, embedded in the social-validation they desire as a direct result of a dissatisfaction with their current social position. This experience of inauthentic solitude is summarised in the following quote from the therapist and philosopher Benjamin Mijuskovic:

And I would add that even the artist, for example, who suffers isolation so that he may write his novel does so primarily because he imagines that eventually he will be more than compensated for his sacrifice when his work results in promoting his "fame" (i.e., recognition from other consciousnesses) thereby giving him the assurance, by others, of his own individual existence - a proof that he is not alone. (Mijuskovic, 2012. p.64-65)

We have now examined the core types of alone-experience; loneliness and solitude. And have broken these two down into their variants. But there is one, final aspect that we must consider before we can consider our understanding of loneliness satisfactory, and that is its temporal aspect: the difference between transitory loneliness experiences, and those that last for weeks, months, and even years.

The Temporal Aspect of Perceived Social Isolation: Transient Loneliness

Transient loneliness is an experience of social pain that is not long-lasting. When one feels that sense of disconnection which is the hallmark of perceived social isolation, whether intimate, relational, or collective, and experiences the behaviours this social pain inspires, one has experienced transient loneliness. This form of 'ephemeral' loneliness is a common dimension of the human experience, and it would be an unusual person indeed who did not encounter it at least once in the course of their life.

Transient loneliness is intrinsically beneficial for our continued survival both as individuals and as a species (Weiss, 1973; Maner, Dewall, Baumeister, et al., 2007). A simple way to illustrate this benefit is through an analogous experience: that of physical pain. When we experience physical pain, such as when we accidentally grab a hot baking tray, we react almost instantly, drawing away from the source of our pain and dropping our freshly baked scones on the kitchen floor. Physical pain acts as a behavioural motivator. It ensures that we perform an action that will negate, or at least lessen, any physical damage to our bodies. Transient loneliness acts in a similar way. Where physical pain makes us react to negate physical pain, transient loneliness alters our behaviour to negate social pain.

Physical pain protects the individual from physical dangers. Social pain, also known as loneliness, evolved for a similar reason: because it protected the individual from the danger of remaining isolated. Our forebears depended on social bonds for safety and for the successful replication of their genes in the form of offspring who themselves survived long enough to reproduce. Feelings of loneliness told them when those protective bonds were endangered or deficient. In the same way that physical pain services as a prompt to change behaviour, loneliness developed as a stimulus to get humans to pay more attention to their social connections, and to reach out toward others, to renew frayed or broken bonds. (Cacioppo & Patrick, 2008. p.7)

At first, transient loneliness causes us to seek solitude (Gerstein & Tesser, 1987). It does this to mitigate the perceived damage to our social bond, in a similar way to how physical pain causes us to retreat from the source of our discomfort. People who cannot experience physical pain, such as those born with congenital analgesia, are difficult to keep alive, as they lack the messaging system to inform them of damage being done to their body. If we could not experience social pain (loneliness), it would have a similar deleterious impact on our survivability, as we wouldn't be able to recognise that our behaviour was causing damage to our social body (i.e., our connections with others), and we therefore wouldn't change our behaviour to prevent ostracism, banishment, or exile from our social groups - outcomes that would have often been fatal for our tribal ancestors (Boomsma, et al., 2014; Cacioppo, Hawkley, et al., 2006).

This initial retreat into solitude gives us time to reassess our social engagement, and to analyse what behaviours we might have undertaken that caused us to experience loneliness. It also gives us a chance to think about how we might go about repairing this social damage so that our sense of social pain can be dispelled. Once this self-analytical work has completed, our loneliness pushes us to dive back into the social fray, and undertake our plan to repair our damaged social bond, such as through an apology, the presentation of a gift, acquiescing to a group demand, etc.

As previously mentioned, transient loneliness is a common part of the human experience; we wouldn't be the species we are without it (we shall explore this claim in more detail in the following chapter, including how we are genetically designed to feel loneliness). But when transient loneliness goes unaddressed, or if our feeling of social pain remains due to our reconciliatory attempts meeting only rejection, then we are likely to transition into a state of chronic loneliness: the form of perceived social isolation that carries the greatest risk.

The Temporal Aspect of Perceived Social Isolation: Chronic Loneliness

Transient loneliness is a common human experience - most of us will feel this form of loneliness at some point. But when transient loneliness cannot be dispelled it transitions into chronic loneliness,

and this is when the deleterious effects of loneliness surface.

Loneliness becomes an issue of serious concern only when it settles in long enough to create a persistent, self-reinforcing loop of negative thoughts, sensations, and behaviours. (Cacioppo & Patrick, 2008. p.7)

Before we examine these negative outcomes, let us investigate the cause of chronic loneliness, or what makes transient loneliness transition into its more deleterious version.

As mentioned previously in this chapter, loneliness triggers a set of behaviours in the afflicted when it first arises. These can be broadly broken down into two steps: retreat, and re-approach. When we experience the pain of loneliness we retreat from its cause and seek solitude to analyse why and how we came to feel this sudden burst of social pain. Once this analytical work concludes, we return to the social weave, and undertake behaviours to repair damaged social bonds or to prove our worth to the social group from which we felt we were becoming isolated. If the result of these behaviours is re-acceptance, then loneliness is dispelled: we no longer feel that heart-pinch of social pain, and we continue on with our social lives. But if these behaviours result in further rejection, and this remains the outcome on the third, fourth, or fifth time, then these behaviours that loneliness triggers begin to corrupt, and the subtle alterations to our cognitive functioning that serve to benefit us during bouts of transient loneliness (such as an increased sensitivity to social signals) start to become detrimental to our attempts at reconnection (Pickett & Gardner, 2005; Snyder & Swann, 1978).

This second outcome, the one that leads to chronic loneliness, is a negative feedback loop. If a lonely individual comes to expect rejection when attempting social reconnection, then he or she will approach subsequent reconnection attempts in a self-protective, defensive, or even hostile manner in an attempt to mitigate the anticipated rejection. This serves to undermine the reconnection attempt from the outset. When each attempt at reconnection fails it is then chalked up as validation for these self-protective behaviours. As rejection continues it reinforces this pessimistic outlook, transforming negative assumptions into self-fulfilling prophecies (Snyder & Swann, 1978). Eventually, one's feeling of loneliness sets in and becomes a personality trait - one becomes defined by their relationship with

loneliness. This is why chronically lonely individuals will often retain their negative outlook on life even after all of their social needs have been met.

When our negative social expectations elicit behaviours from others that validate our fears, the experience makes us even more likely to behave in self-protective ways that spin the feedback loop further and faster toward even more isolation. (Cacioppo & Patrick, 2008. p.179)

Chronic loneliness can result in numerous negative affects for an individual, not just from the wider social perspective, but personally, within our cognitive and physiological functions. In the remainder of this section, we will briefly explore three of the most salient affects, starting with sleep efficacy.

Chronic loneliness often results in sleep being non-restorative. Non-restorative sleep differs from normal, restorative sleep not in quantity but in quality, i.e., both may sleep for eight hours, but the restorative value for the chronically lonely individual will be considerably lower (Ohayon, 2005). The reason for this reduction in sleep quality is surprisingly simple. Imagine, for a moment, that you are a member of a primitive tribe, far back in the mists of human history. If you feel exhausted after a big hunt, you feel safe falling asleep amongst your brethren - you know someone else will stay awake and alert as the firelight fades. But now imagine that you have become exiled from the tribe. You no longer possess the comforting knowledge that a companion is watching over you while you slumber; instead, you're all alone, out in the wilds with no-one to watch your back. When you feel the pain of loneliness, your brain recognises its isolated state, and thereby switches into a state of hypervigilance (Cacioppo, Bangee, Balogh, et al., 2016). It knows it has no-one to rely on but itself. Therefore when you go to sleep your brain remains alert, and peppers your unconscious time with micro-awakenings that scan for threats. You are unaware of these micro-awakenings but when you arise in the morning you remain tired and lethargic, and therefore experience less restorative uplift from your time asleep.

Non-restorative sleep (i.e., sleep that is non-refreshing despite normal sleep duration) results in daytime impairments such as physical and intellectual fatigue, role impairments, and cognitive and memory problems. We have noted that loneliness heightens feelings of vulnerability and unconscious

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vigilance for social threat, implicit cognitions that are antithetical to relaxation and sound sleep. Indeed, loneliness and poor quality social relationships have been associated with self-reported poor sleep quality and daytime dysfunction (i.e., low energy, fatigue), but not with sleep duration. (Hawkley & Cacioppo, 2010. p.222)

Chronic loneliness is associated with an increased risk of cardiovascular disease at any stage of life, primarily due to its tendency to elevate blood pressure (Caspi, Harrington, et al., 2006). This alteration to one's blood pressure doesn't appear bound to any particular event either, but is rather a consistent change that remains present while an individual is afflicted with chronic loneliness. When a person experiences chronic loneliness earlier in life (such as during childhood) that continues to go unaddressed, the risk of cardiovascular disease is even higher, and can lead to an early death for those suffering (Caspi, Harrington, et al., 2006). The deleterious aspect of elevated blood pressure is compounded by another behaviour common in chronically lonely individuals: a tendency to exercise less frequently, and to eat more high-sugar, high-fat foods (Cacioppo & Patrick, 2008).

The last element of chronic loneliness to touch upon here is in how it influences the immune system. When we perceive ourselves socially satisfied, and not subject to feelings of loneliness, our immune systems protect us against viral infection. But when we feel the social pain of loneliness, our immune systems no longer protect us against viral infection to the same degree, specifically around humoral immunity (antibody production and the accompanying processes), which can increase the negative impact a virus has on our bodies as well as increase the time a virus has to propagate within the community (Cohen, Miller, Barkin, et al., 2005).

This has had a real affect on the world population over the past two years, during which time the Coronavirus pandemic raged unabated while self-reported feelings of loneliness increased due to the quarantine measures employed across the world (Lombo, Singh, Johnson, et al., 2021; Office for National Statistics, 2021). Those for whom loneliness increased found themselves at a higher risk for; catching the virus, experiencing more deleterious affects while affected, passing the virus onto others in their community. And for those who are chronically lonely, suffering not just from Coronavirus infection but also from the co-morbidities that accompany long stretches of chronic isolation (such as elevated blood pressure, increased cortisol production, non-restorative sleep), the risk of death from the pandemic is significantly higher, as recognised in a recent paper on the relationship of loneliness and Coronavirus (SARS-CoV-2):

Isolation and loneliness play a significant part in the innate immune system and inflammatory response to infection. Furthermore, several studies also show that loneliness can lead to several other co-morbidities that place individuals at greater risk for severe prognosis. Although public health measures such as mandatory isolation and physical distancing are essential for slowing down the transmission of SARS-CoV-2, mitigating loneliness can be a step towards preventing severe prognosis. Taking steps to mitigate isolation and loneliness can ease the healthcare system's strains, especially in countries with greater infection rates. (Lombo, Singh, Johnson, et al., 2021. p.4)

Now that we have examined these two temporal variants of perceived social isolation (loneliness), we will conclude this chapter with a brief overview of two studies that explore certain interesting aspects of both transient loneliness and chronic loneliness. The first concerns the impact on one's cognitive performance during a short bout of transient loneliness, and the second concerns observed changes in ventral striatum activity in those afflicted with the chronic variant.

Study Review: Transient Loneliness and Cognitive Disruption

One might think that intelligence should increase in people excluded from their social groups, and that being a 'lone wolf' would confer certain cognitive advantages over our more socially connected cousins (Baumeister, Twenge & Nuss, 2002). After all, exiles, outcasts and philosophical strangers are frequently romanticised in our culture. We see them as hard-bitten, rugged individualists; the kind of people we would love to be if it weren't for these relationships holding us back. Think of Kurt Russell's Snake Plissken, Sylvester Stallone's John Rambo, Richard Matheson's Robert Neville, or the numerous social outcasts from fantasy fiction, such as Geralt of Rivia and Elric of Melniboné. When

we see these silent and mean protagonists shoulder their weapons and turn away from authority and family it's easy to assume they must be far more intelligent than the local shopkeeper with his several children and cramped homestead. Or alternatively, if we take an academic, evolutionary perspective on such lone-wolves we might picture an exiled Pre-Neolithic hunter-gatherer thinking up ingenious ways to solve his problems, much like a prehistoric Robinson Crusoe, with his intellect improving as a consequence of his increased self-reliance.

But the psychologist Ray Baumeister didn't believe this was true. He believed that isolation from social groups should *impair* intelligent performance, not increase it. To prove his hypothesis he set up the following experiment.

Baumeister intended to use a simple, standard IQ test to measure the influence of loneliness upon intelligent performance (Baumeister, Twenge & Nuss, 2002). The students in his study sample would complete the IQ test, and he would analyse both the results of the lonely and the non-lonely subjects to see whether or not loneliness had a statistically significant impact upon their IQ score. So far, so straightforward. But there was one problem to overcome first; how could Baumeister ensure that a required portion of the students felt lonely without directly influencing their social lives?

Baumeister understood the keystone to loneliness: that people only feel lonely when they are subjectively aware of their isolation from others, and that this isolation conflicts with their desired social reality. He also knew that people were inherently malleable in their perceptions of reality, and that through clever manipulation they could be made to feel however an experimenter desired. With this knowledge he presented each student from his sample with two misleading questionnaires. One was a basic introversion and extraversion test which rated how outgoing each student was, and one was a form that categorised their personality type. Once these tests were completed, Baumeister presented each student with a bogus scientific horoscope of what their future would hold. The students were lead to believe that this horoscope was based on the results of their tests. In truth, it was randomly assigned, and completely made up. There were three horoscopes. One was a control that said the student would receive many broken bones in the years to come, but gave no mention of their prospective social life. This control ensured that any impact upon IQ scores was down to the student's emotional response to the social element of the descriptions, not just the distress of being given an undesirable or physically painful future. The other two horoscopes expressed positive and negative social futures:

You're the type who has rewarding relationships throughout life. You're likely to have a long and stable marriage and have friendships that will last into your later years. The odds are that you'll always have friends and people who care about you. (Baumeister, Twenge & Nuss, 2002. p820)

You're the type who will end up alone later in life. You may have friends and relationships now, but by your mid-20s most of these will have drifted away. You may even marry or have several marriages, but these are likely to be short-lived and not continue into your 30's. Relationships don't last, and when you're past the age where people are constantly forming new relationships, the odds are you'll end up being alone more and more. (Baumeister, Twenge & Nuss, 2002. p.820)

Once the students were given their respective horoscopes they were asked to complete the IQ test. This contained several questions challenging each student on their mathematical ability, verbal and logical reasoning skills, and spatial awareness. Their scores were then tallied up and compared against the social horoscope that they were given at the experiment's outset.

The results were clear. Baumeister discovered that intelligent performance was significantly hampered by feelings of loneliness triggered immediately before. The students who were given the negative social future answered fewer questions correctly, attempted to answer fewer questions, and were slower and less accurate overall than those in the other prediction groups. They were less adept in all categories (with the exception of simple information processing, such as recall). It seemed that loneliness had truly made these students less intelligent, at least in the short term.

Significant and large decrements in intelligent thought (including IQ and Graduate Record Examination test performance) were found among people told they were likely to end up alone in life. The decline in cognitive performance was found in complex cognitive tasks such as effortful logic and reasoning; simple information processing remained intact despite the social exclusion. The effects were specific to social exclusion, as participants

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who received predictions of future non-social misfortunes (accidents and injuries) performed well on the cognitive tests. The cognitive impairments appeared to involve reductions in both speed (effort) and accuracy. The effect was not mediated by mood. (Baumeister, Twenge & Nuss, 2002. p.817)

Baumeister's experiment showed that transient loneliness, even when triggered immediately before a cognitively-demanding task, can have a detrimental impact on one's cognitive performance. Subsequent studies by other researchers have demonstrated that, when transiently lonely individuals are hooked up to brain scanning machines and asked to complete difficult maths problems, the parts of the brain related to executive control (such as the Orbitofrontal Cortex) are less active than in the brains of the non-lonely, partially explaining this drop in cognitive performance that Baumeister saw in his study (Campbell, Krusemark, Dyckman, et al., 2006).

There is one aspect of Baumeister's study that raises a mild ethical question however, and that is the effectiveness of disavowal. While all the relevant protocols are said to have been followed, such as explaining, in detail, that all the fortunes given during the experiment were bogus once their part in the study concluded, it seems possible that such standard protocols may not have been enough to fully disavow the kind of person who would readily believe 'science horoscopes' without question. To ensure the efficacy of this disavowal process, it would have been more ethically sound to follow these individuals for a short time outside the study, and to test them for perceived social isolation (such as via the UCLA Loneliness Scale) to see if the test had any lasting psychological affects. If an approach such as this was taken following Baumeister's study it is not mentioned within the paper.

Study Review: Chronic Loneliness and Happiness

When asked "what makes you happy?" the typical person will rate both love and friendship ahead of materialistic things like money or owning a big house (Kahneman, et al., 2004). This is due to how we spend the majority of our time: managing the interconnected spheres of our social reality. For most socially connected people this is highly enjoyable; we meet with friends, interact with

acquaintances, spend time with family members, and challenge both our peers and our rivals. During positive social interactions like these the dopaminergic neurons housed in our ventral striatum (our brain's reward centre) activate, giving us the warm feeling we tend to associate with pleasant moments (Aron, Fisher, Mashek, et al., 2005; Rilling, Gutman, Zeh, et al., 2002). Coupled with the hippocampus, which links such positive feelings to the memory of what caused them, this ventral striatum activity makes us want to re-experience more of what made us feel good. So if having a lunch-time chat with Adam from accounting gave us a small dopaminergic rush, we assume that we'll receive a similar rush next time we chat. When lots of these small dopaminergic rewards add together over the course of a day we experience a consistent level of contentment. And it is this consistency of contentment, not the sudden short-lived highs of buying a new car or landing that skateboard trick, which results in us valuing our interactions with others as our greatest source of happiness.

One of the world's leading researchers of loneliness, and the founder of the field of social neuroscience, Dr John Cacioppo is mentioned several times throughout this thesis. His enormous body of research constitutes the foundation on which much of our contemporary understanding of loneliness is built, having been the first neuropsychologist to investigate loneliness (social pain) in a serious, scientific manner. In terms of influence on loneliness research, Dr Cacioppo is a Goliath, and though he passed away in 2018 his wife, Stephanie Cacioppo, another leading neuropsychologist in the field of loneliness and social connection, continues his work (Bauld, 2018). Over their four decades of research together the Cacioppos discovered many of the evolutionary reasons for the presence of loneliness in humans and non-human primates, mapped the relationship between loneliness and our autonomic and neuroendocrine processes, identified the subjective dimension of loneliness, how it influences our feelings of love and connection, and showed how a lonely brain functions differently to a non-lonely brain - especially in regard to how loneliness works upon our feelings of happiness (Cacioppo, Cacioppo & Boomsma, 2014; Ernst, Burleson, et al., 2000; Cacioppo & Hawkley, 2009; Norris, Decety, et al., 2009; Cacioppo, Hawkley, Kalil, et al., 2008). This last point is especially interesting when examined in the context of chronic loneliness, as we shall now see.

At the turn of the millennium John Cacioppo noticed something odd. During an experiment on social isolation, he discovered that the lonely individuals in his experiment claimed to experience less pleasure from positive social interactions than their non-lonely counterparts (Cacioppo, Ernst, Burleson, et al., 2000). This seemed paradoxical. Surely, he wondered, lonely people must receive the same dopaminergic reward as everyone else? It could even be argued that because lonely people typically have fewer people to talk to over the course of a day, then those few social moments should give a greater feeling of reward because of the preceding anticipation – just as how a glass of wine at the end of the day is more enjoyable when we are forced to wait for it. But just like Baumeister before him, John refused to subscribe to this common-sense reasoning. Instead, he set up an experiment to scan the brains of lonely people to see whether they genuinely were experiencing reduced pleasure from being with others, or whether it was all a matter of coincidence (Cacioppo, Norris, Decety, et al., 2009).

He took twenty-three female University of Chicago students and showed them a series of emotionally evocative images while they sat inside an fMRI scanner (a Functional Magnetic Resonance Imaging scanner measures brain activity by detecting small changes in the brain's bloodflow). The images consisted of four types. Some were pleasant and social, depicting such scenes as a man running along a sandy beach with his pet dog, or a farmer smiling at the camera. Others were pleasant but non-social, depicting object-based scenes like a space rocket at lift off or a white vase of flowers. Alongside these pleasant images he inserted several that were unpleasant. These showed images that were calculated to provoke revulsion, such as a filthy toilet or a cockroach, and acted as the emotional opposites to the pleasant images. Once again, these unpleasant images depicted a mix of social and non-social scenes. These target images were interspersed between emotionally neutral photographs, and the order in which they were displayed was randomised by a computer. Each student was asked to rate the images as either positive, neutral, or negative by pressing a button. Once all the images had been rated the students were asked to complete the UCLA Loneliness Scale (Russell, 1996) so that their personal loneliness rating could be determined.

From his results he found the answer he was looking for. Lonely people really do experience less of a pleasant response from positive social images:

The whole brain regression analyses of loneliness scores against the BOLD signal detected in the pleasant social minus pleasant non-social contrast revealed five significant regions of covariation. The largest region was centered in the ventral striatum, part of the neural reward network, and showed that the lower the loneliness, the greater the BOLD signal in this contrast, r(21) = -.75, p < .001. To better understand this relationship, we examined correlations between loneliness scores and neural activation to pleasant social pictures and to pleasant non-social pictures separately. These correlations indicated that loneliness was negatively related to neural activation in the region centered in the ventral striatum when viewing pleasant social pictures, r(21) = -.46, p < .05, and positively related to neural activation in this region when viewing pleasant non-social pictures, r(21) = .69, p < .001. That is, the less the participant felt socially isolated the greater the activation of the ventral striatum when viewing pleasant social pictures, whereas the more the participant felt socially isolated the greater the activation of the ventral striatum to pleasant non-social pictures. (Cacioppo, Norris, Decety, et al., 2009 . p.88)

While this finding is surprising in itself, perhaps more surprising is the final part of the above quote - those who report high levels of loneliness experienced greater ventral striatum activity when viewing pleasant non-social images. Given that the ventral striatum is a part of the brain responsible for pleasure-related incentive salience (a cognitive process that motivates one's behaviour towards an outcome - in this case dopamine release and the accompanying feelings of happiness), this implied that the brains of the chronically lonely students no longer recognised social interaction as a source of happiness, but identified pleasant, non-threatening, non-social scenes (such as images of forests and mountain lakes) as being a source of happiness instead. When we review what we understand about such individuals - that their chronically lonely state is most often a result of repeated instances of social rejection - this result might seem less surprising. After all if someone has come to recognise other people as a source of personal threat) would be preferable: as Cacioppo affirms, social interactions are not always positive experiences:

Social interactions are replete with opportunities for trust, understanding, hope, support, and cooperation, just as they are full of opportunities for

treachery, betrayal, conflict, and disappointment. (Cacioppo, Norris, Decety, et al., 2009. p.91)

This finding provides some explanation as to why lonely people and those who enjoy solitude tend to gravitate towards natural settings (Korpela & Staats, 2014), as such places provide them with freedom from social judgement, and allow them to 'be themselves' without the need to adopt a social persona.

Chronic loneliness causes us to no longer feel the uplifts inherent in positive social interaction; our most frequent source of happiness. For chronically lonely people this poses a problem. An absence of dopaminergic reward from interacting with others discourages them seeking such interactions, and as loneliness usually cannot be dispelled without interacting with other people in a positive manner, it means that their loneliness will likely continue unaddressed, and the deleterious affects upon them (such as increased blood pressure and higher morning stress levels) will remain present. All this only serves to illustrate how challenging it can be for any individual to break free from the negative, self-reinforcing cycle of chronic loneliness (Pickett & Gardner, 2005; Snyder & Swann, 1978).

Loneliness: a Multifaceted Gem

It should now be clear that there is nothing simple about loneliness. Being lonely isn't just a case of feeling blue that you haven't been invited to a party, or feeling down when you have nowhere to go on a Saturday night. Loneliness is multidimensional. It is complex, consisting of many different aspects that overlap in dozens of curious ways.

Now that the multifaceted nature of loneliness has been made clear we can delve into the depths of this profound emotion. We can investigate some of its most surprising relationships, explore the curious ways that it influences our identities and our creativity, and see how life would be almost unrecognisable without its permeating presence. With maps and compasses ready, we can now visit some of the lesser-known places that reside within the vast country of loneliness.

References & Bibliography

Ainsworth. M. D. S., (1965) Further research into the adverse effects of maternal deprivation. In Bowlby, J., (Ed.), *Childcare and the Growth of Love*. 2nd ed., London: Penguin Books

Akerlind. I., & Hornquist. J. O., (1992) Loneliness and alcohol abuse: A review of evidences of an interplay. *Social Science and Medicine*, *34*. 405-414

Aron. A.; Fisher. H.; Mashek. D. J.; Strong. G.; Li. H., & Brown. L. L., (2005) Reward, motivation, and emotion systems associated with early-stage intense romantic love. *Journal of Neurophysiology*, 94. 327–337

Averill. J. R., & Sundararajan. L., (2014) Experiences of solitude. In R. J. Coplan & J. C. Bowker (Eds.), *The Handbook of Solitude*. Chichester: Wiley Blackwell. 90-108

Barbour. A., (1993) Research report: Dyadic loneliness in marriage. Journal of Group Psychotherapy, Psychodrama & Sociometry, 46. 70–72

Bauld. A., (2018) John T. Cacioppo, pioneer and founder of the field of social neuroscience, 1951-2018. *University of Chicago News*. [online] Available at: https://news.uchicago.edu/story/john-t-cacioppo-pioneer-and-founder-field-social-neuroscience-1951-2018 [Accessed 23 October 2021]

Baumeister. R. F.; DeWall. N. C.; Ciarocco. N. J.; & Twenge. J. M., (2005) Social exclusion impairs self-regulation. *Journal of Personality and Social Psychology*, 88. 589-604

Baumeister. R. F., & Leary. M. R., (1995) The need to belong: Desire for interpersonal attachments as a fundamental human motivation. *Psychological Bulletin*, 117(3). 497–529

Baumeister. R. F.; Twenge. J. M., & Nuss. C. K., (2002) Effects of social exclusion on cognitive processes: Anticipated aloneness reduces intelligent thought. *Journal of Personality and Social Psychology*, 83. 817-827

Bowlby. J., (1953) Child care and the growth of love. London: Penguin Books

Brewer. M. B., & Gardner. W., (1996) Who is this we? Levels of collective identity and self representations. *Journal of Personality and Social Psychology*, 71. 83-93

Buchholz. E. S., (1997) The call of solitude: Alonetime in a world of attachment. New York: Simon & Schuster

Byrd. R., (1938) Alone. New York: G. P. Putnam's Sons

Cacioppo. S.; Bangee. M.; Balogh. S.; Cardenas-Iniquez. C.; Qualter. P., & Cacioppo. J. T., (2016) Loneliness and implicit attention to social threat: A high-performance electrical neuroimaging study. *Cognitive Neuroscience*, *7 (1-4)*. 138-159

Cacioppo. J. T., & Cacioppo. S., (2012) The phenotype of loneliness. *European Journal of Developmental Psychology.* 9(4). 446–452

Cacioppo. J. T.; Cacioppo. S., & Boomsma. D. I., (2014) Evolutionary mechanisms for loneliness. *Cognition and Emotion*, 28. 3-21

Cacioppo. J. T.; Ernst. J. M.; Burleson. M. H.; McClintock. M. K.; Malarkey. W. B.; Hawkley. L. C.; Kowalewski. R. B.; Paulsen. A.; Hobson. J. A.; Hugdahl. K.; Spiegel. D., & Berntson. G. G., (2000) Lonely traits and concomitant physiological processes: the MacArthur social neuroscience studies. *International Journal of Psychophysiology*, *35*. 143-154

Cacioppo. S.; Grippo. A. J.; London. S., & Goossens. L., (2015) Loneliness: Clinical import and interventions. *Perspectives on Psychological Science*, *10*(*2*). 238-249

Cacioppo. J. T.; Hawkley. L. C.; Ernst. J. M.; Burleson. M.; Berntson. G. G.; Nouriani. B., & Spiegel. D., (2006) Loneliness within a nomological net: An evolutionary perspective. *Journal of Research in Personality*, 40. 1054-1085

Cacioppo. J. T., & Hawkley. L. C., (2009) Perceived social isolation and cognition. *Trends in Cognitive Science*, 13. 447-454

Cacioppo. J. T.; Hawkley. L. C.; Berntson. G. G.; Ernst. J. M.; Gibbs. A. C.; Stickgold. R., & Hobson. J. A., (2002) Do lonely days invade the nights? *American Psychological Society*, *13*. 384-387

Cacioppo. J. T.; Hawkley. L. C.; Kalil. A.; Hughes. M. E.; Waite. L., & Thisted. R. A., (2008) Happiness and the invisible threads of social connection: The Chicago Health, Aging, and Social Relations Study. In M. Eid & R. Larson (Eds.), *The Science of Well-being*. New York: Guilford. 195-219

Cacioppo. J. T.; Hawkley. L. C., & Thisted. R. A., (2010) Perceived social isolation makes me sad: Five year cross-lagged analyses of loneliness and depressive symptomatology in the Chicago health, aging, and social relations study. *The Psychology of Aging*, *25*(*2*). 453-463

Cacioppo. J. T.; Norris. C. J.; Decety. J.; Monteleone. G.; & Nubaum. H., (2009) In the eye of the beholder: individual differences in perceived social isolation predict regional brain activation to social stimuli. *Journal of Cognitive Neuroscience*, *21* (1). 83-92

Cacioppo. J. T., & Patrick. W., (2008) Loneliness: Human nature and the need for social connection. New York: W. W. Norton & Company

Campbell. W. K.; Krusemark. E. A.; Dyckman. K. A.; Brunell. A. B.; McDowell. J. E.; Twenge. J. M., & Clementz. B. A., (2006) A magnetoencephalography investigation of neural correlates for social exclusion and self-control. *Social Neuroscience*, *1*. 124-134

Carstensen. L., (2006) The influence of a sense of time on human development. *Science*, *312*. 1913–1915

Caspi. A.; Harrington. H.; Moffitt. T. E.; Milne. B. J., & Poulton. R., (2006) Socially isolated children 20 years later: risk of cardiovascular disease. *Archives of Pediatrics and Adolescent Medicine*, *160(8)*. 805-811

Cohen. S.; Miller. G. E.; Barkin. A.; Rabin. B. S.; Treanor. J. J., & Pressman. S. D., (2005) Loneliness, social network size, and immune response to influenza vaccination in college freshmen. *Health Psychology*, 24(3). 297-306

Dante. A., (1996) On monarchy. Cambridge: Cambridge University Press

Dante. A., (2013) The divine comedy. San Diego: Canterbury Classics

Dante. A., (1996) De vulgari eloquentia. Cambridge: Cambridge University Press

Davenport. J. (2005) Dante: poet, author, and proud Florentine. New York: Infobase Publishing

DePaulo. B., (2014) Single in a society preoccupied with couples. In R. J. Coplan & J. C. Bowker (Eds.), *The Handbook of Solitude*. Chichester: Wiley Blackwell. 302-316

Eisenberger. N. I.; Lieberman. M. D., & Williams. K. D., (2003) Does rejection hurt? An fMRI study of social exclusion. *Science*, *302*, *5643*. 290-292

Eliot. T. S., (1972) The waste land and other poems. London: Faber and Faber

Erikson. E. H., (1968) Identity: Youth and crisis. New York: W. W. Norton

Ernst. J. M., & Cacioppo. J. T., (1999) Lonely hearts: Psychological perspectives on loneliness. *Applied and Preventative Psychology*, 8. 1-22

France. P., (1979) Introduction. In J. J. Rousseau., Reveries of the solitary walker. London: Penguin

Freud. S., (1914) Zur Einführung des Narzißmus. Journal of Psychoanalysis, 6. 1-24

Freud. S., (1930) *Das unbehagen in der kultur.* Vienna: Internationaler Psychoanalytischer Verlag Wien

Gerstein. L. H., & Tesser. A., (1987) Antecedents and responses associated with loneliness. *Journal of Social and Personal Relationships*, *4*. 329-363

Gibson. J. J., (1950) The perception of the visual world. Oxford: Houghton Mifflin

Golding. W., (1956) Pincher Martin. London: Faber and Faber

Goossens. L., (2014) Affinity for aloneness in adolescence and preference for solitude in childhood. In R. J. Coplan & J. C. Bowker (Eds.), *The Handbook of Solitude*. Chichester: Wiley Blackwell. 150-166

Goossens. L., & Marcoen. A., (1999) Adolescent loneliness, self-reflection, and identity: From individual differences to developmental processes. In K. Rotenberg & S. Hymel (Eds.), *Loneliness in Childhood and Adolescence*. Cambridge: Cambridge University Press. 225-243

Grassian. S., (2006) Psychiatric effects of solitary confinement. Washington University Journal of Law and Policy, 22. 327-380

Graves. R., (1955) The Greek myths: 1. London: Penguin. 339

Gregory. R. L., (1997) Knowledge in perception and illusion. *Philosophical Translations of the Royal Society of London Biology*, 352. 1121-1128

Harari. Y. N., (2014) Sapiens: A brief history of humankind. London: Harvill Secker

Hawkley. L. C., Browne. M. W., & Cacioppo. J. T., (2005) How can I connect with thee? Let me count the ways. *Psychological Science*, *16*. 798-804

Hawkley. L. C., & Cacioppo. J. T., (2010) Loneliness matters: A theoretical and empirical review of consequences and mechanisms. *Annals of Behavioural Medicine*, 40(2). 218-227

Hawkley. L.C.; Masi. C. M.; Berry. J. D., & Cacioppo. J. T., (2006) Loneliness is a unique predictor of age-related differences in systolic blood pressure. *Psychology and Ageing*, 21. 152–164

Heinrich. L. M., & Gullone. E., (2006) The clinical significance of loneliness: A literature review. *Clinical Psychology Review*, 26. 695-718

Homer., (7th Century BC) The odyssey, trans. R. Fagels., 1997. London: Penguin Books

Howard. A. J., (1975) The flesh-coloured cage. Portland: Hawthorn Books

Hsieh. N., & Hawkley. L., (2018) Loneliness in the older adult marriage: Associations with dyadic aversion, indifference, and ambivalence. *Journal of Social and Personal Relationships*, 35 (10). 1319-1339

Kahneman. D.; Krueger. A. B.; Schkade. D.; Schwarz. N., & Stone. A., (2004) Toward national well-being accounts. *The American Economic Review*, *94*. 429-434

Korpela. K., & Staats. H., (2014) The restorative qualities of being alone with nature. In R. J. Coplan & J. C. Bowker (Eds.), *The Handbook of Solitude*. Chichester: Wiley Blackwell. 351-367

Larson. R. W., (1999) The uses of loneliness in adolescence. In K. Rotenberg & S. Hymel (Eds.), *Loneliness in Childhood and Adolescence*. Cambridge: Cambridge University Press. 244-262

Leary. M. R.; Herbst. K. C., & McCrary. F., (2003) Finding pleasure in solitary activities: Desire for aloneness or disinterest in social contact? *Personality and Individual Differences*, 35. 59-68

Lombo. L.; Singh. J.; Johnson. P. A.; Johnson. J. C., & Mardon. A. A., (2021) Perceived isolation and health: Does isolation and feeling of loneliness pose a risk for severe SARS-CoV-2 infection? *Academia Letters*, 139.

Long. C. R., & Averill. J. R., (2003) Solitude: An exploration of benefits of being alone. *Journal for the Theory of Social Behaviour*, 33. 21-44

Maner. J. K.; Dewall. C. N.; Baumeister. R. F.; & Schaller. M., (2007) Does social exclusion motivate interpersonal reconnection? Resolving the 'porcupine problem'. *Journal of Personality and Social Psychology*, 92. 42-55

Mann. T., (1998) Death in Venice and other stories. London: Vintage

Marcia. J. E., (1966). Development and validation of ego-identity status. *Journal of Personality and Social Psychology*, 3. 551–558

Marcia. J. E., (1980) Identity in adolescence. In J. Adelson., (Ed.), Handbook of Adolescent

Psychology. New York: Wiley and Sons

Marcia. J. E.; Waterman. A. S.; Matteson. D. R.; Archer. S. L., & Orlofsky. J. L., (1993) *Ego identity: A handbook for psychosocial research.* New York: Springer Science

Mascaro. J., (1965) The upanishads. London: Penguin Books

McPherson. M.; Smith-Lovin. L., & Brashears. M. E., (2006) Social isolation in America: Changes in core discussion networks over two decades. *American Sociological Review*, *71*. 353-375

Merton. T., (1958) Thoughts in solitude. London: Burns & Oates

Metzner. J. L., & Fellner. J., (2010) Solitary confinement and mental illness in US prisons: A challenge for medical ethics. *Journal of the American Academy of Psychiatry and the Law, 38 (1).* 104-108

Mijuskovic. B. L., (2012) *Loneliness in philosophy, psychology, and literature*. Bloomington: iUniverse

Mondschein. K., (2013) Introduction. In A. Dante., *The Divine Comedy.* San Diago: Canterbury Classics. VII - XVIII

Montaigne. M., (2009) On solitude. London: Penguin Books

Moustakas. C. E., (1972) Loneliness and love. New Jersey: Prentice-Hall, Inc.

Office for National Statistics., (2021) *Mapping loneliness during the coronavirus pandemic*. London: Office for National Statistics.

Ohayon. M. M., (2005) Prevalence and correlates of non-restorative sleep complaints. *Archives of Internal Medicine*, 165. 35-41

Olson. K. L., & Wong. E. H., (2001) Loneliness in marriage. Family Therapy, 28. 105-112

Pickett. C. L., & Gardner, W. L., (2005) The social monitoring system: Enhanced sensitivity to social cues as an adaptive response to social exclusion. In K. D. Williams, J. P. Forgas, & W. von Hippel (Eds.), *The Social Outcast: Ostracism, Social Exclusion, Rejection, and Bullying*. New York: Psychology Press. 213-226

Plato., (1999) The symposium. London: Penguin

Reichmann. F. F.; (1958) Loneliness. Psychiatry, 22:1, 1-15

Rilling. J.; Gutman. D.; Zeh. T.; Pagnoni. G.; Berns. G., & Kilts. C., (2002) A neural basis for social cooperation. *Neuron*, *35*. 395–504

Rousseau. J. J., (1979) Reveries of the solitary walker. London: Penguin

Russell. D., (1996) UCLA Loneliness Scale (Version 3): Reliability, validity, and factor structure. *Journal of Personality Assessment*, 66. 20–40

Russell. D.; Cutrona. C. E.; Rose. J., & Yurko. K., (1984) Social and emotional loneliness: An examination of Weiss's typology of loneliness. *Journal of Personality and Social Psychology*, 46. 1313-1321

Said. E. W., (2001) Reflections on exile. London: Granta Books

Sippola. L., & Bukowski. W., (1999) Self, other, and loneliness from a developmental perspective. In K. Rotenberg & S. Hymel (Eds.), *Loneliness in Childhood and Adolescence*. Cambridge: Cambridge University Press. 280-295

Smith. K. V.; Wild. J., & Ehlers. A., (2020) The masking of mourning: Social disconnection after bereavement and its role in psychological distress. *Clinical Psychological Science*, *8*(*3*). 464-476

Snyder. M., & Swann. W. B., (1978) Behavioural confirmation in social interaction: From social perception to social reality. *Journal of Experimental Social Psychology*, *14*. 148-162

Storr. A., (1988) Solitude. London: Harper Collins

Stroebe. M.; Schut. H., & Maaike. N., (2015) Homesickness: A systematic review of the scientific literature. *Review of General Psychology*, 19. 157-171

Tesla. N., (1934) Tesla Sees Evidence Radio And Light Are Sound. Interviewed by Dunlap. O. E., *New York Times.* 8 April, 9a-b

Thomas. V., & Azmitia. M., (2019) Motivation matters: Development and validation of the Motivation for Solitude Scale – Short Form (MSS-SF). *Journal of Adolescence*, 70. 33-42

Tornstam. L., (1992) Loneliness in marriage. Journal of Social & Personal Relationships, 9. 197–217

Weeks. D. G.; Peplau. L. A.; Michela. J. L., & Bragg. M. E., (1980) Relation between loneliness

and depression: A structural equation analysis. *Journal of Personality and Social Psychology*, 39. 1238-1244

Weiss. R. S., (1973) *Loneliness: The experience of emotional and social isolation.* Cambridge: The MIT Press

Winnicott. D. W., (1958) The capacity to be alone. *The International Journal of Psychoanalysis*, 39. 416-420

Wolfe. T., (1929) Look homeward, angel. New York City: Charles Scribner's Sons

Wolfe. T., (1962) The Thomas Wolfe reader. New York City: Charles Scribner's Sons

3.

Chapter Three: Origins of Loneliness

"All the lonely people, where do they all come from?" (McCartney, 1966)

We were not always lonely. Like everything in our universe, there came a moment of creation, of genesis, when loneliness first emerged in our forming minds. This moment was not as recent as we might imagine. Loneliness is sometimes thought of as a modern ailment, a consequence of our technologically advanced society. With the proliferation of information age technology keeping us apart even while it connects us, and with more people living alone than ever before, it's easy to see why this idea might seem feasible. But in truth loneliness has been around for thousands, perhaps even millions of years. It is one of the primary emotional motivators. One of the first and most powerful emotions to keep our social structures in check. And though loneliness triggers we may never have made it to where we are today. We need loneliness. It makes us human. But before we can understand why, we have to learn where loneliness comes from. We have to explore the question of what planted and continues to plant the seeds that make loneliness grow in our hearts, minds, and souls. We have to find its origins.

The Shades of Loneliness

It is often a mistake to approach a complex subject in terms of black and white. Binary answers are rarely correct. They are often more a result of prejudice, personal aims, and a lack of empathy and imagination than anything approaching the truth. The world is made up of subtle gradations. Shades of grey. So much so that even the most straightforward questions usually possess a Heisenbergian degree of uncertainty. This fundamental ambiguity applies to loneliness. It can be tempting to apply a black and white answer to the question of its origin, to why we, as a species, feel lonely. And it isn't hard to find examples of this way of thinking.

Consider the nature verses nurture argument. This crops up time and again in scientific literature, and not just around the topic of loneliness. In terms of why we experience loneliness the way that we do, the binary sides of the argument go as follows.

In the nature camp, a person's traits, characteristics, and behaviour are said to be primarily influenced by their genes. If a person has inherited the genes for loneliness then these genes are said to be the sole determinants of that person's susceptibility to loneliness, just as inheriting the gene for blue eyes would be responsible for us possessing that particular eye pigmentation (Dawkins, 1989).

In the nurture camp, the opposite holds true. Rather than genes being the main influencer on traits, characteristics, and behaviour, the primary influencer is environment. If an infant is raised in a loving environment with their biological mother, the argument suggests, then they will be less likely to feel lonely in the future than an infant raised in a broken home or otherwise emotionally deficient environment (Ainsworth, Blehar, Waters & Wall, 1978; Rotenberg, 1999).

Such explanations are unsatisfactory when taken in isolation. They do not describe the whole picture. With regard to the nature argument, we are not entirely at the mercy of our genes even if they do steer us in certain directions - our culture, and our mastery of technology, enable us to trick or over-ride the fate laid out for us by our genetic programming. For instance, while our genes may push us towards genetic propagation through sexual intercourse, the invention of the condom means that we can enjoy sex without necessarily creating offspring, thereby outsmarting our innate genetic imperative (Dawkins, 1989).

And in answer to the nurture argument, many siblings, including dizygotic twins (nonidentical twins who share 50% of their genetic material), differ in both their identity characteristics and their vulnerability to certain conditions - including chronic loneliness - when raised in a shared environment (Goossens, Roekel, et al., 2015). This suggests that nurturance, while important for later feelings of loneliness, cannot explain the presence of loneliness absolutely. All behaviour is the product of an inextricable interaction between heredity and environment during development, so the answer to all nature-nurture questions is "some of each." If people only recognized this truism, the political recriminations could be avoided. Moreover, modern biology has made the very distinction between nature and nurture obsolete. Since a given set of genes can have different effects in different environments, there may always be an environment in which a supposed effect of the genes can be reversed or cancelled; therefore the genes impose no significant constraints on behaviour. Indeed, genes are expressed in response to environmental signals, so it is meaningless to try to distinguish genes and environments; doing so only gets in the way of productive research. (Pinker, 2004. p.7)

To discover the origins of loneliness we have to look somewhere in the middle of these two arguments. Loneliness is most likely the result of dozens, if not hundreds, of interacting influences. Some are likely genetic. Some are likely environmental. And some may be outside of these fields altogether. We are still many years from assembling the full jigsaw of loneliness and seeing the whole picture, but we do have some of the pieces, including a few of the corners. And it is these important pieces we will explore as we attempt to discover where loneliness comes from, and why it evolved.

Loneliness in Infancy

After the collapse of Nicolae Ceausescu's communist regime in Romania, news about the country's many orphanages spread across the world. Harrowing images of orphaned children were reported by the press. Western readers saw photographs of disabled toddlers chained to metal cages, starving boys forced to fight one another for food, malnourished infants abandoned in iron cribs, and far worse (Post, 2007; Nelson, Fox & Zeanah, 2014). The sheer enormity of the appalling conditions to which these young children were subjected became common knowledge, and Romania hung its head in shame. Rather than providing a clean, warm environment where these orphaned children could grow up to be healthy and happy, the communist state had isolated them in institutions that resembled nothing more than Russian Gulag camps. Years later, after these children were released

and adopted into loving homes, many were approached by psychologists who wished to learn about the long-term effects that such an upbringing might have on a young child (Nelson, Fox & Zeanah, 2014; Rutter, et al., 2010). Could they, after such a childhood, possibly grow up to be healthy, functioning members of society? Or would their early deprivation and profound intimate isolation cause them to become warped and twisted, nothing more than poor lost souls haunted by their traumatic early years?

To find out the investigating psychologists drew on the work of John Bowlby, a renowned psychologist responsible for an extensive World Health Organisation report on maternal care which led to the discovery of attachment theory (Bowlby, 1951). One of Bowlby's core ideas was that a lack of suitable maternal care in early infancy could lead to severe psychological, developmental and physiological difficulties in later life. He referred to this state as maternal deprivation, a form of upbringing characterised by neglect, the absence of a mother-figure, and a lack of emotional warmth and continuous loving care.

Prolonged breaks [in the mother-child relationship] during the first three years of life leave a characteristic impression on the child's personality. Such children appear emotionally withdrawn and isolated. They fail to develop loving ties with other children or with adults and consequently have no friendships worth the name. (Bowlby, 1953. p.39)

As Bowlby highlights above, infants who undergo maternal deprivation for six months or more often exhibit emotional withdrawal and difficulty in establishing relationships, especially those of a dyadic, intimate nature. And through the subsequent work of other child-psychologists, we also know that maternal deprivation can cause further issues, including the developmental impairment of abstract thinking and logical reasoning (Goldfarb, 1943), regression to infantile behaviours such as sucking, bed wetting, a desire to be carried, and the abandonment of speech after the age of two or three (Freud, 1973), and delinquent behaviour such as lying, stealing, physical aggression, and sexual misdemeanours in adolescence (Ainsworth, 1965; Cassidy & Berlin, 1999). As Bowlby and the later researchers discovered, maternal deprivation in infancy is as dangerous for a child's development as

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it is unpleasant to experience.

Armed with this prior knowledge, the fate of the Romanian orphans did not seem bright to the psychologists who went to examine them. Many of the children had been placed inside the institutions soon after birth and had grown up unloved and uncared for, knowing nothing about their absent mothers or fathers (Nelson, Fox & Zeanah, 2014). These children were victims of complete maternal deprivation, and would surely, so the psychologists thought, all be hopeless cases.

Professor Michael Rutter was one psychologist who went to examine the adopted Romanian orphans. Through a longitudinal study (one taking place over several years) of the subsequently adopted children he discovered that many of the psychologists' worst fears held true. Many of the children showed clear signs of their early maternal deprivation and loneliness, including stunted brain growth, emotional instability, apathy, quasi-autism, and mild educational impairment (Rutter, et al., 2010). However, this didn't apply to all of the children. Some of the orphans, most notably infants who were adopted quickly and spent little time in the institutions, recovered fairly rapidly and showed little evidence that they had been institutionalised at all, apart from minor physiological stunting. Even some of the children who had been locked away in the orphanages for many years, experiencing the worst deprivation of all the children, showed surprising resilience to the supposed effects of prolonged maternal deprivation.

So what was happening?

Loneliness and Genetic Heritability

It turned out that the psychologists analysing these children had lost sight of the bigger picture. They had, unconsciously or otherwise, fallen on the nurture side of the nature versus nurture argument and simply assumed that all children who were exposed to such an awful upbringing would respond in a similar way. Of course, as Steven Pinker pointed out earlier, this is the wrong way to look at the situation. People, including these abandoned children, differ in their vulnerability to loneliness. One of the reasons for this variable susceptibility is genetic heritability.

Before addressing the heritability of loneliness a brief explanation of genes is required. The gene is the fundamental unit of natural selection (Dawkins, 1989). This means that when it comes to the process of natural selection, it is the gene that drives the evolution of a species, not the group, and not the individual. Genes are best described as little computer programs. They contain instructions for certain actions that play out when certain prerequisites are met. These are known as phenotypes (Doolittle & Sapienza, 1980; Dawkins, 1989). So a gene that contains the instructions (phenotype) for darkening skin colour in the presence of ultra-violet light will only activate when ultra-violet light is present, such as on a hot summer's day, or under a tanning booth. Some of these genes have programs that activate during embryonic development. The gene for curly hair is one example. When a baby is born with a head of curly locks, we know that the infant possess the curly hair gene, and that it activated while the child was still within the uterus (Jablonski, 2008).

It's worth noting that genes can have more than one program or effect. The gene that contains the program for curly hair may also possess the program that causes you to sneeze in the presence of daffodils. Genes may also contain programs that are time-gated: dormant until a particular stage in life. Some researchers believe that this time delayed aspect of gene expression may be one of the main reasons that we age (Hamilton, 1966; Medawar, 1952). Genes can also contain segments of programs that require the presence of other particular genes to activate. A gene that contains half of the program for a lethal disease, for instance, can be entirely harmless unless the other half of that fatal program is present in another local gene within the body. In truth, no one gene is responsible for the entirety of a program (Dawkins, 1989). Generally, a gene will contain a little bit of a larger program, and will have to cooperate with other genes in the local vicinity to complete that program. But for our purposes and for the sake of simplicity, it's easier to think of a gene as possessing a single program.

Genes, like superheroes and comic book characters, also have rivals. These rival genes are known as alleles, and are the evil twin versions of the sibling gene (Malats & Calafell, 2003). One of these genes will be more dominant than the other, and it's this gene whose program will be active in the body. The gene dominance hierarchy is affected by numerous factors, such as environment and the presence of neighbouring antagonistic or cooperative genes, but usually the gene that is dominant is the one that will best help an individual live to breeding age and care for their children. As an example, imagine that the curly hair gene had an allele that favoured straight hair. In environments with little external protection from ultra-violet rays, the curly hair gene is likely to be dominant in the population as it helps shield the head from radiation. However, in environments where the risk of ultra-violet radiation is slight, or where ultra-violet radiation is so minimal that people actually need it for the healthy production of vitamin D, the curly hair gene may fall out of favour and the straight hair gene (its allele), will become dominant instead (Jablonski, 2008).

This allele facet of gene expression is an important one and is key to understanding why some of the Romanian orphans demonstrated less of an aversive reaction to maternal deprivation than others. This leads us into the heritability of loneliness. Heritability being the 'passing on' of genes from one generation to the next (Sheppard, 1958).

The vast majority of genes in our body are passed down from person to person because of their inherent benefit for survival. A gene that helps us live to reproduce, or that helps us care for our children, will be more likely to be inherited by the next generation than a gene that causes us to die young or develop a debilitating condition (Dawkins, 1989). The curly hair gene, with its ability to protect us from radiation, is one example of a helpful gene.

Loneliness can also be considered beneficial for survival. Early in our history, we survived by banding together into groups. By forming primitive tribes and communal societies our early ancestors gained mutual assistance and protection from the outside world. Over evolutionary time loneliness has acted as an aversive signal to push us towards this way of existence. The pain we feel when lonely alters our behaviour and outlook (Cacioppo & Patrick, 2008; Rotenberg, 1994; Duck, Pond & Leatham, 1994). It makes us want to reconnect with people, to find love and companionship and avoid remaining isolated. By triggering this response, loneliness made our early ancestors less willing to wander off alone into dangerous situations, thereby increasing our chances of survival.

> The early and extended dependence on caregivers and the limited physical endowments across the lifespan, together, place humans at risk when they are isolated. In this context, it may be adaptive to have evolved an aversive signal that draws attention to the prospect that our social connection to

others is at risk or absent and that motivates us to ensure or replace the safe, collaborative social surround we need to ensure a genetic legacy. Hunger, thirst, and pain, for instance, have evolved to prompt an organism to change its behavior in a way that protects the individual and promotes the likelihood his or her genes will make their way into the gene pool. We have proposed that the awareness of loneliness evolved to serve as a signal that one's connections to others are frayed or broken and to motivate the repair and maintenance of the connections to others that are needed for our health and well being as well as for the survival of our genes. That is, just as physical pain is an aversive signal that evolved to motivate one to take action that minimizes damage to one's physical body, loneliness is an aversive state that motivates us to take action that minimizes damage to one's social body. (Cacioppo, Cacioppo & Boomsma, 2014. p.11)

Because loneliness is beneficial for survival, we might expect that people who were vulnerable to feelings of loneliness would be more likely to live to breeding age than those for whom loneliness was a mere irritation. If this were true, we should all be equally vulnerable to loneliness as it had a strong evolutionary benefit. We would all have inherited the gene (or gene complex) for high susceptibility to loneliness.

However, a number of recent experiments have found that this isn't the case. The heritability of loneliness is not 100%. It's almost half that. Over the past dozen or so years several independent groups of researchers have investigated the heritability of loneliness. Some were quite small, focusing on a sample of a few hundred (Waaktaar & Torgersen, 2012; McGuire & Clifford, 2000), while the largest analysed over eight thousand (Boomsma, Willemsen, et al., 2005). All studies inferred the degree of heritability by comparing average correlations between pairs of siblings, including monozygotic twins (identical twins who share 100% of their genetic material) and dizygotic twins (non-identical twins who share approximately 50%). Results indicated that loneliness heritability sits at around the 48% mark, as shown in the below table which compares data from several of these heritability studies:

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Study	Design	N	Age (years)	Country	Heritability (b2)
Boomsma, Cacioppo, Slagboom, and Posthuma (2006)	Twins study (twins and non-twin siblings)	8,387 twins; 2,295 siblings	Range = 18–30	The Netherlands	40%
Boomsma, Willemsen, Dolan, Hawkley, and Cacioppo (2005)	Twin study	3,869 MZ; 4,518 DZ	Range = 18–30	The Netherlands	48%
Distel et al. (2010)	Extended twin study (twins, siblings, partners, and parents)	4,818 twins (half MZ, half DZ); 815 siblings; 3,048 parents; 917 partners	<i>M</i> = 34	The Netherlands and Belgium	37%
McGuire and Clifford (2000)					
Colorado study	Adoption study	69 full-sibling pairs; 64 unrelated sibling pairs	Range = 9–12	United States	48%
California study	Twin study (twins and non-twin sibling	22 MZ pairs; 40 DZ (35) pairs; 80 sibling pairs	Range = 8–14	United States	55%
Waaktaar and Torgersen (2012)	Twin study	536 MZ pairs; 903 DZ pairs	Range = $12-18$	Norway	44%

Table 2. Heritability Estimates of Self-Reported Loneliness

Note: MZ = monozygotic twins; DZ = dizygotic twins.

Table data from (Goossens, Roekel, et al., 2015. p.216)

From these studies, it would appear that around half the population are more susceptible to loneliness than the other half. But if loneliness was so beneficial in ensuring our continued survival over evolutionary time, why is this the case? Why are some people less susceptible to loneliness than others? Again, this question is born of a skewed perspective. The idea that loneliness is beneficial for survival and must therefore be an untrammelled evolutionary benefit, if not a personal one, is too black and white. It doesn't provide the full picture.

Loneliness was an excellent way to keep primitive bands together, that much is clear. It discouraged reckless behaviour, such as wandering off alone, or acts of betrayal, and it made us form tight relationships with our loved ones and companions. However, it also curtailed the instinct to explore. People who were susceptible to loneliness would be unlikely to travel far from their band. They would want to stay with their loved ones and keep them safe. This might sound lovely, but from the long-distance perspective of evolutionary time a population that purely consisted of such people would be a disaster, and unlikely to make it to the modern era. For one thing, such tribes would be

unlikely to evolve culturally. Without some members wandering off alone, getting into trouble, discovering new places, new people, and new challenges, fewer stories would be crafted, and the culture of the group would stagnate. Homo sapiens are narrative beings, and arguably require stories just as much as they require resources like food and water (Pratchett, Stewart, & Cohen, 2002; Rendell, Boyd, Cowden, et al., 2010). Secondly, a group made up of homebodies may succumb to starvation after burning through their local resources and having no knowledge of where additional resources may be found. As a counter to these problems, it seems likely that people with high susceptibility to loneliness and people with low susceptibility to loneliness would have naturally evolved in tandem, and groups that contained a good mix of both types would tend to be more successful than those that consisted of only one.

Individuals who are relatively insensitive to the pain of social disconnection may be more likely to serve as explorers but their insensitivity to social connection may not compel them return to share their discoveries. Individuals who are sensitive to the pain of social connection, in contrast, may be more likely to remain in or return to the group and contribute to the protection and maintenance of the group, but they may be less likely to make solitary journeys that reveal new territories, threats, or opportunities. Both types of predispositions can be important. A population consisting only of explorers may be characterized by sufficiently weak forces holding the group together that the group would splinter when pitted against oppositional forces. A population consisting only of people who are susceptible to loneliness, on the other hand, might be at risk for insecurities of other kinds, such as starvation or predation as a result of a slow rate of exploration and discovery. (Cacioppo, Cacioppo & Boomsma, 2014. p.17)

This variation in loneliness heritability is one major reason that some of the Romanian orphans investigated by Professor Michael Rutter and the other psychologists were less affected by their early maternal deprivation than others. While their upbringing was unquestionably awful, the absence (or at least prolonged non-activation) of the gene complex responsible for high vulnerability to loneliness meant that some of the children were able to grow up relatively untroubled by these early experiences. These children were explorers. They were the heroes and adventurers of the tribe.

And because of their innate genetic resilience they grew up healthier and stronger than their lonelier companions, despite the awful conditions of their upbringing.

Evolutionary Mechanisms for Loneliness

The story behind loneliness does not end there. As we discovered in chapter one, loneliness is a multidimensional construct, consisting of many subtle variations. We have examined loneliness in overview, but this examination has only touched the surface. In this section and those following, our focus narrows to tackle the evolutionary mechanisms behind loneliness in more detail. This includes an examination of the three spheres of perceived social isolation (Brewer & Gardner, 1996), as well as the origins of metaphysical connection. We start with intimate loneliness, the social pain that we feel when our closest connections come under threat.

Evolutionary Mechanisms for Intimate Loneliness

Compared to the young of many animals, newborn Homo sapiens are fragile creatures. Unlike the offspring of reptiles, fish, and many other animals that bear large litter sizes, we emerge into the world entirely helpless (Cacioppo, Hawkley, Ernst, et al., 2006). We lack sharp claws, camouflage, exoskeletons, or any other obvious physical benefits to keep us safe from predation. All we have is our intellect and our parents (Calvin, 2004). And in infancy, when we are at our most vulnerable, we have to rely on mum and dad to keep us safe from harm. Because of this, certain evolutionary mechanisms have evolved to make the infant-mother bond (our strongest intimate connection) as resilient as tempered steel (Bowlby, 1988; Cacioppo, Cacioppo & Boomsma, 2014). These same mechanisms are responsible for the intense feelings of loneliness we experience when our intimate relationships come under threat.

To understand these underlying mechanisms we first have to grasp the concept of parental investment. Put simply, parental investment refers to any personal resource expenditure by a parent that increases the odds that their offspring will survive (Trivers, 1972). Example resources include food and energy. So when an animal such as a blue bird spends a lot of time collecting meal worms to feed her young, we call this parental investment, as the expenditure of time, food, and energy benefits the blue bird's young at a cost to both the mother blue bird herself, and her potential future chicks. Here's how Robert Trivers, the American evolutionary theorist who first proposed the idea of parental investment, puts it:

I define parental investment as any investment by the parent in an individual offspring that increases the offspring's chance of surviving (and hence reproductive success) at the cost of the parent's ability to invest in other offspring. So defined, parental investment includes the metabolic investment in the primary sex cells but refers to any investment (such as feeding or guarding the young) that benefits the young. (Trivers, 1972. p.139)

Different animals expend different amounts of resources when it comes to raising their young. Reptiles, fish, and other animals that produce large broods tend to invest fewer resources per individual offspring than animals that produce a small number of offspring, such as baboons, many birds, and Homo sapiens (Royle, Smiseth & Kolliker, 2012; Clutton-Brock, 1991). Because of this small investment the former animals are more willing to let fate determine their offspring's future than the latter, as they can (in many cases) create more for a similar tiny expenditure. Of course, it's worth bearing in mind that such animals are not deciding this consciously. Their behaviour is largely (but not exclusively) a result of their genes' drive towards self-propagation (Dawkins, 1989).

Infant Homo sapiens take a huge amount of investment, relatively speaking, to bring to breeding age (Trivers, 1972; Cacioppo, Hawkley, Ernst, et al., 2006). This is especially true from the perspective of a child's mother. Not only is she required to carry her unborn child for nine months, she also has to spend many years feeding her child, protecting it, and caring for it before it is able to operate as an independent, functioning person. Because an individual child requires so much parental investment, the mother attaches great value to her offspring. After all, she would not want to see her investment go to waste through the child's early death or failure, especially if it meant that she wouldn't have enough resources available to produce a replacement infant and bring it to

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breeding age.

This is a rather mercenary way of looking at things. But it does provide a glimpse into what might be behind the forces of intimate loneliness. Again, we have to remember that the mother is not consciously weighing up the cost of raising her child. She will still experience love, tenderness, and joy at seeing her infant smile. The cost/reward calculations are taking place at the genetic level (Kolliker, Boos, Wong, et al., 2015; Hamilton, 1964). Hamsters provide a grim example of this. If a mother hamster gives birth to a physically deficient child her genes will push her to eat her newborn, as by consuming the infant she will recover some of the parental investment she expended in its formation, and thus avoid spending more in raising a child that would likely succumb to early death by disease or predation anyway (Day & Galef, 1977; Royle, Smiseth & Kolliker, 2012). As cold as it may be, it's a logical choice – at least from the perspective of the hamster's genes.

For us Homo sapiens, the bond between mother and infant is remarkably strong. Part of the reason for this powerful connection is how loneliness functions as a behavioural mechanism for reinforcing a mother's genetic imperative to protect her valuable investment: her darling child. From an evolutionary perspective raising children can be difficult. When it all gets too much, abandoning the infant can even seem like an attractive or even logical course of action despite the obvious ethical implications. Loneliness is a counter to that behaviour. Activating when a mother is separated from her child, loneliness functions as a behavioural influence to compel her to return and continue caring for her son or daughter, as only through reconnection can she alleviate those aversive feelings of intimate loneliness (Cacioppo, Cacioppo & Boomsma, 2014; Cacioppo & Patrick, 2008). This prevents the newborn or young child from being abandoned, and it prevents the overcome mother from losing her investment. In terms of genetic propagation, intimate loneliness is quite the efficient safety mechanism.

Intimate loneliness from the infant's perspective is somewhat different, but also increases the chances of the infant's survival, along with the continuation of the genes housed within. An infant's loneliness activates when it perceives itself to be isolated from its caregiver and therefore at risk of annihilation from antagonistic forces, such as wolves, other humans, or general environmental hazards such as the cold (Ainsworth, 1978; Schaffer & Emerson, 1964). Of course, a newborn is not

consciously aware of these dangers - it is genetically programmed to behave this way as a result of this type of behaviour leading to a higher chance of survival (during our ancestral past an infant who didn't seek social protection when alone would be unlikely to survive for long). The lonely infant therefore desires to be close to parental figures for protection, a desire stimulated by a genetic drive for survival, and often announced with a plaintive cry carefully balanced to draw attention to itself from parental figures, and to be unbearable to ignore (Dawkins, 1989).

The fact that humans are born in modal litter sizes of one and to a long period of abject dependency changes the effects of the operation of the "selfish gene." If infants do not elicit nurturance and protection from caregivers, or if caregivers are not motivated to provide such care over an extended period of time, the infants perish along with the genetic legacy of the parents. The selfish gene therefore had to add to its repertoire the evolution of social connection and care. (Cacioppo, Hawkley, Ernst, et al., 2006. p.1056)

There is also some suggestion that the loneliness we feel when our romantic relationships are upset is heavily influenced by early incidents of intimate isolation. Children who grow up feeling unwanted, neglected or otherwise ignored by their primary caregiver will tend to form a representational model (a mental construct containing learnt information as to how certain people behave that in turn provides an idea of how to react and interact with that same person and others of a similar type) of their mother or mother-substitute as unavailable and cold. If this model is fixed and remains unchallenged throughout childhood and adolescence, it may be applied to romantic interests in adulthood, as such romantic partnerships are sometimes perceived as dependency relationships similar in part to the mother-child relationship. This could lead to the once-neglected person exhibiting problems with separation, trust, acceptance and a greater vulnerability to loneliness in these later romantic relationships (Hazan & Shaver, 1987; Hunter, 1957). As Bowlby states:

> An unwanted child is likely not only to feel unwanted by his parents but to believe that he is essentially unwantable, namely unwanted by anyone.

Conversely, a much-loved child may grow up to be not only confident of his parents' affection but confident that everyone will find him lovable too. Though logically indefensible, these crude over-generalizations are none the less the rule. Once adapted, moreover, and woven into the fabric of working [representational] models, they are apt hence forward never to be seriously questioned. (Bowlby, 1973. p.204-205)

Studies by several researchers lend merit to this idea. A number of studies have investigated the influence of early infant attachment styles on the development of children's subsequent personalities (Bretherton, 1985; Bowlby, 1973; Burgess, Ladd, Kochenderfer, et al., 1999; Cassidy & Berlin, 1999). Other studies have shown that certain personality types are more vulnerable to loneliness than others (Teppers, Klimstra, Van Damme & Goossens, 2013; Saklofske & Yackulic, 1989). Finally, many leading psychoanalysts have pointed out how psychological issues in adulthood often have their roots in childhood trauma (Freud, 1915; Jung, 1983; Mijuskovic, 2012). Taken together, this cumulation suggests that our early relationship with our mother or primary caregiver is part of the underlying reason that intimate loneliness in later life can be so intense.

Evolutionary Mechanisms for Relational Loneliness and Collective Loneliness

Homo sapiens are not the only social creatures. Many other animals live together in groups and exhibit social behaviour. Bats sweep the skies together in large flocks. Gray wolves hunt in packs. Dolphins swim in schools. Even some species of fish, like the salmon, prefer to stay in close proximity to one another, forming tight balls when danger threatens. Individual members of these species gain several benefits through living, hunting, and travelling in groups. For one, opportunities to mate are more abundant. For another, capturing prey becomes much easier. But the main benefit, and the one to which all these other benefits contribute, is an increased chance of personal survival.

Consider the starling. Being a small, fragile bird, a solitary starling would have a lot of trouble trying to survive in a world that contains peregrine falcons and buzzards. One false move, one small lapse of attention, and the starling would become little more than a light meal. To avoid

this fate starlings have evolved a communal structure known as a flock (Powell, 1974). A flock contains dozens, if not hundreds of starlings, each of whom increase the chances of their personal survival by travelling and feeding with others. One of the key benefits of a flock is the sheer number of eyes. With so many birds analysing the sky and the surrounding environment for signs of danger, a predator has a hard time getting close without being noticed. As soon as one bird spots it, all the birds in the flock are quickly informed through song, and the flock as a whole takes evasive action. For an individual starling in this situation, the sheer number of other birds around it means that the chances of it being targeted by an approaching predator are significantly smaller than if it was flitting around a field on its own. As a result, it becomes more likely to survive and breed (Powell, 1974; Hamilton, 1964).

A starling who has discovered the merits of flocking behaviour through evolutionary means is unlikely to want to leave the group. The starling may not be consciously aware of the danger of isolation – though there is some evidence that starlings, along with many other animals that exhibit similar group behaviour, can experience loneliness (Cacioppo, Cacioppo, Cole, et al., 2015) – but unconsciously it knows that being separated from the group often leads to death. This knowledge is imparted genetically. Its genes will direct the starling to value group behaviour over isolationist behaviour because, quite simply, it lessens the chance of being eaten by a predator.

As in starlings, so in Homo sapiens. By bonding together into primitive tribes our early ancestors gained mutual assistance and protection from the outside world (Cacioppo, Cacioppo & Boomsma, 2014). We developed the dictum of safety in numbers, recognising that to travel, hunt, and work in groups was a generally safer bet than going it alone. Loneliness worked behind the scenes to promote this way of life, causing us to feel social pain (Cacioppo & Patrick, 2008) when we strayed from the group, and giving us a positive boost when we reconnected with our loved ones and larger tribe.

But we already know that things aren't quite as simple as this. Bands that consisted of nothing but people who were susceptible to bouts of loneliness would be unlikely to survive unless they lived in a remarkably verdant area, rich with resources and free from natural predators. There simply wouldn't be enough land or food to go around. And even if there was, inbreeding might have lead to the group's eventual implosion through a lack of genetic diversity. Furthermore, the increased sedentary nature of such a tribe may have put them at risk from annihilation by mobile, war-like populations more willing to explore and seek out foreign resources (Bowles, 2009). The ideal collective would have contained an even split of people who fell into loneliness easily and those for whom loneliness was a rare sensation. This 50/50 mix would have provided enough variation to promote both group cohesiveness and group exploration, strengthening the tribe as a whole.

Intimate loneliness would serve to keep members of our ancestral tribes at home with their families and loved ones. But what about relational isolation? Exile from the tribal group is one important aspect of relational isolation, in that feelings of relational isolation would serve to push people who were on the social boundary to alter their behaviours in an attempt to avoid being cast out from the tribe (Hawkley, Browne & Cacioppo, 2005). This is a straightforward answer to how relational isolation affects behaviour. But there is a more interesting aspect to consider.

Some researchers believe that relational loneliness makes us more compassionate. That it fosters an empathic spirit. That it serves as a punishment for selfish behaviour and promotes more socially positive behaviour (Cacioppo, Cacioppo & Boomsma, 2014). If we imagine that one of our tribal ancestors was made to feel isolated from his tribe, perhaps for a morally dubious act, the subsequent pain of relational loneliness would have pushed him to renounce his formally deviant ways and become a better person in the hope that he might have been welcomed back into the group and not have to perish in the uncaring wilderness beyond his tribe's boundaries (Williams, 2001). This is almost certainly correct, especially when feelings of relational loneliness are inspired by a disconnect with family members. But it does require two small corrections. Relational loneliness does not automatically promote compassion and empathy. Relational loneliness promotes obedience.

Consider a teenage gang. A rough one, like those run by Pinky in Graham Greene's *Brighton Rock*, or Alex from *A Clockwork Orange*. The teenagers in these gangs would have still experienced relational loneliness if pushed aside by other members of the group, and would be well aware of the violent and potentially fatal risks that followed straying into the group periphery, much like our tribal ancestors (Sherif, et al., 1961). But can we say that relational loneliness, in this context, would promote compassion and empathy? It's unlikely. Instead, the onset of relational loneliness would do one of two things. It would either cause a member of the group to withdraw and question their connection to the group as part of identity management (Marcia, 1980), or it would push a member to perform behaviours that advertised their obedience to the general spirit and behavioural norms of the group, whether that be engaging in the harassment of a marked outsider (Greene, 1943), sexually assaulting a stranger (Burgess, 1972) or fighting against a rival gang (Sherif, et al., 1961), to subdue their loneliness. For the teenagers in such gangs, obedience to group norms would lessen the chances of peer-rejection. Not only would this eliminate the social pain of relational loneliness, it would also prevent punishment from the now-antagonistic gang.

In childhood, acceptance by a relational group tends to be a collective decision, determined not by any one individual but by the total combined opinion of the potential group member. We see this identified within a study on acceptance within early childhood peer groups by Jeffrey Parker:

> An important feature of group acceptance is that it describes the collective opinion of a group of children about a target child. In the assessment of group acceptance, each child's opinion of a particular child is given equal weight, and the construct is a summary of the group opinion. Acceptance, then, should be considered a unilateral construct, because the feelings of the focal child about particular class members do not enter into the calculation of group acceptance. (Parker, Saxon, et al., 1999. p.204-205)

But in adolescence and adulthood, this dynamic alters - instead of the combined opinion of a relational group's members solely determining acceptance, the influence of a 'high-status' individual often weighs opinion considerably (Fishbein & Azjen, 2010). Pinky in *Brighton Rock*, for example, could be considered a high-status individual, due to one's acceptance within his group being largely determined by his opinion of the potential candidate. Therefore, in order for an individual to find acceptance within a relational group such as this, they would need to impress or demonstrate worth to this high-status member, usually by adopting certain behaviours deemed 'group normative', even if they are in direct contradiction to their own individual beliefs or behaviours:

Reasoned action theory holds that high-status individuals are influential

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because they establish, model, and enforce social norms. Acceptance is tied to leadership and perceived popularity, markers of dominance in group settings that may translate into influence in dyadic settings. Thus, better accepted friends may exact behavioural change from lesser accepted friends through pressure to conform. (Laursen, Hafen, et al., 2012. p.88)

This may be one reason behind the emergence of violent groups and war-like nations. The desire to conform to an expected group behaviour or set of norms means that attributes and traits that may be alien to an individual's nature are picked up and worn like masks, as the need to fit in and avoid the social pain of relational loneliness (along with often-fatal outcomes, like exile) tends to be stronger than the wish to remain individual and authentic (Erikson, 1968; Marcia, 1980; Sartre, 1948; Sartre, 1942; Sherif, et al., 1961). Relational loneliness, therefore, is as double-edged as intimate loneliness. On the one hand it promotes group cohesiveness: a necessary evolutionary tactic for survival (Cacioppo, Cacioppo & Boomsma, 2014). While on the other it influences individualism, often causing us to conform and acquiesce to the dominant power at the cost of our beliefs, values, freedom, and personal morality.

Collective isolation operates in a similar way. Our collective relationships, such as those we have with our favourite football team, or with our adopted religion, can be seen as exaggerated versions of our relational connections, and the same pressures to conform and demonstrate obedience are present as in our relational groups. This is partly why religious rituals form. For instance, genuflection (descending to one knee) in the Catholic church is, on the face of it, a simple act of obedience. By bending onto one knee a catholic demonstrates their devotion to God (Catholic Church, 2003). But there's more to it than that. Genuflection is also a sign of belongingness. Only Catholics would know when to kneel during the Tridentine Mass, for example, or how the presence of the Most Blessed Sacrament affects the action. A non-Catholic attending Mass is unlikely to know how to behave, and thereby gives away his or her position as an outsider. In this respect, genuflection and similar religious rituals function in much the same way as those rituals teenagers develop within their friend groups - it makes those inside the group feel belongingness, helps them identify people who are outside the group, and reinforces the continuation of the social behaviours (Marshall, 2002;

Dunbar, 2013).

A classical assumption of sociological and anthropological sciences is that that one of the primary functions of religion is to promote group solidarity. Dunbar has suggested that religious rituals developed as a mechanism to help form and maintain social bonds in groups of humans. A wealth of evidence supports this theory, showing that many of the behaviours that are incorporated into religious rituals lead to feelings of social bonding, such as joint attention, shared goals, synchronised movement, music making, eating, and moderate alcohol consumption. Accordingly, religious rituals that incorporate a multitude of these behaviours should foster bonds efficiently. Recently, Charles and colleagues provided the first evidence that religious rituals (Christian and Afro-Brazilian) directly increase feelings of social bonding with other attendees. They collected data in over 20 religious rituals in the UK and Brazil, assessing self-reported levels of social bonding before and then after the rituals. Their results showed that taking part in these rituals significantly increased social bonding towards the group. (Charles, Mulukom, Brown, et al., 2021)

If we step back and look at this ritual-making behaviour within groups from an evolutionary perspective we can see three principal benefits. For one, it would have helped tribes (and later, nations) recognise group membership and identify potentially hostile outsiders. Two, it would have contributed to the evolution and expansion of culture. And three, it would have given individuals an indication that they belonged to a particular group, decreasing feelings of collective loneliness and, as identified in the above quote, increased social bonding.

Over evolutionary time, the most successful Homo sapiens would have been those who were accepted by and lived within a group (Brewer & Caporael, 2006). And the only people who would have been more successful would have been people who belonged to one or more larger groups. This group nesting strategy would have provided several safety nets for times when certain groups failed, collapsed, or became antagonistic to the person in question. Researchers have found evidence to back up this idea. The more groups to which a person belongs, the lower their overall feelings of collective isolation (Hawkley, Berntson, et al., 2005).

Evolutionary Mechanisms for Metaphysical Connection

The feeling of metaphysical connection, that which results from a prolonged experience of authentic solitude, might not fall into the same categorisation as social pain (loneliness). However, it is worth touching upon its origins, as it derives from our first experience of loneliness, and provides us with an excellent opportunity to touch upon that initial sense of separation that constitutes the seed from which our feelings of intimate, relational, and collective loneliness grow forth.

Rather than being beneficial for survival, feelings of metaphysical connection are likely an evolutionary side effect, an epiphenomenon that, while interesting, has no real benefit on the genetic level. To discover its root cause we have to return to infancy, and our first experiences of the world.

Before birth, while floating about in its mother's uterus, an infant can be considered a primal, harmonious unity (Freud, 2004; Mijuskovic, 2012). At this stage it is aware of no real differentiation between itself and other people or objects. It has no idea of the boundaries of its own body in relation to the outside world. Indeed, it isn't even aware that an outside world is a possibility. Essentially, the unborn baby considers itself to be the entire universe. A miniature god possessed of an absolute omnipotence in a self-contained cosmos.

This reassuring illusion doesn't last long. Soon after birth, perhaps after a few days or weeks of gurgling in its cradle, the baby makes two important discoveries. First, it notices that its physical body exists separately from other objects (Winnicott, 1960). Perhaps the baby kicks out and punts a cuddly dinosaur. Though the comprehension may be vague, this small act will lead the baby to acknowledge that this cuddly toy is not itself but rather a separate object with its own distinct existence. The second discovery relates to the first time its basic desires go unsatisfied. Perhaps the baby is lying in its cradle and feels hungry, so it lets out a wail. At some point this desire for gratification is going to go unmet. Perhaps the baby's mother is busy having a shower, and doesn't notice the wailing. This incident of desire-frustration leads the infant to understand that its mother is not a part of itself but, like its cuddly dinosaur, is a separate being: We may conjecture that initially the infant's ego identifies itself with the totality of reality, that, as Hegel puts it, consciousness and being are the same. [...] Next comes the sense of separation or distinction as the child realises, recognises self-consciously, that he and the mother are not really the same consciousness, that they do not possess an identical frame of reference or relation. Ultimately, the ensuing structuralisation process, as delineated by Mahler, eventually culminates in internalised self-representation, as distinct from internal object representation. In Kantian terms, the mental presence within consciousness assumes the meaning of my selfconsciousness only insofar as my self is conceived as existing separately from the cognised object, which stands directly in opposition to my self. It is in this sense that Kant declares that self-consciousness is mutually conditioned by the concept of an object. And it is precisely at this stage of awareness when the self is conscious of the reciprocally conditioning object - that awareness develops into self-consciousness. Thus, the dynamic activities which promote self-identity are also the very same functions which separate the ego from its initial, primordial, amorphous, non-self-conscious unity. At this primitive juncture, loneliness first appears when the child first realises that his (a) libidinal desires, (b) the mother, and (c) the desired object are different, distinguishable, and often in conflict. (Mijuskovic, 2012. p.195-196)

After these incidents the illusion of unity is shattered. The evidence to the contrary is simply too great to be ignored even by the relatively simple mind of a newborn, and we therefore experience our first bout of transient loneliness (intimate loneliness in this instance). This is great news for the newly individuated individual, as it triggers the evolved behaviours which contribute to its survival, such as crying out for attention. Not only this, it also lays the foundations for the development of his or her distinct personality (Fairbairn, 1994), as well as sparking the first fire that will lead us to value social connection and forge powerful bonds with others. But while the illusion of oceanic unity is shredded, it isn't cast aside entirely. Like a repressed memory, it is pushed deep down, concealed by layer upon layer of later experience and almost entirely forgotten. But given the right circumstance, this repressed sense of unity can rush once again to the surface of our consciousness:

Originally the ego includes everything, later it detaches from itself the external world. The ego-feeling we are aware of now is thus only a shrunken

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vestige of a far more extensive feeling – a feeling which embraced the universe and expressed an inseparable connection of the ego with the external world. If we may suppose that this primary ego-feeling has been preserved in the minds of many people – to a greater or lesser extent – it would co-exist like a sort of counterpart with the narrower and more sharply outlined ego-feeling of maturity, and the ideational content belonging to it would be precisely the notion of limitless extension and oneness with the universe – the same feeling as that described by my friend as 'oceanic'. But have we any right to assume that the original type of feeling survived alongside the latter one which has developed from it? Undoubtedly we have. (Freud, 2004. p.13-14)

Many people who experience metaphysical connection, or oceanic unity, regularly comment on how it makes them feel both a sense of longing and a sense of spiritual wholeness or unity (Byrd, 1938). They claim that it's a warm feeling. Like slipping into a comfy bed after a long day of manual labour. As it feels warm and fuzzy, we might expect it to be rooted in something beneficial to our survival. But this isn't the case. It serves no evolutionary purpose. In fact, it may even run counter to survival, as some people report a passing, pleasant desire to commit suicide or surrender to death while experiencing metaphysical connection (Storr, 1988).

But that isn't to say that metaphysical connection is useless. The spiritual feelings it inspires have led to significant cultural developments, including the creation and growth of religions like Hinduism and Theravada Buddhism (Skilton, 2004), and people who experience it often talk of a sense of peace that permanently enriches their lives (Byrd, 1938). Even so, metaphysical connection remains a consequence of the re-emergence of a repressed sense of unity in infanthood - our state of being prior to our first experience of loneliness.

Candidate Genes for Loneliness

So far we have explored heritability and the evolutionary mechanisms behind loneliness, and seen that loneliness is just as much a matter of social environment and nurture as it is genes. But when we talk about a gene responsible for loneliness, what do we actually mean? As should be clear by now, loneliness, with all its many faces and dimensions, cannot be attributable to a single gene or phenotype. It is simply too complex. The loneliness of an abandoned lover is qualitatively different to the loneliness of a long-distance runner in a field at three in the morning, for instance. Both may be experiences of loneliness, but they differ enough to suggest that loneliness may come about through the performance of a genetic orchestra rather than a one-man band. Nevertheless, this hasn't stopped several groups of researchers from independently seeking candidate-genes (a gene hypothesised to influence a phenomenon such as loneliness in a significant way). While these experiments have proved unsuccessful in pinning loneliness on any one gene, a few promising candidates have been discovered (Goossens, Roekel, et al., 2015). The most promising by far is the OXTR gene: a gene crucial in the production and bodily dissemination of oxytocin, a feel-good chemical (Strathearn, 2011).

Oxytocin is a hormone chemical created in the hypothalamus and stored in the pituitary gland that has a number of interesting effects on the human body and on behaviour. Its release from the pituitary gland, usually triggered by positive social interaction and physical contact, floods the body with feelings of calmness, security, and contentment. This has led oxytocin to be described as both the master chemical of social connection and the love hormone (Grillon, Krimsky, et al., 2013). The pleasurable feelings oxytocin imparts makes it an important chemical for forging close relationships with others. Here are a few examples of how oxytocin influences our bodies and behaviour.

During sexual intercourse the body is laced with a steady influx of oxytocin. With this chemical circulating around the system sex becomes more enjoyable, and its presence serves to fortify the bond between those taking part by fostering pleasant associations between partners. People in fledgling romantic relationships tend to have higher levels of oxytocin in their system than those who have been in a relationship for six months or more (Magon & Kalra, 2011; Neumann, 2007). Oxytocin also plays a part in social memory retention, so when we are setting out on a new romantic relationship the memories we create in the initial few months will be more vivid than those we develop farther down the line (Kosfeld, et al., 2005; Guastella, et al., 2009). This serves to once again bolster our romantic intimate relationships.

Oxytocin also affects our personalities. It has been found to make people more extraverted, increasing openness, warmth and trust. Studies have found that people with higher levels of oxytocin in their system perceive themselves in a more positive light than those with lower levels, suggesting that an oxytocin deficiency may be partly responsible for the self-doubt and negative self-perceptions that commonly accompany periods of relational isolation (Cardoso & Ellenbogen, 2011). Oxytocin also helps us predict and respond more appropriately to other people's behaviour (Domes, et al., 2007), and artificial administration of oxytocin can lessen feelings of both relational and intimate loneliness in people who have recently lost a loved one (Meinlschmidt & Heim, 2007; Panksepp, 2003).

But the most intriguing effect, from both an evolutionary perspective and for highlighting the origins of loneliness, is how oxytocin works to reinforce our earliest social bond: that between a mother and her child.

Oxytocin levels in the first trimester and early postpartum period have been positively correlated with certain maternal bonding behaviors, such as gaze with infant, vocalizations to infant, and affectionate touch. Viewing images of their children activates dopaminergic pathways in the mothers' brains associated with reward that also contain high levels of Oxt [oxytocin] and Avp [arginine vasopressin] receptors. Mothers with variants of the serotonin transporter and the OXTR genes (the 5-HTT SLC6A4 and OXTR rs53576 polymorphisms, respectively) show lower levels of sensitive responsiveness to their toddlers (rated by observers on the aid given by the mothers to their children on cognitively difficult tasks), implicating systems involved in production and bonding of Oxt [oxytocin] in maternal responsiveness (Lee, Macbeth, et al., 2010. p.141)

When a mother holds her newborn to her skin, whether to breastfeed or just to hug, both mother and child receive a rush of oxytocin into their systems. For the baby, this generates feelings of trust and attachment, as the flood of oxytocin means it will associate that rush of pleasurable feeling with its mother. If warm physical contact becomes a regular occurrence it should lead the infant to develop a positive representational model of its mother that will make later intimate relationships easier (Hunter, 1957). For the mother, the calmness and contentment that characterises

oxytocin release will help strengthen her emotional bond with her child, until eventually even just an image of her son or daughter will cause them to experience strong feelings of maternal connection.

When an infant suckles at the breast, the stimulation increases the concentration of oxytocin, which then hastens the release of milk. Over time this stimulation becomes a conditioned reflex for the mother, and simply seeing her baby is enough to cause her milk to let down. (Cacioppo & Patrick, 2008. p.137)

Coupled with the aversive effects of intimate loneliness, the influence of oxytocin provides an additional evolutionary safety net to ensure that the mother stays with her infant. In simple terms we might consider oxytocin release the carrot and loneliness the stick that persuades the mother to stay with her child.

To illustrate the importance of oxytocin in the mother-child relationship, let's look at what happens when oxytocin isn't released. Ewes and rats, like humans, generally look after and mother their young. They take care of them, protect them from harm, keep them fed and watered, and lie close to them to keep them warm at night. However, when ewes and rats are injected with a chemical that blocks the natural release of oxytocin during birth, maternal bonding fails, and the mothers tend to abandon their newborns, which, in the wild, often leads to the death of their now neglected offspring. The tendency for maternal bonding to fail when oxytocin isn't released during or straight after birth (or when it is artificially inhibited through injection of an antagonist, such as vasopressin) is illustrated in the below quote from a study on maternal behaviour in rats. In this study, mother rats were injected with the antagonist ornithine vasotocin immediately after giving birth to the first pup, and again after the final pup was born:

The onset of maternal responsiveness to pups presented in the test cage an hour after delivery was extremely rapid in saline-treated controls. [...] In contrast, fetching and grouping of pups were markedly delayed in all antagonist-treated mothers. None retrieved the first pup before 3 minutes, and two failed to collect any of the pups within an hour of testing. [...] All elements of maternal behaviour thus seemed more or less disrupted by i.c.v.

oxytocin antagonist. (Leengoed, Kerker, & Swanson, 1987. p.278-279)

While a lack of oxytocin in no way leads to such whole-scale abandonment in human mothers (remember, we are not completely at the mercy of our genes), its absence can still cause problems that indirectly damage the child's development and inhibit maternal bonding. For instance, a lack of oxytocin in the bloodstream lessens the flow of milk after childbirth (Nissen, Gustavsson, et al., 1997). A deficiency in milk availability is likely to cause a shortfall in the nutrients that the infant needs for healthy development, especially in societies that do not have efficient substitutes for breast milk. Furthermore, low levels of oxytocin, perhaps caused by psychological issues such a depression, or early childhood trauma in the mother (Heim, Young, et al., 2009), may cause human mothers to unintentionally neglect their children (Strathearn, 2011). This could lead to these children exhibiting behavioural issues in later life, and may cause them difficulty in forming strong intimate relationships in adolescence and adulthood.

All this suggests that oxytocin has played an important role in the formation of positive social behaviours throughout our evolutionary history. It also seems to influence many of the phenotypic effects that we associate with loneliness, and the withdrawal of oxytocin triggers (such as physical contact) during periods of isolation may partly explain why we feel fewer emotional uplifts and are more prone to feeling down when lonely. These are the main reasons that many researchers have investigated the OXTR gene.

A number of recent studies have shown that the OXTR gene (or more specifically, the variations of the OXTR gene, known as single nucleotide polymorphisms, or SNPs) might be one of the key players in the orchestra of loneliness (Goossens, Roekel, et al., 2015). Some studies have shown that people with a particular version of the OXTR gene (GG genotype at SNP rs53576) demonstrate stronger social skills and are more willing to trust others than people with another type, suggesting that variations in this gene may influence how susceptible we are to loneliness (Ebstein, Knafo, Mankuta, Chew, & Lai, 2012; Kumsta & Heinrichs, 2013). For instance, if person A receives a greater dose of oxytocin from social interaction than person B (thanks to the presence of a particular version of the OXTR gene), we might assume that person A would be more willing to

pursue social interaction and develop relationships, while person B would rate such pursuits as less important for their happiness. This could mean that person A would generally be less lonely than person B, but could also mean that person A would experience loneliness more intensely during their rarer instances of perceived social isolation.

Other studies have focused on pregnant women and teenage girls, and have found that individuals who possess the same version of the OXTR gene as mentioned above generally demonstrate lower loneliness (Connelly, et al., 2014). Others have found that some forms of the OXTR gene can predict greater stability in a person's susceptibility to loneliness over time (van Roekel, Verhagen, Scholte, et al., 2013).

However, while these studies have shown positive, significant outcomes in relation to the influence of variations in the OXTR genotype on loneliness, the influence is generally small. A single variation in the OXTR allele doesn't seem to affect loneliness all that much, at least not when other influences, such as environment and nurture, are in play. Nevertheless, through these studies of the OXTR candidate gene we have at least taken our first glimpse into the genetic orchestral pit of loneliness. Hopefully, later studies will identify additional genes and genetic networks that will enhance our understanding of the genetic basis of loneliness, and we'll finally be able to better understand just how important genetic and environmental factors are in our feelings of isolation.

The Origin of Loneliness: A Glimpse into a Deeper Pool

The origin of loneliness isn't reducible to a simple explanation. There is no single thing that we can point to and isolate as the sole underlying reason that we experience this emotion. In this chapter we have seen how loneliness comes about through the interaction of countless forces. We have seen that loneliness has a strong heritable component, that it can be passed down through the generations, from our early ancestors all the way to our children and our children's children. We have seen that our early experiences can have a marked impact on our susceptibility to loneliness in later life. And we have examined some of the evolutionary mechanisms that may have influenced the rise of

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loneliness in us as a species.

But the origins of loneliness go much deeper. We have taken a glimpse at some of the interacting forces that have contributed to its evolution and development, but there is still much that evades us. Several interesting pathways have opened up in recent years that highlight just how little we understand about the genetic side of loneliness (see Goossens, Roekel, et al., 2015, for a review), and while we might believe that we have a good grasp on the evolutionary pressures that made loneliness such a persuasive force in our ancestors, solid evidence for these theories is still thin and far between. Nevertheless, what knowledge we do possess should help us to better understand loneliness and recognise many of the beneficial aspects of this often maligned emotion.

References & Bibliography

Ainsworth. M. D. S., (1965) Further research into the adverse effects of maternal deprivation. In Bowlby, J., (Ed.) *Childcare and the Growth of Love*, 2nd ed., London: Penguin Books. 220-230

Ainsworth. M. D. S.; Blehar. M. C.; Waters. E., & Wall. S., (1978) *Patterns of attachment: A psychological study of the strange situation*. Hillsdale, NJ: Earlbaum

Asher. S. R.; Parkhurst. J. T.; Hymel. S., & Williams. G. A., (1990) Peer rejection and loneliness in childhood. In S. R. Asher & J. D. Coie (Eds.), *Peer Rejection in Childhood*. New York: Cambridge University Press

Baumeister. R. F.; DeWall. N. C.; Ciarocco. N. J.; & Twenge. J. M., (2005) Social exclusion impairs self-regulation. *Journal of Personality and Social Psychology*, 88. 589-604

Berlin. L. J.; Cassidy. J., & Belsky. J., (1995) Loneliness in young children and infant-mother attachment: A longitudinal study. *Merrill-Palmer Quarterly*, *41* (1). 91-103

B. M. J., (1942) Loneliness in infancy. British Medical Journal, 2. 345

Boivan. M., & Hymel. S., (1997) Peer experiences and social self-perceptions: A sequential model. *Developmental Psychology*, 33. 135-145

Boomsma. D. I.; Willemsen. G.; Dolan. C. V.; Hawkley. L. C., & Cacioppo. J. T., (2005) Genetic and environmental contributions to loneliness in adults: The Netherlands Twin Register Study. *Behaviour Genetics*, *35*. 745–752

Bowen. S. M., & Miller. B. C., (1980) Paternal attachment behaviour as related to presence at delivery and pre-parenthood classes: a pilot study. *Nursing Research*, *29*. 307-311

Bowlby. J., (1951) *Maternal care and mental health*. Monograph Series, no. 2. Geneva: World Health Organisation

Bowlby. J., (1953) Child care and the growth of love. 1st ed., London: Penguin Books

Bowlby. J., (1973) *Attachment and loss. Vol. 2: Separation: Anxiety and anger.* New York: Basic Books

Bowlby, J., (1988) A secure base: Parent-child attachment and healthy human development. New York: Basic Books Bowles. S. (2009) Did warfare among ancestral hunter-gatherers affect the evolution of human social behaviours? *Science*, 324. 1293-1298

Bretherton. I., (1985) Attachment theory: Retrospect and prospect. In I. Bretherton., & E. Waters (Eds.), Growing points in attachment theory and research. *Monographs of the Society for Research in Child Development*, 50. 3-35

Brewer. M. B., & Caporael. L. R., (2006) An evolutionary perspective on social identity: revisiting groups. In M. Schaller, J. A. Simpson, & D. T. Douglas (Eds.), *Evolution and Social Psychology*. Madison, CT: Psychosocial Press. 143-161

Brewer. M. B., & Gardner. W., (1996) Who is this we? Levels of collective identity and self representations. *Journal of Personality and Social Psychology*, 71. 83-93

Burgess. A. (1972) A clockwork orange. London: Penguin Books

Burgess. K. M.; Ladd. G. M.; Kochenderfer. B. J.; Lambert. S. F., & Birch. S. H., (1999) Loneliness during early childhood: The role of interpersonal behaviours and relationships. In K. Rotenberg & S. Hymel (Eds.), *Loneliness in Childhood and Adolescence*. Cambridge: Cambridge University Press. 109-134

Byrd. R., (1938) Alone. New York: G. P. Putnam's Sons

Cacioppo. J. T.; Cacioppo. S., & Boomsma. D. I., (2014) Evolutionary mechanisms for loneliness. *Cognition and Emotion*, 28. 3-21

Cacioppo. J. T.; Cacioppo. S.; Cole. S. W.; Capitanio. J. P.; Goossens. L., & Boomsma. D. I., (2015) Loneliness across phylogeny and a call for comparative studies and animal models. *Perspectives on Psychological Science*, *10*. 202-212

Cacioppo. J. T.; Hawkley. L. C.; Ernst. J. M.; Burleson. M.; Berntson. G. G.; Nouriani. B., & Spiegel. D., (2006) Loneliness within a nomological net: An evolutionary perspective. *Journal of Research in Personality*, 40. 1054-1085

Cacioppo. J. T., & Patrick. W., (2008) Loneliness: Human nature and the need for social connection. New York: W. W. Norton & Company

Calvin, W. H., (2004) A brief history of the mind. New York: Oxford University Press

Cardoso. C., & Ellenbogen. M. A., (2011) Acute intranasal oxytocin improves positive self-

perceptions of personality. Psychopharmacology, 220. 741-749

Cassidy. J., & Berlin. L. J., (1999) Understanding the origins of childhood loneliness: Contributions of attachment theory. In K. Rotenberg & S. Hymel (Eds.), *Loneliness in Childhood and Adolescence*. Cambridge: Cambridge University Press. 34-49

Catholic Church., (2003) *General instruction of the Roman missal*. Washington D.C.: United States Conference of Catholic Bishops

Charles. S.J.; van Mulukom. V.; Brown. J. E.; Watts. F.; Dunbar. R. I. M., & Farias. M. (2021) United on Sunday: The effects of secular rituals on social bonding and affect. *PLoS ONE 16(1)*

Clutton-Brock. T. H., (1991) The evolution of parental care. Princeton: Princeton University Press

Connelly. J. J.; Golding. J.; Gregory. S. P.; Ring. S. M.; Davis. J. M.; Davey Smith. G.; Harris. J. C.; Carter. S. C., & Pembrey. M., (2014) Personality, behaviour and environmental features associated with OXTR genetic variants in British mothers. *PLoS ONE*, *9*

Dawkins. R., (1989) The selfish gene. 2nd ed., New York: Oxford University Press

Day. C. S., & Galef. B. G., (1977) Pup cannibalism: One aspect of maternal behaviour in golden hamsters. *Journal of Comparative and Physiological Psychology*, *9*. 1179-1189

Domes. G.; Heinrichs. M.; Michel. A.; Berger. C., & Herpertz. S. C., (2007) Oxytocin improves mind-reading in humans. *Biological Psychiatry*, 61. 731–733

Doolittle. W. F., & Sapienza. C., (1980) Selfish genes, the phenotype paradigm and genome evolution. *Nature*, 284. 601-603

Duck. S.; Leatham. G.; & Pond. K., (1994) Loneliness and the evaluation of relational events. *Journal of Social and Personal Relationships*, *11*. 253-258

Dunbar. R. I., (2013) The origin of religion as a small-scale phenomenon. In S. Clarke. (Ed.) *Religion, Intolerance, and Conflict: A Scientific and Conceptual Investigation*, Oxford: Oxford University Press. 48-66

Ebstein. R. P.; Knafo. A.; Mankuta. D.; Chew. S. H., & Lai. P. S., (2012) The contributions of oxytocin and vasopressin pathway genes to human behaviour. *Hormones and Behaviour*, 61. 359–379

Erikson. E. H., (1968) Identity: Youth and crisis. New York: W. W. Norton

Fairbairn. W., (1994) Psychoanalytic studies of the personality. London: Routledge

Fishbein. M. & Ajzen. I., (2009) Predicting and changing behaviour: The reasoned action approach. New York: Psychology Press

Freud. A., (1973) *The writings of Anna Freud, vol. III: Infants without families. Reports on the Hampstead Nurseries (1939-1945).* New York: International Universities Press

Freud S. (1915) The unconscious. London: Hogarth Press

Freud. S., (2004) Civilization and its discontents. London: Penguin Books

Goldfarb. W., (1943) The effects of early institutional care on adolescent personality. *Journal* of *Experimental Education*, 12. 106-108

Goossens. L.; Roekel. E.; Verhagen. M.; Cacioppo. J. T.; Cacioppo. S.; Maes. M., & Boomsma. D. I., (2015) The genetics of loneliness: Linking evolutionary theory to genome-wide genetics, epigenetics, and social science. *Perspectives on Psychological Science*, *10*. 213-226

Grillon. C., Krimsky. M., Charney. D., Vytal. K., Ernst. M., & Cornwell. B., (2013) Oxytocin increases anxiety to unpredictable threat. *Molecular Psychiatry*, *18* (9). 958-960

Greene. G. (1943) Brighton rock. London: Penguin Books

Guastella. A. J.; Carson. D. S.; Dadds. M. R.; Mitchell. P. B., & Cox. R. E., (2009) Does oxytocin influence the early detection of angry and happy faces? *Psychoneuroendocrinology* 34. 220–225

Hamilton. W. D., (1966) The moulding of senescence by natural selection. *Journal of Theoretical Biology*, 12. 12-45

Hamilton. W. D., (1964) The genetic evolution of social behaviour. *Journal of Theoretical Biology*, 7. 1-16

Hawkley. L. C.; Berntson. G. G.; Engeland. C. G.; Marucha. P. T.; Masi. C. M., & Cacioppo. J. T., (2005) Stress, ageing, and resilience: Can accrued wear and tear by slowed? *Canadian Psychology*, 46. 115-125

Hawkley. L. C., Browne. M. W., & Cacioppo. J. T., (2005) How can I connect with thee? Let me count the ways. *Psychological Science*, *16*. 798-804

Luke Thompson

Hawkley. L. C., & Cacioppo. J. T., (2010) Loneliness matters: A theoretical and empirical review of consequences and mechanisms. *Annals of Behavioural Medicine*, 40. 218–227

Hazan. C., & Shaver. P., (1987) Romantic love conceptualized as an attachment process. *Journal of Personality and Social Psychology*, 52. 511-524

Heim. C.; Young. L. J.; Newport. D. J.; Mletzko. T.; Miller. A. H., & Nemeroff. C. B., (2009) Lower CSF oxytocin concentrations in women with a history of childhood abuse. *Molecular Psychiatry*, 14. 954–958

Hunter, I., (1957) Memory: Facts and fallacies. London: Penguin Books

Jablonski, N. G., (2008) Skin: A natural history. Oakland: University of California Press

Jung. C. G., (1983) The psychology of the transference. London: Routledge

Kolliker. M.; Boos. S.; Wong. J. W. Y.; Rollin. L.; Stucki. D.; Raveh. S.; Wu. M., & Meunier. J., (2015) Parent-offspring conflict and the genetic trade-offs shaping parental investment. *Nature Communications*, 6. 6850

Kosfeld. M.; Heinrichs. M.; Zak. P. J., & Fehr. E., (2005) Oxytocin increases trust in humans. *Nature*, 435. 673-676

Kumsta. R., & Heinrichs. M., (2013) Oxytocin, stress, and social behaviour: Neurogenetics of the human oxytocin system. *Current Opinion in Neurobiology*, 23. 1–16

Laursen. B.; Hafen. C. A.; Kerr. M., & Stattin. H., (2012) Friend influence over adolescent problem behaviors as a function of relative peer acceptance: To be liked is to be emulated. *Journal of Abnormal Psychology*, *121(1)*. 88-94

Lee. H. J.; Macbeth. A. H.; Pagani. J. H., & Young. W. S., (2010) Oxytocin: the great facilitator of life. *Progress in Neurobiology*, 88. 127-151

Leengoed. E.; Kerker. E., & Swanson. H. H., (1987) Inhibition of post-partum maternal behaviour in the rat by injecting an oxytocin antagonist into the cerebral ventricles. *The Journal of Endocrinology*, *112*. 275-282

Magon. N., & Kalra. S., (2011) The orgasmic history of oxytocin: Love, lust, and labour. *Indian Journal of Endocrinology and Metabolism*, 15. 156-161

Marcia. J. E., (1980) Identity in adolescence. In J. Adelson. (Ed.) *Handbook of Adolescent Psychology*. New York: Wiley and Sons

Marshall. D. A., (2002) Behavior, belonging, and belief: A theory of ritual practice. *Sociological Theory*, 20(3). 360-380

Malats. N., & Calafell. F., (2003) Basic glossary on genetic epidemiology. *Journal of Epidemiology and Community Health*, 57. 480-482

McCartney. P., (1966) Eleanor Rigby. Revolver. London: EMI Studios

McGuire. S., & Clifford. J., (2000) Genetic and environmental contributions to loneliness in children. *Psychological Science*, *11*. 487–491

Medawar. P. B., (1952) An unsolved problem in biology. London: H. K. Lewis

Meinlschmidt. G., & Heim. C., (2007) Sensitivity to intranasal oxytocin in adult men with early parental separation. *Biological Psychiatry*, *61*. 1109–1111

Mijuskovic. B. L., (2012) *Loneliness in philosophy, psychology, and literature.* Bloomington: iUniverse

Nelson. C. A.; Fox. N. A., & Zeanah. C. H., (2014) Romania's abandoned children: Deprivation, brain development, and the struggle for recovery. Massachusetts: Harvard University Press

Neumann. I. D., (2007) Oxytocin: the neuropeptide of love reveals some of its secrets. *Cell Metabolism*, 5. 231-233

Nissen. E.; Gustavsson. P.; Widstrom. A. M., & Uvnas-Moberg. K., (1997) Oxytocin, prolactin, milk production and their relationship with personality traits in women after vaginal delivery or Cesarean section. *Journal Psychosom Obstet Gynaecol*, 19. 49–58

Panksepp. J., (2003) Neuroscience: Feeling the pain of social loss. Science, 302. 237-239

Parker. J. G.; Saxon. J. L.; Asher. S. R., & Kovacs. D. M., (1999) Dimensions of children's friendship adjustment: Implications for understanding loneliness. In K. Rotenberg & S. Hymel (Eds.), *Loneliness in Childhood and Adolescence*. Cambridge: Cambridge University Press. 201-221

Pinker. S., (1997) How the mind works. New York: W. W. Norton

Pinker. S., (2004) Why nature and nurture won't go away. Daedalus, 133(4). 5-17

Post. R., (2007) *Romania for export only: The untold story of the Romanian orphans.* Netherlands: Eurocomment Diffusion SA

Powell. G. V. N., (1974) Experimental analysis of the social value of flocking by starlings (Sturnus vulgaris) in relation to predation and foraging. *Animal Behaviour, 22*. 501-505

Pratchett. T.; Stewart. I., & Cohen. J., (2002) *The science of Discworld II: The globe.* London: Ebury Press

Rendell, L.; Boyd, R.; Cownden. D.; Enquist, M.; Eriksson, K.; Feldman. M. W.; Fogarty. L.; Ghirlanda. S.; Lillicrap. T., & Laland. K. N., (2010) Why copy others? Insights from the social learning strategies tournament. *Science*, *328*. 208-213

Rotenberg. K. J., (1994) Loneliness and interpersonal trust. Journal of Social and Clinical Psychology, 13. 152-173

Rotenberg. K. J., (1999) Childhood and adolescent loneliness: An introduction. In K. Rotenberg & S. Hymel (Eds.), *Loneliness in Childhood and Adolescence*. Cambridge: Cambridge University Press. 3-8

Royle. N. J.; Smiseth. P. T., & Kolliker. M., (2012) *The evolution of parental care*. Oxford: Oxford University Press

Rutter. M.; Sonuga-Barke. E. J.; Beckett. C.; Bell. C. A.; Castle. J.; Kreppner. J., & Kumsta. R., (2010) Deprivation-specific psychological patterns: Effects of institutional deprivation by the English and Romanian Adoptee Study Team. *Monographs of the Society for Research in Child Development*, 75. 1-252

Saklofske. D. H., & Yackulic. R. A., (1989) Personality predictors of loneliness. *Personality* and Individual Differences, 10 (4). 467-472

Sartre. J. P., (1948) Anti-semite and Jew. New York: Schocken Press

Sartre. J. P., (1942) *Being and nothingness: A phenomenological essay on ontology*. New York: Washington Square Press

Schaffer, H. R., & Emerson, P. E., (1964) The development of social attachments in infancy. *Monographs of the Society for Research in Child Development*. 1-77

Sheppard. P. M., (1958) Natural selection and heredity. London: Hutchinson

Sherif. M.; Harvey. O. J.; White. B. J.; Hood. W. R., & Sherif. C. W., (1961) *Intergroup conflict and cooperation: The Robbers Cave experiment (Vol. 10).* Norman, OK: University Book Exchange

Skilton. A., (2004) A concise history of Buddhism. Cambridge: Windhorse Publications

Storr. A., (1988) Solitude. London: Harper Collins

Strathearn. L., (2011) Maternal neglect: Oxytocin, dopamine and the neurobiology of attachment. *Journal of Neuroendocrinology*, 23. 1054-1065

Teppers. E.; Klimstra. T.; Van Damme. C., & Goossens. L., (2013) Personality traits, loneliness, and attitudes toward aloneness in adolescence. *Journal of Social and Personal Relationships*, 30. 1045-1063

Trivers, R. L., (1972) Parental investment and sexual selection. In B. Campbell., (Ed.), *Sexual Selection and the Descent of Man 1871-1971*. Chicago: Aldine-Atherton.

van Roekel. E.; Verhagen. M.; Scholte. R. H.; Kleinjan. M.; Goossens. L., & Engels. R. C. (2013) The oxytocin receptor gene (OXTR) in relation to state levels of loneliness in adolescence: Evidence for micro-level gene-environment interactions. *PLoS ONE*, *8*

Waaktaar. T., & Torgersen. S., (2012) Genetic and environmental causes of variation in perceived loneliness in young people. *American Journal of Medical Genetics Part B: Neuropsychiatric Genetics*. 580–588

Williams. K. D., (2001) Ostracism: The power of silence. New York: Guilford Press

Winnicott. D. W., (1960) The theory of the parent-infant relationship. *The International Journal of Psychoanalysis*, 41. 585-595

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Chapter Four: Loneliness and Creativity

"In the spiritual and creative experience, there is often no other way but the lonely way." (Moustakas, 1991)

Imagine a ship's hold. Its tightly-packed human cargo. The hot air is claustrophobic; dank with the sweat of fearful bodies long unwashed. The incessant pounding of the Indian Ocean on the clinkered hull drowns any attempt at colloquy. In a corner, enveloped in this crowded loneliness, sits a young Portuguese boy. With his head lowered, an observer would never divine the boy's resemblance to his late father; nor would they see the similarities between this boy and another, the same age, six-feet beneath disturbed earth. As the waves roll and stagger those standing, the boy remains unmoved, anchored by the weight of his isolation, and the oppressive silence. He is considering his future. He thinks upon his mother's rash decision; this trip, this exile to strange shores, the wealthy man his mother swears shall return sunlight to their melancholy lives. He holds little hope for such things. He knows he shall be cast aside. Abandoned. Ignored in the furnace-glow of a fresh relationship that has scant room for a precocious boy. And he knows, with dull certainty, that he shall never return home, nor play again upon those hard, slick cobbles that the morning sun barred with luminous gold, where the dirty, happy children ran and sang and called with their sweet mellifluous voices to him, the quiet, shy boy, who was their gentlest, kindest friend...

For this Portuguese boy, these feelings of loneliness and isolation were to endure. They would shape his future and personality, and awaken the latent creative talents that lay sleeping within. For this boy loneliness and silence were to be a way of life: an unshakable influence that would ultimately lead to his early passing. But for the world of literature, his unbroken melancholy was to be a profound and lasting blessing.

This boy was Fernando Pessoa, one of the greatest Portuguese writers of the 20th century and a man for whom the themes of loneliness, silence, isolation, ostracism, and exile were to be definitive and persistent (Boyd, 1991; Pessoa, 1999). Without the loneliness of bereavement and the silence of his lifelong exile it's unlikely that Pessoa would ever have developed the rich inner worlds and characters that led to the creation of his many poems and fictions. We would have no Alberto Caeiro; no Bernardo Soares; no The Book of Disquiet. It was a desire for sound and community that drove the young Pessoa to populate his inner-world with separate personalities, heteronyms and alter-egos, fictional identities that possessed different thoughts, feelings, and beliefs from his own, that could communicate with each other, argue with each other, and fill his long, lonely silences with the music of intelligent discourse. Silence and loneliness were extremely beneficial for his creativity. But at the same time his loneliness and the mechanisms he employed to deal with his isolation crippled him from a healthy, social perspective. Pessoa left the world having never known the joys of a lasting romantic relationship. His friendships were few and far between, and even those who sought to grow close to him were kept at bay by his intensely private and withdrawn nature (Pessoa, 2003). In later life loneliness drove Pessoa to drink, a common problem for the chronically lonely (Åkerlind & Hörnquist, 1992). And in 1935, after a bout of hepatitis brought on by his descent into alcoholism, Fernando Pessoa passed from life, leaving behind a corpus of unpublished writings that are still being sorted and translated to this day.

Loneliness, and the silence that accompanies lonely hours, is a cursed chalice. While isolation may provide the inspiration and physical opportunities to create masterful works, the price on an individual's health and well-being is often great. Lonely people experience more stress in their lives, affecting their hearts (DeBerard & Kleinknecht, 1995). They find social intercourse more difficult, and will actively avoid it even while they long for closeness with another (Cacioppo & Patrick, 2008). Lonely people perceive themselves in a more negative light and find positive social scenes less rewarding than being alone in silent, natural spaces, such as moorlands and forests (Cacioppo & Hawkley, 2009; Ernst, et al., 2000). They find that sleep doesn't refresh them as well as it should, and they often die at a much earlier age than people who have lived more socially connected lives (Thurston & Kubzansky, 2009; Patterson & Veenstra, 2010). And yet, when we listen to a composition by Beethoven, read the fictions of Virginia Woolf, Rudyard Kipling, or Fernando Pessoa, or admire the haunting paintings of Edvard Munch, it's hard to argue that loneliness isn't sometimes worth its high price. For loneliness is essential for the development of the creative, imaginative soul (Storr, 1988; Averill & Sundararajan, 2014; Long & Averill, 2003; Buchholz, 1997). Without it, many of the world's greatest works may never have come into being.

Imagination and Creativity

The world of man is the material crystallisation of imagination. When we stand in the centre of London and admire the many buildings, streets and statues that constitute the British capital, we are admiring the products of human imagination; of thoughts, feelings, and concepts that were crafted in the mind before they appeared in reality. The same is true of political doctrines, philosophies, religion, works of art and the scientific discoveries that continue to alter the way we perceive the world and each other. They were dreams and fantasies conjured in the imagination long before they were given life and clothed in steel, stone, words and belief.

Every invention, whether large or small, before being implemented, embodied in reality, was held together by the imagination alone. It was a structure erected in the mind through the agency of new combinations and relationships. (Ribot, 1901)

Such reification can have a profound effect on our lives and culture. But from where do these ideas and concepts originate? Terry Pratchett, the late fantasy author, once postulated the presence of inspiration particles: ideas and discoveries wrapped up in small packages no bigger and no more substantial than neutrinos, streaming through the cosmos, and that the impact of these particles with a human mind was what caused great creative ideas to form in the imagination (Pratchett, 1988). Historical explanations have been no less outlandish. Many poets, artists, writers and brilliant thinkers have, at different times, attributed their sudden creative epiphanies to divine inspiration,

the attentions of muses, or other abstract, noumenal phenomena:

The poet unaccountably finds himself dominated by something which absorbs his being... [The idea] has a powerful character and atmosphere of its own, and though at first it is too indefinite for intellectual analysis, it imposes itself on the poet with the majesty and authority of vision. Even if he does not fully understand it, he feels it and almost sees it... Inspiration sets to work with a will which nothing can withstand. (Bowra, 1955. p.4-5)

Such explanations are unsatisfactory and largely incorrect, for they assume that brilliant ideas come from without, in a sudden creative flash. This view is back to front. Great ideas develop slowly. Internally. They emerge in vault of the mind – even if they were triggered by something external, like Newton's apocryphal apple. Ideas rely on the personal accumulation of prior experience, and they rely on the combinatorial nature of our imagination (Vygotsky, 2004).

Imagination as a Combinatorial System

Any system that can generate an infinite number of combinations from a finite number of elements is known as a discrete combinatorial system (Pinker, 1994). This is a little too abstract for our purposes, so here's a concrete analogy that we can continue to refer to throughout. A grand piano has 88 separate keys: 36 black keys, and 52 white. Each plays a particular note, unique to that key. If you pressed the same key a hundred times it would continue to make the same sound indefinitely. However, when you combine the keys, pressing them in different orders, sometimes two or three at a time, you can create an infinite number of unique permutations, or compositions. There is no upper limit to the number of compositions you can create on a piano with 88 keys. Even if you played a new song on the piano every hour of every day until the end of the universe, the vast pool of possible compositions would barely register a ripple. Because of this characteristic, the ability to create an infinite number of combinations with a finite number of elements, we refer to the music of a pianoforte, and music as a whole, as being a combinatorial system. Now imagine that instead of keys the piano used your memories. That each key was one particular moment of your life, carefully stored away in the vault of the hippocampus. When you close your eyes and daydream you become a pianist sitting before this curious instrument, this imaginarium, and all the fantastic scenes, objects, and events that burst into your consciousness are compositions created by your performance.

While this helps us picture how our imagination functions (and is, itself, a product of the imagination system), it doesn't fully explain our imagination's combinatorial nature. The keys, for instance, are not actual memories but *impressions* of previous experiences (Vygotsky, 2004; Hunter, 1957). They may be the smell of dust (an impression retained from the time you sat on an old armchair), or the feel of the sun on your bare skin (an impression from an all-but forgotten holiday in the south of France when you were five years old). When these past impressions are combined by a bout of creative imagination we generate new ideas, or personal inspirations, that may lead us to a glorious poem, an outstanding work of architecture, or a new political concept:

Everything the imagination creates is always based on elements taken from reality, from a person's previous experience. It would be a miracle indeed if imagination could create something out of nothing or if it had other sources than past experience for its creations. [...] Scientific analysis of works of the imagination that are as fantastic and remote from reality as they could possible be, such as fairy tales, myths, legends, dreams, and the like, persuasively argue that the most fantastic creations are nothing other than a new combination of elements that have ultimately been extracted from reality and have simply undergone the transformational or distorting action of our imagination. A hut on chicken legs exists, of course, only in fairy tales, but the elements from which this fairy tale image is constructed are taken from real human experience, and only their combination bears traces of the fantastic, that is, does not correspond to reality. (Vygotsky, 2004. p.13)

Furthermore, many of the memory impressions that constitute the keys of our imaginarium may be clumsy composites of multiple half-remembered events. In a previous chapter we discussed representational models. When an infant cries and his mother fails to materialise and comfort him, he begins to develop a representational model of his mother as unavailable (Bowlby, 1973). This then

colours his expectations within future intimate relationships, including his relationship with a future spouse (Hazan & Shaver, 1987). But when we say that the infant builds this concept of his mother as unavailable, he is not drawing upon any singular memory. His concept of mother availability is a construction built from the accumulation of similar experiences that have meshed together to form an impression of those events as a single mental entity. This impression then takes the form of one key in our imaginarium, despite being a construct of multiple 'lesser' impressions.

Every product of the imagination is therefore based on authentic real-world experience. Without real experiences imaginative play would be impossible. With this in mind it would logically follow that a person with more life experience, such as an explorer, soldier, or travelling bard, would have a richer imagination than a person who had spent the majority of their years confined to one place, as the Russian psychologist Vygotsky states:

The richer a person's experience, the richer is the material his imagination has access to. This is why a child has a less rich imagination than an adult, because his experience has not been as rich. If we trace the history of great works, great discoveries, then we can almost always establish that they were the result of an enormous amount of previously accumulated experience. Every act of imagination starts with this accumulation of experience. All else being equal, the richer the experience, the richer the act of imagination. (Vygotsky, 2004. p.15)

There is truth to this. However, just as a pianoforte with only three keys can still create an infinity of compositions (just as you can always increase the highest mathematical number by adding the integer one, you can endlessly increase the number of compositions by adding one more note), a person can still develop a brilliant imagination even if their experience is limited. This is due to our imagination system's remarkable ability to curve in on itself.

Our imagination system can create new finite elements by combining existing ones and storing the results as distinct elements that can be drawn upon at a later date. To continue our piano analogy, it would be akin to performing a composition and then retaining that composition as an additional key which could be woven into a later composition without having to be re-composed beforehand. By repeating this process multiple times, a pianist could logically put together brand new compositions by combining previously created compositions in different orders. Indeed, many electronic keyboards permit just this.

To illustrate this ability further, let's create a hypothetical experiment using a fictional child. We'll call him Pushkin. Pushkin is a five year old boy. He is in a room with four small toys: a wooden block, a cotton giraffe, a model house, and a small tin soldier holding a flag. Pushkin has never been outside the room and has never experienced anything that we would expect a boy of five to have previously experienced. For our hypothetical, the only things available to Pushkin's imagination system are these four objects. Pushkin touches the toys, tastes them, smells them, observes how they bend, makes the doors on the house open and close, and so on. Pushkin soon becomes tired of this and abandons the toys. He then closes his eyes and engages in imaginative play. What kind of things might Pushkin create in his imagination? Let's go with four outcomes: a cotton house, a tin soldier with a giraffe's long neck, a wooden soldier with a door in his chest, and a flag displaying an image of a giraffe-coloured block. These fantastical creations then become elements in their own right, as concrete to Pushkin's imagination system as the four objects that exist in reality. The next time Pushkin plays he imagines these fictive creations as being present, and pretends that when the tin soldier with the flag (real) opens the door in the wooden soldier's chest (fictive), it reveals a room occupied by several small giraffes (fictive). At this point Pushkin can abandon the physical toys and continue generating new elements by combining these chimerical ones, spiralling ever inwards into his own private, imaginative world.

From this simple hypothetical we can see how new finite elements can be generated to provide material for the imagination system, even when we confine ourselves to concrete objects.

But what hard, scientific evidence do we have for our imaginarium? Handily, this has recently been demonstrated in a 2019 study by Andrey Vyshedskiy, a researcher at the University of Boston, who examined the process of 'Pre-frontal synthesis' - the same constructive, combinatorial process as outlined above. In his study he outlined the neurological processes involved in the production of our imaginative fictions, and demonstrated that our conscious experiences of an imagined object, place, or person can be seen as a physical process occurring within the mind: The scientific consensus is that each familiar object is encoded in the brain by a network of neurons known as a neuronal ensemble. The sensory component of each object stored in memory is physically encoded by neurons of the posterior cortex, that was auspiciously named by Christof Koch and colleagues 'the posterior cortical hot zone' for its ability to singlehandedly generate conscious experience. When one recalls any object, the object-encoding neuronal ensemble (objectNE) in the posterior cortical hot zone activates into synchronous resonant activity that results in conscious perception of the object. The neuronal ensemble binding mechanism, based on the Hebbian principle "neurons that fire together, wire together," came to be known as the Binding-by-Synchrony (BBS) hypothesis. However, while the Hebbian principle explains how we perceive a familiar object, it does not explain the infinite number of novel objects that humans can imagine. To account for the limitless constructive imagination, it is proposed that synchronization of independent objectNEs [object-encoding neuronal ensemble] is a general mechanism underlying any novel imaginary experience. [...] PFS [pre-frontal synthesis] involves spatial combination of two or more objects from memory into a novel mental image. The mechanism of PFS under the [Binding-by-Synchrony] hypothesis involves the LPFC [lateral pre-frontal cortex]-orchestrated synchronization of independent objectNEs to fire in-phase with each other. When two or more independent objectNEs are activated to fire synchronously, they are consciously experienced as one unified object or scene. In this process humans can purposefully manufacture an unlimited number of novel mental images and can plan their future actions through mental simulation of the physical world. (Vyshedskiy, 2019. p.90-91)

Vyshedskiy's work shows us how our imagination is not the work of mysterious, noumenal forces nor the attention of celestial beings, but is a physical function occurring within our brains that can be both mapped and observed.

Our imagination system is remarkable, but it can be unhealthy if left unchecked. One who continually spirals inwards into the combinatorial creations of their mind can lose touch with reality and become a victim of their own imagination. In the immortal words of Goya, 'imagination abandoned by reason can produce impossible monsters' (Goya, 1969). What starts as a fun diversion from reality can overwhelm and consume, so that the personality of the person imagining becomes inseparable from the created fantasies.

Years after he dreamt up his first heteronyms, Fernando Pessoa acknowledged this difficulty within his own mind. He came to recognise that his playful imaginings had become uncontrollable, and that the personalities he had developed had steadily become richer than his own:

I have cultivated several personalities within myself. I constantly cultivate personalities. Each of my dreams, immediately after I dream it, is incarnated into another person, who then goes on to dream it, and I stop... To create, I destroyed myself; I made myself external to such a degree within myself that within myself I do not exist except in an external fashion. I am the living setting in which several actors make entrances, putting on several different plays. (Pessoa, 1991. p.62)

Our imagination's ability to curve in on itself and create chimeras can be dangerous if left unchecked, as Pessoa experienced. But despite the pitfalls it is still a remarkable ability, and one that has proven exceptionally useful for people in the past, especially for creative individuals like Doctor Edith Bone.

In 1949 Doctor Edith Bone was accused of spying by the Hungarian Secret Police and detained in solitary confinement. Throughout her seven years of imprisonment she was frequently left alone in absolute darkness for months at a time with nothing to occupy her attention and zero human interaction beyond the brief moments where food and water were shoved through the door by an anonymous prison guard (Bone, 1957). To prevent from descending into madness Edith used her imagination's ability to curve in upon itself (Storr, 1988). From the memory impressions of her past, and of the many plays and stories that she had read in her lifetime, she was able to create whole new narratives, plays, and poems purely within her own mind. Through this Doctor Edith Bone was able to maintain her mental agility, and though her physical health was damaged considerably by her imprisonment, she managed to retain both her sanity and her sense of self:

Dr Bone invented various techniques for keeping herself sane. She recited and translated poetry, and herself composed verses. She completed a mental inventory of her vocabulary in the six languages in which she was fluent, and went for imaginary walks through the streets of the many cities which she knew well. [...] She is not only a shining example of courage which few could match, but also illustrates the point that a well-stocked, disciplined mind can prevent its own disruption. (Storr, 1988. p.48)

For Doctor Edith Bone, imagination acted as both salvation and creative retreat during her loneliness.

The combinatorial nature of the imagination, how accumulated experience provides the material that we draw upon when we imagine, is central to our creativity. But this is only half the story. Just as owning a piano doesn't automatically make you a virtuoso, possessing a bountiful store of life experience doesn't necessarily make you a great creative thinker. A budding pianist must dedicate himself to the instrument if he wishes to become a musician. He must practise. He must spend time learning scales, tinkling the ivories. The same requirement applies to someone who wishes to develop a rich and creative imagination.

Imagination and Daydreaming

Imagination is not exclusively the domain of the creatively gifted. Every one of us has access to it. A man who might claim never to waste his time imagining will still, most likely, have wondered at some point about the dinner awaiting his return from work – an act that relies on an active imagination system. And a self-confessed unimaginative parent, worried about the late return of a child, is still liable to imagine all the terrible scenarios that could have befallen their child before their offspring sidles through the front door, looking sheepish. We all have the ability to imagine, no matter our background and upbringing. But some people are better at imagining than other people (Antrobus, Coleman & Singer, 1967). As with most things, there is no sole reason why this might be the case. The growth of the imagination is influenced by innumerable factors. And yet not all of these factors carry the same weight. Some are more important than others, and one of the most important factors in the growth of the imagination is the ability to daydream (Storr, 1988).

Daydreaming is far from an idle pastime. It is creatively charged (Singer, 1974). When we daydream we are playing with our imagination system. We are combining elements, making up false and fantastic futures, composing and performing minor scales on the keyboard of our imaginarium. Through daydreaming we build upon our imagination, and the more we daydream the better we become at using and manipulating our inner imaginarium.

Daydreaming occurs in one of two ways: volitionally and unintentionally. Most of us slip into daydreaming from time to time without meaning to. This usually happens when our attention flags, when we are exposed to some boring or repetitive task like washing the dishes. This kind of daydreaming is unintentional, and while it does provide some practice with our imaginarium it is less productive than when we actively choose to daydream. We might put together a jingle when we daydream unintentionally, but we're unlikely to compose something comparable to Brahms' symphonies. For daydreaming to be truly beneficial it has to become a conscious act, not just a reaction. We have to be able to daydream at will. It has to become volitional.

Throughout the literature, mind wandering is portrayed as a mistake, a mental mishap, a cognitive failure. What is seldom acknowledged is that mind wandering can also be volitional. Individuals can choose to disengage from external tasks, decoupling attention, in order to pursue an internal stream of thought that they expect to pay off in some way. The pay off may be immediate, coming in the form of pleasing reverie, insight, or new synthesis of material, or it may be more distant as in rehearsing upcoming scenarios or projecting oneself forward in time to a desired outcome. Projection backward in time to reinterpret past experiences in light of new information is also a possibility. All of these activities, which take place internally, sheltered from the demands of external tasks and perception, offer the possibility of enormous personal reward. These mental activities are, in fact, central to the task of meaning making, of developing and maintaining an understanding of oneself in the world. (McMillan, Kaufman, & Singer, 2013)

As McMillan, Kaufman, & Singer state, a volitional daydream is one we choose to experience. That we actively pursue. A poet who sits beside a brook and lets her mind wander in search of poetic inspiration is engaging in volitional daydreaming. So too is an unhappy child who sits alone in the school playground and fantasises about being exiled to a magical, wonderful land. Unlike everyday unintentional daydreaming - the kind of daydreaming we drift into without any conscious intent volitional daydreaming requires effort. It is a skilled act. To engage in a volitional daydream a person must be both willing and able to mentally detach from their immediate environment and allow their mind to float, unimpeded, with little to no direction, whenever they desire. This requires conscious cultivation. It requires practice. And most of all, it requires both solitude and transient loneliness.

Daydreaming, Creativity and Solitude

Daydreaming is facilitated by solitude (Storr, 1988; McMillan, Kaufman & Singer, 2013). When we are physically alone, free of distractions, our minds can wander and we can journey inwards. Natural settings often provide the right kind of environment for solitary daydreaming (Korpela & Staats, 2014). We might find that a long walk in the woods or a morning sat beside a riverbank can provide both the solitude and the opportunity for uninterrupted daydreaming usually denied us in our daily grind (Rousseau, 1979). But by the same ticket we might find that an hour lying on the bed alone or thirty minutes sitting in an empty train carriage on the way home from a shopping trip equally provides the aloneness required for daydream and imaginative play. No matter where we may be, when we are physically alone, idle and content with the situation, daydreaming often takes place.

When at home alone I sit And am very tired of it, I have just to shut my eyes To go sailing through the skies To go sailing far away To the pleasant Land of Play. (Stevenson, 1916)

Stevenson's poem *The Little Land* demonstrates an act of volitional daydreaming facilitated by objective social isolation, or solitude. In the poem, Stevenson is alone. But he isn't experiencing the social pain of loneliness. Rather, Stevenson is happily alone. He is also tired and content. This situation means that Stevenson is both mentally and physically free to pursue his daydreaming. He is able to frolic in the land of his imaginarium, a place rich with wonder and ideas. For the real Stevenson these periods of blissful lonely freedom likely gave him a place where he could construct wild and glorious imaginings. Imaginings that undoubtedly fed his creativity and imbued his works with the charm and wistfulness that characterises many of his poems and stories.

Many creative individuals have praised the creative virtues of solitude over the years, some from a pragmatic perspective, such as Virginia Woolf, who was very vocal about promoting the basic need for a writer to own a private room within which they can retire from their social environment to engage in creative production without any distractions (Woolf, 1929), some from an anecdotal perspective, such as Mozart:

When I am, as it were, completely myself, entirely alone, and of good cheer - say, travelling in a carriage or walking after a good meal or during the night when I cannot sleep - it is on such occasions that my ideas flow best and most abundantly. (Holmes, 2005. p.255)

And some from a purely romantic or philosophical perspective, such as Thomas Mann, 'The fruit of solitude is originality, something daringly and disconcertingly beautiful, the poetic creation.' (Mann, 1998. p.218), and Henry David Thoreau:

Whoever has had one thought quite lonely, and could contentedly digest that in solitude, knowing that none could accept it, may rise to the height of humanity, and overlook all living men as from a pinnacle. (Thoreau, 2009. p.248)

Even people outside of creative industries remark on solitude's exceptional power to facilitate creative thought. For example, the noted psychologist Margaret Morgan would frequently take long daydream-filled walks alone. During these walks she would think about everything and anything, forming complex stories in her imaginarium to keep herself entertained and distracted from her worries. These creative daydreams helped her plan her future life and settle on her long career as a psychologist (Buchholz, 1997). Many students in non-creative fields and adults outside of higher education also find solitude useful. Creative thought, problem solving, creative incubation, and the pursuit of creative endeavours are all bolstered by periods of solitude, as several independent studies have shown (Averill & Sundararajan, 2014; Long & Averill, 2003).

Solitude is certainly beneficial for daydreaming and practising on the keyboard of the imaginarium, but solitude is not always easy to attain. In early and mid-adulthood solitude can be a rare commodity. The increasing pace of present-day life means that there are fewer opportunities to be alone and lose oneself in creative daydreaming. Long workdays in social settings and the heightened demands for performance, output and workplace engagement mean that time that would have been spent in imagining is now spent recovering from mental fatigue. Sadly, the absence of solitude opportunities also means that we no longer have the time to even recognise our need for aloneness. This can lead to incidents of stress and mental exhaustion that we cannot easily pin to a cause. For many marriages, this can be fatal (Barbour, 1993), and when we have no time to daydream and play in our imaginarium we may find that life loses much of its lustre (Winnicott, 1971). Even more unfortunate are those who come late to solitude and daydreaming, such as people who have grown up enmeshed in the modern world of easy electronic distraction (Turkle, 2015). For these always-on souls, periods of solitude and contemplation are perceived as frightening and aversive rather than restorative or beneficial for creativity and happiness. We can see this in Wilson's experiments with college-age students and solitude experiences, where most were far more willing to electrocute themselves than sit alone in quiet contemplation for fifteen minutes (Wilson, et al., 2014). The common perception of solitaries as unusual, pitiable, or somehow damaged, generally propagated by media stories involving dangerous loners and persistent adolescent fears of ostracism, also makes people shun solitude – despite the many creative benefits it offers.

But it isn't all bad news. Several methods have recently arisen that have been found to help adults reconnect with the calm, comforting solitude that facilitates creativity and daydreaming. One is secular mindfulness meditation. During a meditation session a person sits in a quiet room free of distraction, focuses upon their breathing, and allows their mind to empty of all thought (Marlatt & Kristeller, 1999). People who frequently meditate remark on the mood boosts and creative benefits that meditation provides, but we don't have to rely on anecdotal evidence to know that meditation is great for daydreaming and creativity. A study from 2005 found frequent mindfulness meditation had a beneficial effect upon cortical plasticity - the neurological structure that underpins our mind's ability to retain prior experiences - as well as the thickness of several brain areas, including the left superior temporal gyrus (a region of the brain responsible for attending to a single voice - including one's internal voice - during high levels of background noise), and Brodmann area 9 (a region of the brain responsible for our short-term memory, inferring the intention of others, inductive reasoning, spatial memory, recognition, and recall):

Within the search territory, a large region of right anterior insula and right middle and superior frontal sulci corresponding approximately to Brodmann areas 9 and 10 were significantly thicker in meditators than in controls. The left superior temporal gyrus and a small region in the fundus of the central sulcus showed trends towards a significantly thicker cortex in meditation participants than in controls. (Lazar, Kerr, Wasserman, et al., 2005. p.1896)

As the retention and recollection of prior experience constitutes a core pillar of our imagination's combinatorial system (Vygotsky, 2004; Vyshedskiy, 2019), this shows that meditation can reconnect adults to their inner imaginarium, increase their familiarity and pleasure with solitude experiences, and can help bring forth the latent creativity that is so often lost in the rush of modern life.

Solitude and the capacity to be alone are important players in the development of an active and rich imagination (Winnicott, 1971; Storr, 1988). But the opportunities and willingness to be alone are not enough to generate the outstanding creativity that we see in many talented writers and artists. While a pianist with the time to practice his art may create many fine compositions, he will still fail to reach the heights of Chopin if he lacks the inner-fire that will push him to mastery. Creative geniuses like Beethoven, Woolf, Kafka and Pessoa all have something else besides a love for solitude and an acknowledgement of its creative benefits. They all possess some deep burning flame that pushes them to the pinnacle of their crafts and that elevates their imaginarium from the everyday to a creative nadir that few can ever hope to match. This something is loneliness: the cursed chalice that bestowed Fernando Pessoa with masterful creativity, but that consumed his life.

Daydreaming, Creativity and Loneliness

Writing is an act of communication (Storr, 1988). It's rare to find a novel written for no-one. Even rarer to find a collection of poetry written purely for the honest love of composition. When we write creative works we are attempting, consciously or unconsciously, to connect with other people. We are attempting to become recognised, to attract fans, plaudits, to share our knowledge and viewpoint with others. And most of all, we are attempting to validate our existence, to know that we are known, just as the philosopher Benjamin Mijuskovic, whom we quoted in a previous chapter, reminds us:

And I would add that even the artist, for example, who suffers isolation so that he may write his novel does so primarily because he imagines that eventually he will be more than compensated for his sacrifice when his work results in promoting his "fame" (i.e., recognition from other consciousnesses) thereby giving him the assurance, by others, of his own individual existence - a proof that he is not alone. (Mijuskovic, 2012. p.64-65)

The pursuit of existential validation is central to any writer's desire for publication, however much one may protest to the contrary. When we discover written works not intended for publication their fragmentary, directionless nature can bewilder and enchant. We might even feel a tinge of guilt, as though we had trespassed into a beautiful rose garden. This is one reason why much of Fernando Pessoa's work is so unique and captivating. A reader gains a great deal of pleasure from Pessoa's *The Book of Disquiet* when they know it was written on hundreds of pieces of paper thrown in no order into a trunk. Equally, some of the most enchanting creative pieces reside in the diaries of writers who had no intention of letting their diaries be disseminated amongst the braying public - the diaries of Franz Kafka, especially, which were published against his specific wishes to have them destroyed, are prime examples of this.

This desire for existential validation is a desire to conquer loneliness (Mijuskovic, 2012). A person who turns to writing or art in order to overcome their loneliness does so because loneliness has been instrumental in providing them with the tools needed to become a writer or artist (Storr, 1988). Through social isolation they will have developed a rich imagination, a love of daydreaming,

and a fondness for creating fictions much as one who grew up lifting weights will have developed strong muscles. Fiction-making becomes their main skill, and it is only natural that they employ this when seeking to correct their unsatisfactory social reality.

For many writers and artists social isolation begins in childhood, and their loneliness tends towards the chronic. Unlike transient loneliness, chronic loneliness sets in as a trait, permanently altering their outlook, behaviour and personality (Peplau, 1982). When loneliness is chronic, even bountiful love cannot shift its aversive influence. For many creative writers and artists, this means their pursuit of verification through publication is often futile, resulting in profound disappointment when the pain of their loneliness remains unchanged, even as the whole world sings their praises.

Childhood loneliness is a recurrent theme in the lives of many of the greatest writers and artists. As we have seen with Fernando Pessoa, for creative geniuses early isolation is a double-edged sword. While it gives them unmatched creative powers it also strips them of much of life's joy, polluting their hearts and minds like oil on a Caribbean lagoon. The social relationships of truly creative people are seldom stable. Companionable love often eludes them, and an early death is frequently around the corner (Patterson & Veenstra, 2010). The lives of creative people like Pessoa are rarely enviable, but only the most ardent philistine would argue that the creative fruits of such difficult and lonely lives are not sometimes worth the price of their burden. To illustrate this point, let's examine the early instances of loneliness experienced by some of the world's greatest creative people, and how their unaddressed feelings of social pain fuelled and influenced their work.

Loneliness and Creativity: Rudyard Kipling

Born in Bombay in 1865, Rudyard Kipling, the proud son of English parents working in India, passed the first years of his life in a dream-like happiness (Storr, 1988). He was raised with all the love a small boy could desire, doted upon by his mother, father, ayah (native nursemaid) and Hindu bearer. In these formative years he was exposed to Bombay culture, taken around the many markets and temples, and allowed to wander in the company of his guardians. Kipling would later refer to

these days as being awash in light and colour (Kipling, 2008). But like the dreams they resembled they could not last forever, and just before his sixth birthday, after a long trip to England on a crowded passenger ship, the young Rudyard Kipling found himself abandoned in a dark and foreboding place, lost, isolated, and bereft of love (Kipling, 1995).

For the next six years Kipling lived in a Portsmouth boarding house in the care of an evangelical English woman named Mrs Sarah Holloway. Kipling described his new home as a 'house of desolation... smelling of aridity and emptiness' (Kipling, 2008). No happiness was to be found within its dour walls, and his new guardian would regularly punish him with beatings and solitary confinement for the most minor of indiscretions. This binary change in circumstance transformed the once joyous Kipling into a nervous, anxious, and fearful young boy. Dream had shifted into nightmare, and the young Kipling recognised that he would have to turn his attentions inwards if he hoped to escape (Kipling 2008). Seeded with memories from his time in Bombay and from the few books he unearthed at the Holloway's, Kipling's imaginarium granted him the escape he desperately desired, and metamorphosed his once-dreaded solitary punishments into times where he could run free in a world of his own devising.

When my Father sent me a Robinson Crusoe with steel engravings I set up in business alone as a trader with savages (the wreck parts of the tale never much interested me), in a mildewy basement room where I stood my solitary confinements. My apparatus was a coconut shell strung on a red cord, a tin trunk, and a piece of packing-case which kept off any other world. Thus fenced about, everything inside the fence was quite real, but mixed with the smell of damp cupboards. If the bit of board fell, I had to begin the magic all over again. I have learned since from children who play much alone that this rule of 'beginning again in a pretend game' is not uncommon. The magic, you see, lies in the ring or fence that you take refuge in. (Kipling, 2008. p.8)

Kipling discovered that solitude was not something to be feared, but something to be treasured. This realisation became the lifeline that kept Kipling from falling into the overwhelming darkness that lay beneath his feet, and later, when his eyesight began to fail and he found himself more isolated than ever before, Kipling's love of solitude and daydream became his only spiritual defence (Kipling, 1995). Unlike Pessoa, who would stay within the walls of his imaginarium for the remainder of his life, the return of Kipling's parents rescued him from fantasy and returned him to a reality that once again contained love and happiness. Nevertheless, the six years of chronic loneliness and daydreaming left a deep mark on Kipling, and can be felt across his works. We see Kipling's loneliness in the isolation of Mowgli, a boy raised by wolves and later ostracised from the animal family that, though they were not his true people, he came to love (Kipling, 1894). We also see loneliness and neglect in the maltreatment of Gunga Din, and his proud self-insistence of his own intellectual superiority over those who beat him (Kipling, 1892). However, the influence of Kipling's loneliness is most apparent in his short story *Baa, Baa Black Sheep*: a semi-autobiographical account of a young boy's exile from his family, and a story that reveals just how deeply his early loneliness affected Kipling's life, and how it transformed him from a once-outgoing and exuberant boy from Bombay into a quiet, reserved, and solitary young man marred by a deep and enduring darkness.

When young lips have drunk deep of the bitter waters of Hate, Suspicion, and Despair, all the Love in the world will not wholly take away that knowledge; though it may turn darkened eyes for a while to the light, and teach Faith where no Faith was. (Kipling, 1995. p.39)

Loneliness provided the fire for Kipling's creative brazier. It was an inspirational, if personally destructive, force. But there was one facet of Kipling's loneliness that was advantageous for both his survival and his creativity, and that was an increased awareness to social threat (Cacioppo, Bangee, Balogh, et al., 2016). During his time at the Holloway's Kipling became an adroit judge of other people's moods, especially those of Mrs Holloway and her son. Within seconds he could tell when he was about to be accused of some indiscretion, or if he was to be punished for some inconsequential act. Even the particular way that Mrs Holloway's son ascended the stairs triggered Kipling's awareness of incoming danger (Kipling, 2008). This gave him valuable moments to plan his reaction and weave believable stories that might prevent punishment. This ability is commonly observed in

lonely people. The evolutionary explanation for this phenomena is that loneliness acted as a warning system for our ancestors, telling that they were becoming isolated, and that their survival was under threat. This warning system increased their attention and surveillance of their social environment with a focus upon self-preservation, pushing them towards reconnection and the safety of the social group, while also causing them to be more cautious about who they opened up to.

Paradoxically, feeling lonely not only increases the explicit desire to connect or re-connect with others, but it also produces an implicit hypervigilance for social threats, which is likely to reflect an adaptation of the predator evasion defence previously documented in socially isolated rodents. This evolutionary theory of loneliness suggests that feeling socially isolated or on the social perimeter leads to increased surveillance of the social world and an unwitting focus on self-preservation. (Cacioppo, Bangee, Balogh, et al., 2016. p.138)

For Kipling, the chronically lonely boy, this warning system may not have fostered social reconnection, but it did help him avoid physical and emotional violence on occasion, and provided a small boost to his creative talents by giving him more time to fabricate his self-protective stories, and a novelist's ability to gauge the concealed motives of others.

Loneliness and Creativity: Beatrix Potter

Beatrix Potter underwent severe loneliness in early life. But unlike Kipling, whose childhood was streaked with a deep and impenetrable darkness, Potter's early years were flooded with an overabundance of light. Born to wealthy parents in Kensington, London, in the summer of 1866, the young Potter was treated with the delicacy and reverence traditionally reserved for royalty (Lear, 2007). A Victorian Rapunzel, Potter was denied the company of other children and was forbidden from exploring the world beyond the confines of South Kensington. She did not even see Buckingham Palace or the Horse Guards Parade until the age of nineteen, despite them being only a short walk from her home (Storr, 1988). Throughout her formative years Beatrix Potter was destitute of friendship. There was no one with whom she might share her thoughts or desires. No one to play with or spend idle time with. Of her few relationships during this period only those with her Scottish governess and younger brother Walter, who being born several years after Beatrix could never satisfy her need for childhood companionship, could be considered close. Because of her restricted, socially unsatisfying upbringing Potter developed into a shy and retiring child, more comfortable in the company of animals than people, and happier exploring British wildernesses than attending the few stuffy social engagements imposed on her by her emotionally distant Unitarian parents (Lane, 1978).

The philosopher Hegel once theorised that in order to know oneself, one must be known by another. He claimed that our self-consciousness is conditioned by those with whom we interact, so that our active self-consciousness (our personality, for instance), is a relative concept dependent on other self-consciousnesses:

Self-consciousness exists in itself and for itself, in that, and by the fact that it exists for another self-consciousness; that is to say, it *is* only by being acknowledged or "recognised". [...] Self-consciousness has before it another self-consciousness; it has come outside itself. This has a double significance. First it has lost its own self, since it finds itself as an *other* being; secondly, it has thereby sublated the other, for it does not regard the other as essentially real, but sees its own self in the other. (Hegel, 2003. p.104-105)

For Beatrix Potter, opportunities to know herself in this way were few and far between, and so she adopted two simple substitutions. The first was to write a journal: a method of individuation employed by many Victorian women in similar situations, as the psychologist Ester Buchholz notes:

If we understand that, historically, men were more able than women to shape their futures and follow a solitudinous call - at sea, on horseback, or through wandering - then we realise why females traditionally put deep longings of self-determination on paper. Journal writing may be *the* symbol of the lone creative woman. (Buchholz, 1997. p.235)

Written in code, this journal became part of her life, carried with her whenever she was taken to her grandmother's house in Hatfield or deposited at the family's isolated Scottish estate for the summer. Through regular record keeping of the minutiae of daily life, as well as through her romantic descriptions of nature, Potter's journal not only provided her with a way to indirectly communicate with herself, it also stimulated the creative talents that lay within (Storr, 1988). By writing a journal Potter discovered an act of creation that she found both fulfilling and enjoyable. A fact evidenced by the sixteen years that she continued to fill the pages.

Her second substitution was perhaps a little more unusual than her first: she befriended her pets. When a person is sufficiently isolated from others, so they lack the opportunity to forge social bonds even if they wished to, and if they are in the throes of the social pain known as loneliness, they will often seek society in inanimate objects or animals (Epley, Akalis, & Cacioppo, 2008). To do this, they will imbue their human substitute with humanlike characteristics, such as emotional states and motivations, and will entertain themselves by communicating with it, often playing the part of the object or animal by adopting a slightly different voice. This is partly why an engineer or mechanic who spends several months building a car in their shed will feel that their creation has its own soul; it's also why many lonely people develop such strong relationships with their cats or dogs, and why the recently bereaved sometimes believe they can communicate with deceased loved ones. Such onesided relationships are known as 'parasocial' relationships. They can be efficient social substitutes for short periods, helping to mitigate the pain of loneliness, and even trigger some of those same neural pathways that fire when we think about other Homo sapiens:

Whether it's a god, a devil, an animal, a machine, a landmark, or a piece of cast-off sports equipment, the anthropomorphised being becomes a social surrogate, and the same neural systems that are active when we make judgements about other humans are activated when we assess these parasocial relationships. (Cacioppo & Patrick, 2008, p.258).

For a lonely man stranded on an island, a volleyball becomes a sarcastic companion. For a religious hermit locked away in an island monastery for a month of uninterrupted meditation, God becomes a willing confidant, and for Beatrix Potter, lonely and isolated in her Victorian home, her pet rabbits and mice became charming friends with whom she was able to pass the long, lonely days:

Luke Thompson

[Beatrix Potter] made friends with rabbits and hedgehogs, mice and minnows, as a prisoner in solitary confinement will befriend a mouse. (Lane, 1970. p.38)

This anthropomorphism was the basis for her literary success. The tales of Peter Rabbit developed through Potter's imaginative attribution of humanlike characteristics to her beloved pets: an attribution stimulated by her childhood longing for companions and friendship. While this lonely tendency began as a private way to find a modicum of social fulfilment, she later committed these fantastic imaginings to paper, creating wonderful stories to entertain an ill child of an ex-governess (Lane, 1970). A few years later Potter's stories were published and became a commercial success, finding their way into the playrooms and nurseries of children in Britain and beyond. Through sharing her once-private anthropomorphic tales Beatrix Potter brought great pleasure to people the world over, providing them with enchantment and delight, and strengthening the important intimate bonds between children and their parents through bedtime readings of her work – a legacy which, to the lonely Potter, must have brought her satisfaction, contentment, and peace.

Loneliness and Creativity: Joseph Conrad

To the young Joseph Conrad peace, contentment and satisfaction were concepts beyond imagining. Born into the harsh winter of a Poland rocked by disharmony and rebellion, the infant Conrad came to know more of exile and loneliness in his first few years than many learn in a lifetime (Meyers, 1991). His father, Apollo Korzeniowski, was a patriotic revolutionary who desired nothing more than a Poland independent of Russia – a colossal design that Apollo, a self-styled political martyr, often sought to accomplish with his own two hands. The passion with which he pursued this goal frequently led to retaliation from the ruling Muscovites, and this retaliation, this hostility, became a common feature of Conrad's early life. One of Conrad's first memories was of his father imprisoned behind bars, being denied water as he and his family were travelling under Russian escort through a forest dense with snowfall (Meyers, 1991). This memory of his family's forced exile to Vologda in 1862, just a few years after his birth, captures the dark spirit of Conrad's formative years and highlights the homelessness that permeated his upbringing. Conrad was never permitted to stay in one location long enough to experience the warmth of belonging. Whether due to his father's pursuit of political revolution, through illness and bereavement, or at the insistence of the hostile Russian government, he was always moved on – pushed forward by forces beyond his control. Berdichev, Warsaw, Zhitomir, Vologda, Novofastov, Kiev, Chernikov, Lvov, Krakow and Krynica were all transient homes for the young writer. Once he approached adulthood, and the age of military conscription, the rootless Conrad submitted to voluntary exile, moving to France to avoid the mandatory twenty-five year military sentence before drifting into harbour within his adoptive Britain (Najder, 2007).

Unlike his patriotic father Conrad never swore absolute fealty to any country. While the blood of Polish revolutionaries may have coursed through his veins his heart remained free, unbound by the propaganda and political ideals worshipped by his parent's generation. Conrad's homelessness, combined with his refusal to ally himself to any government, nation, or political cause, resulted in a self-initiated exile not just from Poland and Russia, but from the land itself (Meyers, 1991). In his pursuit of a mariner career on the open sea, Conrad felt, for the first time, a sense of homecoming, perhaps inspired by the piratical daydreams and nautical imaginings that gave him escape in early childhood (Storr, 1988; Meyers, 1991). The immense trackless ocean did not demand loyalty or allegiance to a specific political dogma. It only requested respect and patience, and the young sailor, experiencing a new and exciting way of life, was more than willing to acquiesce. Throughout his voyages Conrad saw many of the places that were to provide both the literary material and inspiration for his novels and short stories. The Malay archipelago, the coast of Africa, South America, the South China sea – these exotic locations all appear in his creative works and give his fiction a unique flavour that was unmatched by his homebody contemporaries (Najder, 2007). Both Heart of Darkness and An Outpost of Progress take place in the wild and unconquered Congo (Conrad, 1902; Conrad, 1898). *The Lagoon* is set in an Indonesian rainforest (Conrad, 1897). Almayer's Folly is located in the jungles of Borneo (Conrad, 1895). Other novels have their settings

in pseudo-fictional islands and villages, or take place entirely at sea. While these exile-inspired escapades contributed to the uniqueness of his early writings, Conrad's chronic sense of loneliness had a far more subtle influence on his creative work, and helped raise him from a mere author of adventures to the grand status of literary genius.

In the spring of 1865 Eva, Conrad's mother, died of tuberculosis (Najder, 2007). Joseph was just seven years old at the time. The impact of this loss sent shockwaves through the boy's already delicate constitution. He fell ill more frequently, and became vulnerable to nervous attacks. Worse still, the death of his mother corrupted the close relationship that Conrad enjoyed with his father, twisting it into one of co-dependence and pitiable devotion. Fearing the influence that Russian culture might have on his son, Apollo denied Conrad any contact with other children. He was forbidden from attending school or from developing relationships with boys and girls his own age. Instead, the cloistering Apollo kept Conrad locked away at home, teaching him about the world through his own darkened filter (Meyers, 1991). These intense and lonely years had a profound influence on both Joseph's developing personality and his knowledge of others. He came to see how isolation could influence a man's behaviour. How loneliness could twist and darken a man's view of the world and turn his heart and soul against his neighbours. He saw, in Apollo's idolisation and worship of his deceased wife, how bereavement and unmitigated loneliness can drive a man to madness and undermine the foundations of his character. For several years, up until his father's death in 1869 from the same illness that claimed his mother, Conrad saw every perturbation that loneliness could have on a man's soul (Meyers, 1991).

Though these years caused Conrad many moments of grief and despair, the ongoing value of his experience is evident in his work. Even before he became a teenager, he had experienced greater trials, felt greater pain, and had seen more of loneliness, than many of the adults of his time. As his biographer, Jeffrey Meyer puts it:

> It is essential to emphasise and to remember the most crucial facts of Conrad's early life: the Russians had enslaved his country, forbidden his language, confiscated his inheritance, treated him as a convict, killed his parents, and forced him into exile. (Meyers, 1991. p.29)

Without such a profound awareness of loneliness and its influence Conrad's fictional stories would lack much of the colour and depth that makes them stand so far above the creative efforts of his literary contemporaries. While we can see Conrad's knowledge of loneliness in many of his novels and characters, with the loneliness of his father finding significant expression in *Victory* (Conrad, 1915), the dark influence of isolation is most apparent in the character of Mr Kurtz: the mysterious figure hidden away in the depths of the Congo in Conrad's short novel *Heart of Darkness*.

When Marlowe, the narrator of *Heart of Darkness*, discovers Mr Kurtz for the first time, the man he meets is wildly removed from the accounts overheard during his journey. Rather than the intelligent, collected, respectable gentleman he had anticipated, Marlowe finds a Kurtz overwhelmed by a great loneliness; corrupted, violent, and barely human.

The wilderness had found him out early, and had taken on him a terrible vengeance for the fantastic invasion. I think it had whispered to him things about himself which he did not know, things of which he had no conception till he took counsel with this great solitude – and the whisper had proved irresistibly fascinating. (Conrad, 1902. p.69)

The isolated Kurtz exhibits many of the common effects of chronic loneliness. He displays hypervigilance to threat, seeing danger where no danger lies (Cacioppo, Bangee, Balogh, et al., 2016). He demonstrates a decline in executive function, succumbing to his base desires more readily, and making decisions alien to his ethical and moral background (Baumeister, Twenge, & Nuss, 2002). But the most startling influence that loneliness had on the alienated Kurtz was in how it altered his perception of reality, and his place within it.

The human mind has a tendency to twist the world into unrecognisable shapes when loneliness becomes chronic (Cacioppo & Patrick, 2008). Lonely people expect negative responses to social engagement. They assume that any approach on their part to another will be met with hostility or rebuttal. When this negative expectation is carried into social engagements it affects the lonely person's behaviour, making their body language more defensive and their attempts at communication more antagonistic. Because of this, negative expectation often becomes a selffulfilling prophecy (Murray, Bellavia, Rose & Griffin, 2003). When a chronically lonely person tries to communicate with another, their standoffish nature often results in social failure. When this result is experienced several times the lonely person's world will distort in two ways. First, they will start to perceive the world as a more aggressive place. And second, they will begin to see themselves in a different light, often as a marginalised outsider who may never be accepted by the wider world (Cacioppo & Hawkley, 2005).

Kurtz experienced a similar corruption to his world view when isolated in the Congo. Cut-off from western civilization, abandoned to a country populated with people who, thanks to his British colonialism, he could not see as human equals able to offer companionship, the darker elements of Kurtz's personality began to gain purchase (Conrad, 1902). Like Conrad's father, whose belief in his own importance and ideals only inflated during isolation (Meyers, 1991), the estranged Kurtz came to see himself as occupying a station far above the indigenous people that he oppressed. Prior to his isolation, Kurtz was known for his eloquence and his loquacity, able to inspire and manipulate others with ease. But once separated from civilized society Kurtz had no one to keep his expansive ego in check, and his belief in his own power and importance grew exponentially. This engorged ego, coupled with his impaired executive function and his hypervigilance towards threat, transformed the once-civilized Kurtz into a wild, dangerous individual able to order the death of others indiscriminately. But like Apollo, whose pursuit of his ideals even while ostracised from all who might listen ultimately led to his early death, the self-deified Kurtz could not see the toll that loneliness was taking on his body and mind. Upon liberation, the narrator Marlowe gave the following description of the state in which he found the chronically lonely Kurtz:

His was an impenetrable darkness. I looked at him as you peer down at a man who is lying at the bottom of a precipice where the sun never shines. (Conrad, 1902. p.82)

Marlowe recognised the cruel irony of Kurtz's self-delusion. Far from occupying an empyrean height, the deluded Kurtz actually resided in the depths of an impenetrable loneliness. Like many chronically lonely people who fall into the inescapable spiral of negative expectation, he

was not the man he believed himself to be, and the world was not as his loneliness suggested. Prolonged isolation had corrupted Kurtz's perception of reality, and once liberation made the extent of this corruption apparent to the previously deluded explorer, the lonely Kurtz passed away in a fit of horrified realisation.

> Anything approaching the change that came over his features I have never seen before, and hope never to see again. Oh, I wasn't touched. I was fascinated. It was as though a veil had been rent. I saw on that ivory face the expression of sombre pride, of ruthless power, of craven terror - of an intense and hopeless despair. Did he live his life again in every detail of desire, temptation, and surrender during that supreme moment of complete knowledge? He cried in a whisper at some image, at some vision - he cried out twice, a cry that was no more than a breath: The horror! The horror! (Conrad, 1902. p.83)

The Midas Touch of Loneliness

In the myth of King Midas, the Greek god Dionysus endowed the benevolent king with the unique power to turn anything he touched to solid gold (Graves, 1955). At first the king was overjoyed with his new power. Apples, tables, statues, plates – everything he brushed his fingers against was transmogrified into glittering, valuable gold. But it soon dawned on the poor king that this gift, while making him rich beyond his royal dreams, came with a dear cost. He could no longer embrace his children. A kiss from his wife would turn her into lifeless metal. Distraught by the gift that had briefly brought him joy, King Midas begged Dionysus to remove his boon, to which the Greek god soon acquiesced.

Loneliness, especially loneliness of the chronic variety, is akin to Midas' golden touch. While loneliness may grant talented individuals the creativity and imagination needed to develop great works, it also robs them of much of life's joy. And unlike Midas, once the lonely person has created his or her great work there is no Greek God from which we might beg release. Chronic loneliness permeates a person's character. Once experienced, it's here to stay. And so this returns us to the question asked in the outset. Are the novels of Virginia Woolf worth the loneliness that she experienced throughout her life, and that drove her into a deep, inescapable depression? Can we truly say whether *The Jungle Book* is fitting compensation for the seven years of neglect and abuse suffered by the young Rudyard Kipling? Is the honour of creating a lasting work of art really worth a lifetime of isolation and unhappiness? It's a question that perhaps only those who have experienced the Midas touch of loneliness can truly answer. But whatever we may believe, as the psychologist and loneliness philosopher Clark Moustakas once remarked, sometimes, in the pursuit of creative genius, the only way is the lonely way (Moustakas, 1991).

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References & Bibliography

Åkerlind. I., & Hörnquist. J. O., (1992) Loneliness and alcohol abuse: A review of evidences of an interplay. *Social Science and Medicine*, *34* (*4*). 405-414

Antrobus. J. S.; Coleman. R., & Singer. J. L., (1967) Signal-detection performance by subjects differing in predisposition to daydreaming. *Journal of Consulting Psychology*, *31*. 487-491

Averill. J. R., & Sundararajan. L., (2014) Experiences of solitude. In R. J. Coplan & J. C. Bowker (Eds.), *The Handbook of Solitude*. Chichester: Wiley Blackwell. 90-108

Baumeister. R. F.; Twenge. J. M., & Nuss. C. K., (2002) Effects of social exclusion on cognitive processes: Anticipated aloneness reduces intelligent thought. *Journal of Personality and Social Psychology*, 83. 817-827

Barbour. A., (1993) Research report: Dyadic loneliness in marriage. Journal of Group Psychotherapy, Psychodrama & Sociometry, 46. 70–72

Bone. E., (1957) Seven years solitary. London: Hamish Hamilton

Boivan. M., & Hymel. S., (1997) Peer experiences and social self-perceptions: A sequential model. *Developmental Psychology*, 33. 135-145

Bowlby. J., (1973) *Attachment and loss. Vol. 2: Separation: Anxiety and anger.* New York: Basic Books

Bowra. C. M., (1955) Inspiration and poetry. London: Macmillan and Company

Boyd. W., (1991) Introduction. In: F. Pessoa., (1991) *The book of disquiet.* London: Serpent's Tail

Buchholz. E. S., (1997) The call of solitude: Alonetime in a world of attachment. New York: Simon & Schuster

Cacioppo. S.; Bangee. M.; Balogh. S.; Cardenas-Iniquez. C.; Qualter. P., & Cacioppo. J. T., (2016) Loneliness and implicit attention to social threat: A high-performance electrical neuroimaging study. *Cognitive Neuroscience*, *7 (1-4)*. 138-159

Cacioppo. J. T.; Ernst. J. M.; Burleson. M. H.; McClintock. M. K.; Malarkey. W. B.; Hawkley. L. C.; Kowalewski. R. B.; Paulsen. A.; Hobson. J. A.; Hugdahl. K.; Spiegel. D., & Berntson. G. G., (2000)

Lonely traits and concomitant physiological processes: the MacArthur social neuroscience studies. *International Journal of Psychophysiology*, *35*. 143-154

Cacioppo. J. T., & Hawkley. L. C., (2005) People thinking about people: The vicious cycle of being a social outcast in one's own mind. In K. D. Williams, J. P. Forgas & W. von Hippel (Eds.), *The Social Outcast: Ostracism, Social Exclusion, Rejection, and Bullying.* New York: Psychology Press. 91-108

Cacioppo. J. T., & Hawkley. L. C., (2009) Perceived social isolation and cognition. *Trends in Cognitive Science*, 13. 447-454

Cacioppo. J. T.; Hawkley. L. C.; Berntson. G. G.; Ernst. J. M.; Gibbs. A. C.; Stickgold. R., & Hobson. J. A., (2002) Do lonely days invade the nights? *American Psychological Society*, *13*. 384-387

Cacioppo. J. T.; Hawkley. L. C.; Ernst. J. M.; Burleson. M.; Berntson. G. G.; Nouriani. B., & Spiegel. D., (2006) Loneliness within a nomological net: An evolutionary perspective. *Journal of Research in Personality*, 40. 1054-1085

Cacioppo. J. T., & Patrick. W., (2008) Loneliness: Human nature and the need for social connection. New York: W. W. Norton & Company

Conrad. J., (1895) Almayer's folly. London: T. Fisher Unwin

Conrad. J., (1897) The lagoon. London: Cornhill Magazine

Conrad. J., (1898) An outpost of progress. London: Cosmopolis

Conrad. J., (1902) Heart of darkness. London: Blackwood's Magazine

Conrad. J., (1915) Victory. London: Methuen

Coplan. R. J., & Ooi. L., (2014) The causes and consequences of playing alone in childhood. In R. J. Coplan & J. C. Bowker (Eds.), *The Handbook of Solitude*. Chichester: Wiley Blackwell. 111-128

DeBerard. S. M., & Kleinknecht. R. A., (1995) Loneliness, duration of loneliness, and reported stress symptomatology. *Psychological Reports*, *76* (3). 1363-1369

Epley. N.; Akalis. S., & Cacioppo. J. T., (2008) When we need a human: Motivational determinants of anthropomorphism. *Social Cognition*, *26* (*2*). 143-155

Freud. S., (1959) Creative writers and daydreaming. *Standard Edition of the Complete Psychological Works of Sigmund Freud, Vol* 9. London: Hogarth

Gardner. W. L.; Pickett. C. L.; Jefferis. V., & Knowles. M., (2005) On the outside looking in: Loneliness and social monitoring. *Personality and Social Psychology Bulletin*, *31* (*11*). 1549-1560

Goossens. L., (2014) Affinity for aloneness in adolescence and preference for solitude in childhood. In R. J. Coplan & J. C. Bowker (Eds.), *The Handbook of Solitude*. Chichester: Wiley Blackwell. 150-166

Goya. F., (1969) Los caprichos. New York: Dover Publications

Graves. R., (1955) The Greek myths: 1. London: Penguin.

Hazan. C., & Shaver. P., (1987) Romantic love conceptualized as an attachment process. *Journal of Personality and Social Psychology*, 52. 511-524

Hegel. G., (2003) Independence and dependence of self-consciousness: Lordship and bondage. In, G. Hegel., *The Phenomenology of Mind*, trans. J. B. Baillie., New York: Dover Publications. 104-112

Holmes. E., (2005) The Life of Mozart. New York: Cosimo Classics

Hunter, I., (1957) Memory: Facts and fallacies. London: Penguin Books

Kane. M. J.; Brown. L. H.; McVay. J. C.; Silvia. P. J.; Myin-Germeys. I., & Kwapil. T. R., (2007) For whom the mind wanders, and when: an experience-sampling study of working memory and executive control in daily life. *Psychological Science*, *18*. 614-621

Kipling. R., (1984) The jungle book. London: Macmillan

Kipling. R., (1892) Barrack-room ballads. London: Methuen

Kipling. R., (1995) Baa baa, black sheep, London: Penguin Books

Kipling. R., (2008) Something of myself. Cambridge: Cambridge University Press

Klinger. E., & Cox. W. M., (1987) Dimensions of thought flow in everyday life. *Imagination, Cognition, and Personality, 7.* 105–128

Korpela. K., & Staats. H., (2014) The restorative qualities of being alone with nature. In R. J.

Coplan & J. C. Bowker (Eds.), The Handbook of Solitude. Chichester: Wiley Blackwell. 351-367

Lane. M., (1970) The tale of Beatrix Potter. London: Frederick Warne & Co

Lane. M., (1978) The magic years of Beatrix Potter. London: Frederick Warne & Co

Lazar. S. W.; Kerr. C. E.; Wasserman. R. H.; Gray. J. R.; Greve. D. N.; Treadway. M. T.; McGarvey. M.; Quinn. B. T.; Dusek. J. A.; Rauch. S. L.; Moore. C. I., & Fischl. B., (2005) Meditation experience is associated with increased cortical thickness. *Neuroreport*, *16* (*17*). 1893-1897

Lear. L., (2007) Beatrix Potter: A life in nature. New York: St. Martin's

Long. C. R., & Averill. J. R., (2003) Solitude: An exploration of benefits of being alone. *Journal for the Theory of Social Behaviour*, 33. 21-44

Mann. T., (1998) Death in Venice and other stories. London: Vintage

Marlatt. G. A., & Kristeller. J. L., (1999) Mindfulness and meditation. In W. R. Miller (Ed.), *Integrating Spirituality into Treatment: Resources for Practitioners*. Washington DC: American Psychological Association. 67-84

McMillan. R. L.; Kaufman. S. B., & Singer. J. L., (2013) Ode to positive constructive daydreaming. *Frontiers in Psychology.* 4. 626

Meyers. J., (1991) Joseph Conrad: A biography. London: Butler and Tanner

Mijuskovic. B. L., (2012) *Loneliness in philosophy, psychology, and literature*. Bloomington: iUniverse

Mooneyham. B. W., & Schooler. J. W., (2013) The costs and benefits of mind-wandering: a review. *Canadian Journal of Experimental Psychology*, 67. 11-18

Moustakas. C. E., (1991) Loneliness. New Jersey: Prentice Hall

Murray. S. L.; Bellavia. G. M.; Rose. P., & Griffin. D. W., (2003) Once hurt, twice hurtful: How perceived regard regulates daily marital interactions. *Journal of Personality and Social Psychology*, 84. 126-147

Najder. Z., (2007) Joseph Conrad: A life. New York: Camden House

Patterson. A. C., & Veenstra. G., (2010) Loneliness and risk of mortality: A longitudinal

investigation in Alameda County, California. Social Science and Medicine, 71. 181-186

Peplau, L.A., (1982) *Loneliness: A sourcebook of current theory, research, and therapy (Vol. 36).* New Jersey: John Wiley & Sons Inc.

Pessoa. F., (1991) The book of disquiet. London: Serpent's Tail

Pessoa. F., (1999) Correspondência 1905-1922. M. P. da Silva., (Ed.). Lisbon: Assírio & Alvim

Pessoa. F., (2003) *Escritos autobiográficos, automáticos e de reflexão pessoal*. R. Zenith., (Ed.) Lisbon: Assírio & Alvim

Pinker. S., (1994) The language instinct. New York: Harper Perennial

Pratchett. T., (1988) Sourcery. London: Victor Gollancz

Ribot. T., (1901) Tvorcheskoe voobrazhenie. St. Petersburg: Iu. N. Erlikh

Rousseau. J. J., (1979) Reveries of the solitary walker. London: Penguin

Singer. J. L., (1966) *Daydreaming: an introduction to the experimental study of inner experience.* New York: Random House

Singer. J. L., (1974) Daydreaming and the stream of thought. American Scientist, 62. 417-425

Singer J. L., (1975) Navigating the stream of consciousness: research in daydreaming and related inner experience. *American Psychologist*, 30. 727–738

Smallwood. J.; Schooler. J. W.; Turk. D. J.; Cunningham. S. J.; Burns. P., & Macrae. C. N., (2011) Self-reflection and the temporal focus of the wandering mind. *Consciousness and Cognition*, 20. 1120-1126

Stevenson. R. L., (1916) A child's garden of verses. Chicago: M. A. Donohue & Co

Storr. A., (1988) Solitude. London: Harper Collins

Thoreau. H. D., (2009) The journal 1837-1861. New York: New York Review Books

Thoreau. H. D., (1854) Walden; or, life in the woods. Boston: Ticknor and Fields

Thurston. R. C., & Kubzansky. L. D., (2009) Women, loneliness, and incident coronary heart

disease. Psychosomatic Medicine, 71. 836–842

Turkle. S., (2015) Reclaiming conversation: The power of talk in a digital age. London: Penguin

Vygotsky. L. S., (2004) Imagination and creativity in childhood, *Journal of Russian and East European Psychology*, 42. 7-97

Vyshedskiy. A., (2019) Neuroscience of imagination and implications for human evolution. *Current Neurobiology*, *10*(2). 89-109

Wilson. T.; Reinhard. D.; Westgate. E; Gilbert. D; Ellerbeck. N; Hahn. C; Brown. C., & Shaked. A., (2014) Just think: The challenges of the disengaged mind. *Science*, *345* (*6192*). 75-77

Winnicott. D. W., (1958) The capacity to be alone. *The International Journal of Psychoanalysis*, 39. 416-420

Winnicott. D. W., (1971) Playing and reality. New York: Routledge

Woolf, V., (1929) A room of one's own. London: The Hogarth Press

5.

Chapter Five: Loneliness and Identity

"There is something at work in my soul which I do not understand." (Shelley, 1818)

Identity is who we are. Who we *really* are. Identity is a continuous core that thrums beneath our interchangeable masks, beneath our pretences, beneath our amicable facades. It can be seen in the reflection of a mirror. Heard in the silence of solitary hours (Moustakas, 1972). And it can be felt within as an anchor, as that centre to which we can refer each experience and action (Erikson, 1968). Identity is the ultimate I, our inner citadel, and yet, like the brain-processes discussed in previous chapters of this thesis, there is nothing mystical about its existence. Identity is a construct, built from all manner of material. It can be measured, mapped and deconstructed. But unlike a building, and in contrast to what many of us may believe about identity, it is not a static construct, but a dynamic one that changes over time from our experiences of the world, others, and ourselves. James Marcia, one of the leading scholars of identity theory, summarises it so:

Identity has been called a "sense," an "attitude," a "resolution," and so on. I would like to propose another way of construing identity: as a self-structure - an internal, self-constructed, dynamic organization of drives, abilities, beliefs, and individual history. The better developed this structure is, the more aware individuals appear to be of their own uniqueness and similarity to others and of their own strengths and weaknesses in making their way in the world. The less developed this structure is the more confused individuals seem about their own distinctiveness from others and the more they have to rely on external sources to evaluate themselves. The identity structure is dynamic, not static. Elements are continually being added and discarded. Over a period of time the entire gestalt may shift. (Marcia, 1980. p.159)

Identity is a dynamic multidimensional structure. As Marcia notes, it is an ever-changing mental construct, and is reliant on a meaningful past and an apprehensible future (Marcia, 1980). It is also the core of our being. The ghost in the human machine. But how is such a structure built, and where does solitude and loneliness fit within the story of identity? The answer lies in how we interact with other people, and in how we interact with ourselves.

Constructing Identity: Fragments and Assimilation

We cannot plan our identities prior to construction. There are no blueprints, no architectural notes for the development of our identity - at least, none we are privy to during assembly. Because of this, identity initially resembles a shanty town, an accumulation of discordant elements gathered together with little consideration for the larger picture. Identity only becomes an ordered and cohesive citadel after years of planning, demolition, and reconstruction; a process which the famed psychoanalyst Carl Jung defined as individuation:

The maturation process of personality induced by the analysis of the unconscious, which I have termed 'the process of individuation'. (Jung, 1959. p.159)

Before we examine the individuation process, we need to wander the pathways of our inner shanty towns. We need to explore the improvised shacks. The corrugated iron fences. The plywood homes and mud-caked roads of our formative souls. To understand individuation and the role of loneliness and solitude in identity, we have to first look at our chaotic foundations and recognise their far-ranging sources.

The building blocks of identity are known as identity fragments (Erikson, 1968). A fragment is much like a small, self-contained package that holds a single characteristic, expression, outlook, or belief. A fondness for nature may be a single fragment. As may a distaste for oranges, or a tendency to look

upwards while performing mental arithmetic. These fragments are assimilated from innumerable places (Erikson, 1968). We gather fragments from our friends, from those who pass in and out of our lives, from ideologies and art, from cultural expectations, observed behaviours, the jobs or social roles we pursue – the list is endless. The assimilation of identity fragments is an unconscious and self-acting process. Like oblivious sponges, we have little control over the fragments that we absorb. By adolescence the average person will have soaked up hundreds if not thousands of such fragments. They will have created a vast inner shanty town, a collection of identity fragments without form and without order, ready to be shaped into a cohesive personal identity.

Our first fragments come from those closest to us in childhood, our parents, guardians, close relatives and teachers (Erikson, 1968; Marcia, 1980; Storr, 1960). These initial fragments form the foundation upon which our identity shall be constructed, and are absorbed unconsciously through a process known as 'introjection':

Central to Erikson's formulations about identity development is the idea that people build their identity on the basis of childhood identifications. Initially, children adopt particular values, ideas, and preferences from socialization figures (typically parents) in a rather literal, fragmented, and primitive manner, a process referred to as introjection. (Soenens & Vansteenkiste, 2011 p.384)

Anyone who has spent time with young children will notice their tendency towards mimicry. This is an observable consequence of identity fragment assimilation. When a little girl expresses a world-weariness beyond her years, that's because it is. She has assimilated certain elements of an older person's outlook, and is behaving in a way consistent with those absorbed characteristics. Of course, this doesn't mean that she is genuinely world-weary. She may be behaving as if the world were weighing on her shoulders, but there is nothing authentic about this behaviour. In childhood, identity fragments are assimilated and expressed without analytical consideration. We do not gain the cognitive capacity for such analysis until early adolescence, when the brain's rostral prefrontal cortex develops to the point where we can actively engage in abstract reasoning (Dumontheil, 2014; Dumontheil, Burgess, & Blakemore, 2008). Prior to this, any mimicry is more closely related to play

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than authentic feeling.

Parental influence shapes us in myriad ways. In earlier chapters we have seen how maternal deprivation can cause long-lasting and heavily unpleasant consequences, and how it can impact our relationships in later life (Bowlby, 1953; Hojat, 1987; Ainsworth, 1978; Berlin, Cassidy & Belsky, 1995). Therefore it may come as a surprise to learn that our parents actually have far less influence on our emerging identities than we may assume. A greater influence can be found in our friendships, and in our interactions with peer groups.

During this developmental period [the transition from childhood to early adolescence], adolescents begin to gain autonomy from their parents and begin to spend increasingly more time with peers. As a result, the peer group becomes one of the strongest determinants of psychosocial functioning during adolescence. [...] Individuals begin the key developmental task of forming a personal identity in adolescence. During this time, adolescents begin to explore and evaluate the appropriateness of various identities and roles. Given that adolescents spend increasing amounts of time with peers, interpersonal relationships and experiences become vital sources of information. (Alden & Auyeung, 2014. p.396)

Our early adolescent years are often the first time that we become exposed to people of a similar age with views and beliefs different to those of our parents. Coming from the relative stability of concrete thought and parental protection, these identities hit us like flood water. Old viewpoints and attitudes are washed away in the deluge of new and exciting identity fragments. Certainties are undermined, the foundations that we once assumed were solid are proved anything but and, as we are carried along in the surge, we become gloriously aware of life's untapped possibilities (Goossens & Marcoen, 1999). In adolescence we become exposed to concepts such as society and personal morality. The existence of ideologies, artistic appreciation, and new systems of belief all explode into our consciousness. Our friends, acquaintances, and peers are often the gateways through which we first explore these concepts. Through conversations and interactions the world opens up. Sometimes such exploration is beneficial – we find a new way of looking at the world, or discover a love for something that brings us joy now and will continue to do so in the coming years. Sometimes

exploration is harmful – perhaps we force ourselves to adopt discordant viewpoints and behaviours to fit in with a group perceived as attractive, or we develop a habit or characteristic that becomes difficult to shake off in later life.

Generally, the identity fragments that we assimilate during late childhood and adolescence are a mixture taken from both these two extremes and from their more neutral middle. How we sort through these fragments to construct a coherent identity is a question we shall return to soon, but for now, it's enough to recognise that the fragments absorbed from our friends and peers contribute significantly to our emergent identity.

The assimilation of identity fragments from other people is a relatively intuitive concept. Less intuitive is the assimilation of identity fragments from the culture in which we live. To explain this concept let's engage in an act of personal remembrance. Think back to your early adolescence, to your schooldays, to those roller-coaster years that now seem strangely unreal - almost as if they had happened to a different person. Think about your bedroom. The place where you spent much of your time. It's likely that you had posters of celebrities tacked to the walls. Perhaps you had a poster of James Dean nailed to the back of your door. Perhaps you had Madonna or Britney Spears taped up by your bedside. Or perhaps your walls were mobbed with a staple-punched collage of professional footballers. Whichever the case, these poster celebrities - these cultural figures - are what the developmental psychologist Erik E. Erikson describes as pre-formed identity models (Erikson, 1968). A pre-formed identity model is an identity that we perceive as being complete. Usually, these models are people that hold a certain admirable status, whether in the wider world, as with celebrities, or within our relational and collective spheres. They are the people that we look up to, that we idolise, that we want to be. And they are replete with desirable identity fragments. By stapling photographic representations of these pre-formed identity models to our walls, we hope that some of their 'magic' will brush off on us (Steele & Brown, 1995). If we admire the footballing finesse of David Beckham, for instance, we might decorate our living space with his image in the hope that we may absorb a modicum of his skill.

Previously, I mentioned that the assimilation of identity fragments is an unconscious, selfacting process. With posters and similar artefacts, and an active desire to absorb the characteristics they illustrate, we might be tempted into thinking this statement is false – that we can, in fact, pick and choose the identity fragments that we assimilate. But this train of thought is defective. While we can partially influence the fragments we take on, such as by joining a group that exhibits the desired characteristic, or by erecting a pop sanctorium in our bedrooms, we cannot guarantee that we will assimilate the identity fragments that we set out to absorb. The boy who admires David Beckham for his footballing skills might come away with an increased appreciation for male grooming, or a newfound interest in the Spice Girls, rather than the fancy footwork he hoped to attain.

The pre-formed identity models available to us are largely dictated by the culture and generation in which we live. A young boy living in a Catholic community in the 17th century may still decorate his living space with the images of those he would like to emulate, but they are more likely to be religious figures, saints and martyrs, than millionaire footballers. Culture also controls our freedom of choice in selecting pre-formed identity models. In cultures dominated by powerful political ideologies, the people in charge may attempt to shape the identities of their nation's youth through propaganda that idolizes the virtues and character traits that the controlling government wishes to foster in their future citizens. Sometimes only brief exposure to this propaganda is enough to influence an emerging personality. In Erikson's work on identity he describes an ex-German soldier who emigrated to America with his young son before the outbreak of the Second World War (Erikson, 1968). Prior to their escape, the emigrant's son had been exposed to a few snatches of Nazi propaganda. He had seen the posters for the Hitler Youth. He had overheard the Nuremberg rallies on his father's volksempfänger. As the boy was young at the time, still learning his alphabet, his father presumed that this propaganda would be ineffective. But as the boy grew into adolescence, he realised that his assumption was far off the mark. The propaganda had affected his son, and it was starting to make itself known through his increasingly aggressive behaviour, anti-Semitic statements, and fascist sensibilities.

His little son had hardly any time to absorb Nazi indoctrination before he came to this country, where, like most children, he took to Americanization like a duck to water. Gradually, however, he developed a neurotic rebellion against all authority. What he said about the "older generation" and how he

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said it, was clearly taken from Nazi writings which he had never read and his behaviour was an unconscious one-boy Hitler Youth rebellion. A superficial analysis indicated that the boy in identifying with the slogans of Hitler Youth identified himself with his father's aggressors. (Erikson, 1968. p.54)

To counter his growing fascism the boy's father enrolled him in military school. The ideals, both political and personal, exhibited by his fellow recruits prevented his fascism from developing further, as in order to be accepted by the peer group, he was moved to adopt the identity fragments exhibited by the other recruits and to conform to the collective's dominant ideology. Ultimately, the fragments assimilated from his peers overwhelmed the fascist fragments that he had unconsciously assimilated in his childhood. This resulted in him becoming a more Americanised, and therefore more socially acceptable, individual (Erikson, 1968).

There is one final source of identity fragments that we'll explore in this section. A source that is responsible for approximately half of our personality traits. Our genetic make-up. Just as the genes we inherit from our parents determine physical characteristics such as our eye pigment and bone structure, inherited genes can also be responsible for the traits that constitute our identity.

If our father was a violent man, and quick to anger, it is likely that we will have a tendency towards aggression in difficult social encounters. This remains true even if we have never met. The heritability of identity fragments has been demonstrated in numerous studies that investigate the personality similarities of monozygotic twins (identical twins born from the same egg) who have been raised apart (Segal, 2012). One of the most surprising findings of these studies is that twins reared hundreds of miles from each other, who perhaps never knew they had an identical twin until the study took place, were just as similar in terms of identity as monozygotic twins who had spent their childhoods being reared together:

Adult [monozygotic] twins are about equally similar on most physiological and psychological traits, regardless of rearing status [together or apart]. [...] Common rearing enhances familial resemblance during adulthood only slightly and on relatively few behavioural dimensions. (Bouchard, et al., 1990 p.226-227) These similarities weren't restricted to general personality traits like aggression or altruism either. Some twins discovered that seemingly unique identity idiosyncrasies, such as a fondness for a particular brand of cigarette, unusual religious beliefs, preferred holiday destinations, and a tendency to bite their fingernails while worried, were shared with their estranged sibling (Segal, 2012). These studies have led to the finding that genetic heritability is, on average, responsible for around half of the traits that make up our identity, as Tellegen notes:

On average, about 50% of measured personality diversity can be attributed to genetic diversity. This result confirms previous findings and represents an extension to a wide range of distinctive personality characteristics. The remaining 50% is technically classified as all environmental. (Tellegen, et al., 1988. p.1035-1036)

With the remaining half (classified above as 'all environmental') being constructed from the identity fragments we have assimilated from our peers, our parents, our culture, our idols, and our physical environment.

Constructing Identity: Adolescence and Identity Formation

Now that we know how our shanty towns come into being, let's turn our attention to the process of planning, demolition, and reconstruction known as individuation. The term individuation refers to an ongoing process of differentiation, of separation from others (Jung, 1938). The first individuation phase takes place in infancy, when we become aware of our existential separation from our mother, objects, and the wider world (Marcia, 1980). The second individuation phase occurs in adolescence (Blos, 1967). During this time our brains develop the cognitive capacity to process abstract thought (Dumontheil, 2014; Dumontheil, Burgess & Blakemore, 2008), a change which fundamentally alters the way we think about ourselves, as Sippola and Bukowski highlight:

Children tend to define the content of self according to to concrete phenomenon such as hair colour, gender, and abilities or skills. [...] In contrast, on entering formal operations, adolescents acquire a powerful tool that allows them to think about the self in more complex and differentiated ways. That is, they can now think about and reflect on their own thoughts, desires, and motives. As they turn increasingly inward for self-definition, adolescents begin to structure their definition of the self according to beliefs, values, and psychological traits and characteristics. (Sippola & Bukowski, 1999. p.284)

This same development in our cognitive powers grants us the increased capacity to focus on selective information (Luna, Garver, Urban, Lazar & Sweeney, 2004), to have more executive control over our behaviour and our emotional responses, which gives us greater power over how we act when alone or with others (Yurgelun-Todd, 2007), and to recognise that other people have their own inner worlds (Sippola & Bukowski, 1999). This greater social and personal awareness, coupled with the pressures of cultural expectations – such as the demand to choose a career or industry – make adolescence the peak period for identity formation (Erikson, 1968; Marcia, 1980).

During adolescence we start to learn who we are. We begin to analyse the characteristics, beliefs, and morals that we have assimilated from others, and start to discard those that are odds with the person we are becoming. This self-reflective phase can be broadly described as a process of exploration and commitment (Marcia, 1980; Matteson, 1977). By taking a mirror to our souls we explore our gathered fragments and attempt to separate those that are congruent with our developing identity from those that clash. When we choose to incorporate a fragment or collection of fragments into our identity – and the aspect of conscious choice is important – we say that we have committed to a personal investment. We have accepted that these fragments, this identity, is who we are, or at least who we are gradually becoming. We make a similar commitment when we come to a decision about the kind of person that we do not wish to be, and actively discard any fragments that conform to that unwanted identity. This process of exploration, of looking within, and commitment characterises the second stage of individuation, the adolescent years that begin in our early teens and continue through to our mid or late twenties when our shanty towns finally transition into the mighty, cohesive citadels that we desire.

Through self-reflection we come to know ourselves. But self-analysis cannot take place if we are always with others. The process of exploration and commitment has to take place in private, when distractions are at a minimum, and when the tyrannical identities of other people are absent. To engage in the maturational act of individuation we have to be alone (Storr, 1988; Moustakas, 1972). We have to seek the reflective silence of solitude.

Solitude and Reflection

Look into this forest. Into the ancient woodland that clings to the banks of the impetuous Mississippi. Amid the pines and the dogwoods, lying with his palms pressed into the leaf fall, sits a young adolescent. He is dressed in the cast-off clothes of full-grown men. He is chewing a long piece of dry straw, his gaze fixed on a single leaf that, in the warm autumn air, is about to join those discarded by the juvenile oak. The boy is Huckleberry Finn, and he has retired to the solitude of the woods to question something that his guardian, Miss Watson, expects him to accept without consideration. Religion, and the efficacy of prayer.

I set down, one time, back in the woods, and had a long think about it. I says to myself, if a body can get anything they pray for, why don't Deacon Winn get back the money he lost on pork? Why can't the widow get back her silver snuffbox that was stole? Why can't Miss Watson fat up? No says I to myself, there ain't nothing in it. I went and told the widow about it, and she said the thing a body could get by praying for it was 'spiritual gifts'. This was too many for me, but she told me what she meant – I must help other people, and do everything I could for other people, and look out for them all the time, and never think about myself. This was including Miss Watson, as I took it. I went out in the woods and turned it over in my mind a long time, but I couldn't see no advantage about it – except for the other people – so at last I reckoned I wouldn't worry about it any more, but just let it go. (Twain, 2013. p.13)

Without time to reflect, an authentic identity cannot develop. When we cannot look within

and subject our assimilated identity fragments to scrutiny, we become vulnerable to indoctrination, manipulation, and identity engulfment (Marcia, 1980; Breuer, 1973; Podd, 1972). We become what other people want us to be, rather than our authentic selves. We become distorted reflections, golems, homunculi. Solitude facilitates this internal communion (Moustakas, 1972). Being physically alone frees us from the inherently aggressive identities of other people. We no longer have to fight against engulfment (Hegel, 2003). We can lower our social defences and venture inwards without fear. Solitude can also free our minds from distraction. By entering the woodland, there was nothing to steal Huckleberry Finn's attention. All was at peace. Distraction-free solitude has become rarer over the past few decades as technology has become more pervasive, permeating every aspect of our lives (Buchholz, 1997; Turkle, 2015). But when it can be found, the soothing balm that solitude provides can help us make sense of our inner chaos, and bring a questioning eye to the characteristics, beliefs, morals, and behaviours that we have assimilated.

Several studies have shown that adolescents find time alone invaluable for identity exploration. Between the ages of ten and thirteen, the time that young adolescents spend alone, volitionally, increases by more than half (Larson, 1999). This spike in solitary experiences is accompanied by a change in how adolescents perceive their alonetime, in that they rate it as less unpleasant and more desirable than do pre-adolescents, seeing solitude as an opportunity for identity development and for the pursuit of fun or constructive personal tasks (Kroger, 1985; Marcoen & Goossens, 1993; Wolfe & Laufer, 1974; Goossens, 2014).

A rather dramatic shift occurs in early adolescence with respect to the incidence and the experience of solitude. Compared with fifth and sixth graders, seventh, eighth, and ninth graders spend more time on their own, they see solitude more as a voluntary state, and they evidence a positive after-effect of being alone on subsequent emotional states. (Goossens & Marcoen, 1999. p.228)

Research has also shown that while adolescents are alone more frequently than preadolescents, this increase in solitude does not result in greater loneliness (Larson, 1999). This is partly because adolescent alonetime is largely taken up with purposeful activity, whether that be creative interests, such as writing poetry or learning an instrument, or identity exploration and selfreflection (Goossens & Marcoen, 1999; Storr, 1988; Buchholz, 1997). Adolescents who dedicate at least a quarter of their day to solitary introspection become better adjusted than those who avoid solitude or rate it as unpleasant (Larson & Csikszentmihalyi, 1978). And adolescents report happier emotional states following solitude than at other comparable periods of the day, an uplift likely caused by solitude's tendency to alleviate social demands, reduce feelings of anxiety and selfconsciousness, and provide a greater feeling of inner harmony and the sense of being oneself (Larson & Csikszentmihalyi, 1980; Goossens & Marcoen, 1999).

Solitude is an essential ingredient in the development of a cohesive, unique identity. But solitude is only beneficial if we choose to be alone - and even then, only for short, transient periods (Storr, 1988). In adulthood, we may find this volitional solitude in a natural environment. Echoing Huckleberry Finn, the 18th century philosopher Rousseau discovered the pleasures of being alone during a retreat to the island of Saint-Pierre, where he would often lie for hours on the riverbank, accompanied by no one but the hum of dragonflies (Rousseau, 1979). In adolescence, volitional solitude is often accompanied with a behavioural 'shutting out' of external influences (Buchholz, 1997). When an adolescent retires to their room and closes the bedroom door, they are actively and clearly choosing to isolate themselves from their parents, their peers, and the wider social world. Their solitude is coloured with the warm hues of safety and volition, and can be used beneficially. This was the solitude experienced by Huckleberry Finn. He was not exiled to the woods, but chose to be there. He may not have had a bedroom door to shut, but the sentiment, his movement to a location of privacy, remained the same. If his guardian had forced him to sit alone in the woodland, it's unlikely that Huckleberry Finn would have dedicated his time to self-reflection and identity development. Rather, he would have been hatching a plan to escape. We can see something like this in the adolescent who is condemned to the solitude of their room by an external force, such as by an angry parent. In this instance, their solitude is unlikely to be used in any internally beneficial way. Coloured with the dark blues of fear and the loss of freedom, along with the burning reds of external suppression and the desire to escape, solitude becomes a constraint that is viewed in the same light as imprisonment. Action and revolt become the primary goals, not self-reflection.

The Capacity to be Alone

It is not enough to desire solitude. Mankind fears being alone more than anything in life. More than death, more than darkness, more than silence (Mijuskovic, 2012). It's not uncommon for people to actively desire time alone, and once they attain it, flee from it. Because of this, a willingness to be alone is not enough to carry us down the path of self-reflection and individuation. We have to learn to sit by ourselves, in physical isolation, and not fear the fact of our aloneness. If we want to enter solitude and engage in the self-reflection necessary for individuation, we have to develop the lifelong ability to be physically alone (Winnicott, 1958).

The capacity to be alone is rooted in our first few years of life, in those formative infant years between birth and active childhood, after our first individuation, and prior to our second. And it begins with a deep paradox. To develop the ability to be alone, and through it, to find solitude both beneficial and desirable in later life, we have to first experience aloneness in the presence of someone else:

Although many types of experience go to the establishment of the capacity to be alone, there is one that is basic, and without a sufficiency of it the capacity to be alone does not come about; this experience is that of being alone, as an infant and small child, in the presence of mother. Thus the basis of the capacity to be alone is a paradox; it is the experience of being alone while someone else is present. (Winnicott, 1958. p.30)

This sounds contradictory, but there are clear reasons for this apparent paradox. Imagine, for a moment, that you are a young child. You are sitting alone in your mother's living room playing with colourful blocks. You've been doing this for ten minutes, and you're quite happy. But then you get a strange feeling. Something isn't right, and you can't quite put your chubby finger on it. So you turn around. You look about for support. There, sitting on a nearby table, is a cup of tea – your mother's cup of tea, gently steaming. You can also hear her in the kitchen, clattering around like a one-man band. This proximity reassures you, and you go back to playing with your red and yellow blocks. Now imagine that you're that same child in an identical situation, but with one major difference. This time, when you turn around seeking support, there is no cup of tea. No sounds are coming from the kitchen. The house is silent. Dead quiet. Because of this, your feelings of internal discomfort become more pronounced. You start to panic. You become suddenly and acutely aware of your physical isolation. You are alone and your mother is nowhere to be found. The natural outcome in this instance is to develop a fear of aloneness, rather than to find comfort in one's own company.

There is one point of contention I would raise with Winnicott's theory of the capacity to be alone, however, and that is his assertion that the capacity begins development in infancy. In order for a child to maintain evocative consistency (the capacity to retain and recall an object or person that is no longer immediately present) of another during physical separation, a certain level of cognitive development needs to be attained. Specifically, the Dorsolateral prefrontal cortex needs to be present and operational within the brain for one to maintain evocative consistency, and as this region is not in a fully operational, developed state until near the end of the first year of life, it seems unlikely that a capacity to be alone could be built in any significant way prior to this stage (Diamond, 1990). This is important to note, as some may believe that leaving an infant by itself for certain periods would be important to develop the capacity to be alone (or at least would have no long-term aversive effects), whereas this capacity can only be developed after this initial year of an infant's life (Paterson, Heim, et al., 2006).

The underlying social aspect of the capacity to be alone becomes more apparent when we consider the communicative nature of self-reflection that occurs in, and is most facilitated by, experiences of solitude. When we look within, when we reflect on the identity fragments that constitute our inner chaos and subject them to analysis, we are actually engaging in an act of self-communication. We are talking with ourselves. Learning about the person we wish to be. Because self-reflection is a form of communication, an inability to be alone doesn't just cause us distress when with physical isolation, it also causes us to lose touch with our most important relationship – the one we hold with our self.

When self-communication becomes less like talking with a friend and more like being berated by a stranger, identity formation becomes stunted. We become less adept at recognising when an internal belief is genuine or when it has been unconsciously forced upon us from without. Identity exploration becomes rarer, and whatever few commitments are made are adopted without analytic forethought. Self-alienation can result in greater identity confusion, a sense of aimlessness, greater self-consciousness, dysphoria, stress, and a prolonged or even indefinite adolescence (Larson & Csikszentmihalyi, 1980; Goossens & Marcoen, 1999; Marcia, 1980; Stafford, 2015; Arnett, 2014).

A growing body of evidence suggests that the capacity to be alone is becoming rarer in young people, especially in those who have grown up enmeshed in the modern age of hyper-connectivity and technological distraction (Turkle, 2015; Buchholz, 1997). The following experiment, undertaken by Timothy Wilson, a psychologist at the University of Virginia, provides an apt illustration of how younger people have started to respond to short solitude experiences.

Picture a small white room with no windows. In the centre is a white plastic chair. Not comfortable, but not uncomfortable either. Next to the chair is a table. A red circular button has been built into the centre of the table top. If pressed, this button administers a sharp and painful electrical shock. There is nothing else in the room bar these few objects. This is the room into which Timothy Wilson ushered his test subjects, one at a time, after removing their mobile phones and other computerised equipment. Wilson's test subjects were all young college students, and had all grown up with modern technology. Not one of them could remember a time before mobile phones and the internet. Prior to the test Wilson had asked these subjects to press the red button and rate the intensity of the electric shock. Most said that it was extremely unpleasant and that they would gladly pay money to avoid feeling it again. They did not want to repeat the experience. Because of this Wilson assumed that his test subjects, when asked to sit alone in this room for fifteen minutes and do nothing but enjoy their own company, would be able to complete the task without undue stress. He was wrong.

Many participants elected to receive negative stimulation over no stimulation – especially men: 67% of men (12 of 18) gave themselves at least one shock during the thinking period [range = 0 to 4 shocks, mean (M) = 1.47, SD = 1.46, not including one outlier who administered 190 shocks to himself], compared to 25% of women (6 of 24; range = 0 to 9 shocks, M =

1.00, SD = 2.32). Note that these results only include participants who had reported that they would pay to avoid being shocked again. The gender difference is probably due to the tendency for men to be higher in sensation-seeking. But what is striking is that simply being alone with their own thoughts for 15 minutes was apparently so aversive that it drove many participants to self-administer an electric shock that they had earlier said they would pay to avoid. (Wilson, et al, 2014. p.76)

As quoted above, Wilson found that two thirds of the college-age men had chosen to shock themselves at least once during this period. One individual found sitting alone so unbearable that he shocked himself one hundred and ninety times. A quarter of the female test subjects had done the same, choosing to shock themselves rather than sit and quietly contemplate. This was a surprising result for Wilson. So he undertook the test again. And again. In other tests he prepared his subjects with topics they might like to contemplate while sitting alone. A favourite holiday, a happy memory, a first romantic experience. No matter what, the results remained the same. Distraction, no matter how painful, remained preferable to solitude and self-reflection.

Many of Wilson's test subjects reached for the red button rather than self-reflect. To people who can remember a time prior to the invention of the mobile phone, this behaviour may be hard to understand. For people born in the past twenty years, less so. According to a report from Deloitte on smartphone use in the United Kingdom, half of all 18 to 24 year-olds check their phones at least once between midnight and morning, with a third grabbing their phone within five minutes of waking (Hope, 2016). Mobile phones are amazing devices, connecting us to the world in ways that, a decade ago, would have been unimaginable. Greater connection, coupled with the vast knowledge available to us through mobile internet, gives us another minor but important source of identity fragments, one that is easily overlooked (Valkenburg & Peter, 2008; Katz & Rice, 2002; Stern, 2004). But for all their wonder mobile phones also make massive demands on our attention, so much so that many are now turning to addiction clinics to rid themselves of their smartphone dependence (Kwon, Kim, Cho & Yang, 2013; Singh-Bhatia, 2008; Babadi-Akashe & Zamani, 2014).

Smartphones are extremely effective distractions. Think about the times that you are alone during the day, waiting for a bus, sitting in the bathroom, resting after a day's work. These solitary

times breed boredom – boredom that would previously have been broken by internal reflection or creative daydreaming (Mann, 2016). But today, with mobiles and other devices rarely out of reach, boredom can be rapidly eradicated with a quick glance at our glowing screens, a behaviour that the vast majority of us will be more than familiar with:

These days, average American adults check their phones every six and a half minutes. We start early: there are now baby-bouncers (and potty seats) that are manufactured with a slot to hold a digital device. A quarter of American teenagers are connected to a device within five minutes of waking up. Most teenagers send one hundred texts a day. Eighty percent sleep with their phones. Forty percent do not unplug ever, not even in religious services or when playing a sport or exercising. (Turkle, 2015. p.42)

Because of this, authentic inward-looking solitude has become rarer (Turkle, 2015), and for those who have never known a life without smartphones, the idea one may self-reflect when alone rather than distract one's attention with a browse on a smartphone or similar diversionary device (such as a red button that administers mild shocks), may be perceived as absurd, little more than a relic of a technologically deprived past. Worse still, it may not even be perceived at all.

Despite the massive increase in ways to stay in touch with others facilitated by recent technological developments, people are becoming more solitary than ever before. As described in the initial chapter of this thesis, over the past forty years, in the USA, the number of close confidants dropped from three in 1985, to zero in 2004:

Discussion networks are smaller in 2004 than in 1985. The number of people saying there is no one with whom they discuss important matters nearly tripled. The mean network size decreases by about a third (one confidant), from 2.94 in 1985 to 2.08 in 2004. The modal respondent now reports having no confidant; the modal respondent in 1985 had three confidants. (McPherson, Smith-Lovin & Brashears, 2006. p.353)

If an inability to be alone without distraction is becoming more common in young people

today, then the identities of these household solitaries may be at risk. As previously mentioned, selfalienation can result in identity confusion, aimlessness, greater self-consciousness, helplessness, stress, delayed maturation (Larson & Csikszentmihalyi, 1980; Goossens & Marcoen, 1999; Marcia, 1980; Stafford, 2015; Arnett, 2014). When we become afraid of solitude, when any moment spent alone without distraction becomes laden with anxiety, we may also fall foul to self-distortion and feelings of dysphoria, to the sensation that the face looking out of the mirror has no relation, or a warped relation, to the person on the other side (Storr, 1988). We may also come to feel that our identities are extremely fragile, that any strong external influence, such as a romantic relationship or loyal friendship, is best avoided in order to prevent our apparently fragile self from being shattered.

As an inability to be alone means self-reflection becomes less frequent and harder to attain, we may also become more neurotic. When we lack the ability to sit alone and confront the internal difficulties, worries, and inconsistencies that plague our conscious and unconscious minds, these uncontested problems may set in, resulting in long-lasting psychological disorders and mental health issues that may undermine attempts at individuation. Existentialist philosophers and psychologists have claimed that this fear of being alone is related to the fear of death: that when a person has not had positive solitude experiences in childhood, and thus defines him or herself largely by their social role and social interactions, then being alone feels akin to self-negation, and makes them experience a sense of pervasive emptiness that is perceived as being close to a death-state (Mijuskovic, 2012). As the clinical psychologist Ester Buchholz states:

Dread of being alone, as Coleridge's Ancient Mariner chants, is not exactly on the same scale as a general distaste for dreaming, lone-pursuits, being bored stiff, or having time to kill. Rather, this dread is a soul-searing association with death. (Buchholz, 1997. p.40)

Beyond this, there is another, more insidious result that comes from avoiding solitude. When we actively avoid being alone in self-reflection we become more vulnerable to indoctrination, overidentification, manipulation, and identity engulfment (Marcia, 1980; Breuer, 1973; Podd, 1972). This increased vulnerability can derail us from the identity we are steaming towards, and cause us to roll into the shadows of other people. For our identities, this can be catastrophic. Through engulfment, we may lose our sense of an individuated self and become puppets, suspended upon invisible strings. And that's not all. If the inability to be alone is on the rise, and self-reflective solitude is falling out of favour in place of distraction-focused, inauthentic solitude, a greater vulnerability to indoctrination, manipulation, and identity engulfment may not just affect us on the personal level, it may also have severe detrimental affects on our culture, on our way of life, and on the fabric of society itself.

The Threat of Engulfment

In the winter of 2007, with frost inside the windows and the last of the autumn flowers withering in the clay pots outside the family living room, my stepfather succumbed to throat cancer, and passed away. My brother was sixteen at the time, still in the throes of mid-adolescence. His identity was starting to bud and grow. Certain elements, unique among us, were making themselves known in his behaviour and his beliefs. We knew not where his love for the guitar came from – none of us were interested in instruments – but he was learning to play off his own back, and was becoming quite capable. His sense of humour seemed to be his own, as was his style, which, though coloured by the influence of his friends and favourite TV shows, was unique and shyly flamboyant – an atramentous explosion of deep purples and blacks. He had also developed a fondness for architecture, and would often retire to his bedroom away from the distressing drama downstairs to build small worlds and impressive structures out of Lego, matchsticks, and anything else on which he could lay his hands.

After my stepfather's death my brother's identity underwent a complete inversion. Within months his dress sense had changed. Out went the Gothic blacks and extravagant purples, and in came the ragged t-shirts, oil-stained jeans, and wild, unstyled hair that my stepfather used to sport. My brother started to neglect his guitar too, claiming that he no longer found any pleasure in playing the instrument or in composing new songs. It went into storage, along with his Lego collection and deconstructed creations. As the months went by he become more and more like our late stepfather. He started to adopt his sense of humour, his characteristics, his outlook on the world. He purchased a classic car, intending to do it up and sell it on – itself an unfulfilled dream of my stepfather. It even seemed as though his face had altered. It had warped, deepened somehow, to resemble our dead stepfather. This change was disconcerting. But at the time we assumed that it was a standard way of coping with grief. We assumed that he would eventually grow out of his mimicry and return to the young, charming boy who had a promising music career and a unique, gentle, and quietly pragmatic view of the world and other people.

But he didn't. As the months turned into years, my brother faded away. He disappeared, and in his place stood a distorted reflection, a shade, a living ghost of my late stepfather. Through overidentification he became the dead man utterly. Besides his name few aspects of his previous self remained. Whenever they surfaced a look of pain would cross his face, he would bite back tears, and he would gruffly change the subject. He would then ensure that they were never mentioned again. When I meet him today, years later, it doesn't feel like my stepfather was the one who passed on. It feels like he's still here, alive and well, sitting opposite me, smelling faintly of engine oil. Instead, it feels as though it was my brother, the young man with a love of music and architecture, who went to the other world. It feels like he was the one who died. The one who will never return. And to myself and my wider family, that is a deeply troubling feeling.

In Dr Sacks' famous case study of identity loss it was Korsakoff's syndrome that stole his subject's sense of self and undermined the citadel of his identity (Sacks, 1986). In my brother's case disease was not to blame. There was no neurological condition or pre-existing health problem that could be pinpointed as the catalyst for his transformation. It was something more subtle and insidious that had caused my brother's forming identity to be supplanted with that of a dead man. It was engulfment.

Engulfment is a process in which one identity becomes overwhelmed by another. This can be via conscious effort on the part of the dominant individual (such as a father attempting to shape his son in his image), or even on the part of the submissive individual (one mimicking the behaviours of a dominant individual to find social acceptance). It can also be unconscious, where neither party are aware of the over-identification occurring. In his work *Psychological Types*, Carl Jung approaches the concept of identity-engulfment, and offers us a definition (he uses the synonymous, psychoanalytical

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term 'identification'):

Identification is an estrangement of the subject from himself in favour of an object in which the subject is, to a certain extent, disguised. For example, identification with the father practically signifies an adoption of the ways and manners of the father, as though the son were the same as the father and not a separate individual. (Jung, 1938. p.551)

Our first *conscious* awareness of engulfment tends to occur in adolescence, when we start to feel that our identities are being smothered by those of our parents. Parental figures exert a degree of dominance and control on a child's forming identity, either on purpose or unconsciously (Bowlby, 1953; Bowlby, 1988). They want to keep us safe. They want to protect us. But at the same time they often want to transform us into miniature versions of themselves. Most of us do not want this. We would prefer to be ourselves, distinct, differentiated, and unique. This desire for individuality causes us to push back against the forces of parental engulfment to preserve our own budding individuality (Kroger & Haslett, 1988; Blos, 1967). By way of example, when a young adolescent is being wilfully disobedient, perhaps refusing to go to bed when requested, or sneaking cookies from a forbidden jar, this rebellion is a sign that he is taking his first steps towards differentiating his identity from those who control his life.

Another common form of engulfment is role-engulfment (Erikson, 1968; Schur, 1971). We have seen some of this before, with Erikson's example of the German boy who became an American soldier. Role-engulfment often begins with a strong self-schema: this being a stable, partitioned set of identity fragments which contains a collection of beliefs, generalizations about self, expressions, and morals that only apply within certain social domains (Markus, 1977). Each person will usually hold several self-schemas within them, and can swap them in and out as the social domain demands. So, for example, a manual labourer on a building site will be expected to behave in a certain way, to hold certain beliefs, to enjoy certain activities. If they do not show the expected characteristics when within that social domain, then they may be viewed with distrust by their construction site peers. To ensure integration and acceptance, a self-schema is needed; a partitioned sub-identity that contains

the elements necessary for acceptance in that social domain. Like a mask, this self-schema can be put on and removed at will. The manual labourer who claims to love football and alcohol when at work may abhor both when at home.

Role-engulfment occurs when the mask gets stuck, when the partitioned self-schema starts to breach its partition and overwhelm the individual's identity.

An engulfed self reflects a single, dominating role in which no other identities may exist. [...] [Adler and Adler, in their study on role-engulfment in college-age athletes] found that as the athletes merged their internal self-identity with their powerful and alluring athletic identity, role engulfment began to emerge. Rather than attempt to manage two competing identities, however, the athletes actively sought to develop the new, more desirable one. The former role and identity was thus neglected, as were its associations with family, friends, and other company. (Zvosec, Gordon, et al., 2019. p.53)

Role-engulfment is a frequent danger for any person who dedicates the majority of their time to one task, as noted in the quote above. But while this might be a risk for athletes, it is a far greater risk for those who become long-term caregivers for a terminally ill loved one (Skaff & Pearlin, 1992).

A person newly-tasked with being a full-time caregiver is likely to be emotionally fragile, and beset with a worrying sense of confusion, or uncertainty about their future (Marcia, 1980). This is especially likely if the one requiring care is a spouse or parent. Because of this, the carer may latch on to the role of caregiver, finding the objective outlook, pragmatic approach to difficulties, and socially set behaviours of the role both comforting and distracting from their internal distress. Alternatively, one who becomes a caregiver gradually, perhaps as a loved one's condition worsens, may not wish to define themselves by the caregiver role, but due to the time commitment inherent in their new, carer responsibilities, find themselves only performing actions congruent with that role, with other actions relating to other roles (self-schemas) being lost as a result:

> Dickson examined spousal caregivers' understandings of what it is to live with an individual with a spinal cord injury. Participants reported that "duties and responsibilities that they felt obliged to perform often prevented

them from being able to engage in activities that they wanted or would choose to participate in," such as taking a nap or getting a meal. The caregiver role claimed the vast majority of their time and left no time to partake in that activities that once defined his or her sense of self. Many of the participants stated that their only value was as a caregiver and that "assuming the role of partner caregiver, resulted in them becoming 'invisible' to other people- that their well-being became secondary to that of their injured partner." (Eifert, Adams, et al., 2015. p.363)

Over time the person will develop their caregiver self-schema more fully, and will fall into the role without thinking. And herein lies the danger. As the role of full-time caregiver is so demanding, both physically and mentally, and can last for a long time, the caregiver's previous identities (all self-schemas) may be gradually consumed by the carer self-schema. In this instance it becomes a 'Master' identity, and holds a dominant status within one's inner-hierarchy of self-schemas:

Master status refers to a role that has become more important than any other label or role. This role often shapes a person's entire life, overshadowing all other roles. (Eifert, Adams, et al., 2015. p.358)

If the person being engulfed in this way is an adult who has achieved identity formation, then they may be horribly cognisant of their fading identity. They may see themselves disappearing. See their loves, their hopes, and their characteristics slowly becoming eroded by the stress of their role. As one may expect, this can result in lower self-esteem, depression, and guilt or shame over feelings of resentment towards the one being cared for (Skaff & Pearlin, 1992). If the person in this carer role is an adolescent, still forming their identity, then this engulfment may be outside the bounds of their awareness, leaving them unable to fight back against the consumption of their embryonic identity.

It was engulfment that consumed my brother's identity. To return to our metaphor, it was as if his internal citadel, his castle of identity, had been invaded by armies streaming from my late stepfather's hold. Over time they had smashed through his defences, pillaged his personal and unique identity, and set up residence in the looted throne room of his soul. As the years went by all internal rebellion

was quashed. My brother's citadel had been conquered. He had capitulated to the onslaught of my stepfather's identity.

Could solitude have helped him fight back against engulfment? It's a strong possibility. The peace of aloneness can often help in cases of bereavement, giving us time to reflect on our loss and come to terms with a reality that no longer contains our loved one (Storr, 1988; Moustakas, 1972). Unfortunately, like many of Wilson's subjects, my brother had never been one for solitude. Any time spent alone was usually dedicated to communication over instant messaging services, guitar playing, or computer games. Contemplation was never on his agenda. Any desire for aloneness that he experienced following my stepfather's death was immediately and proactively dealt with by my family's insistence that he spend time with others and talk out his problems. Because of this loving intrusion he never had the opportunity to self-communicate. He was locked out of his own citadel, and so was unable to man the defences. Furthermore, whenever he exhibited an expression or behaviour that was characteristic of our deceased stepfather, he was roundly praised, and told that his stepfather would have been proud. Because of this social environment his engulfment had free reign. Without the freedom or encouragement to retreat into solitude and self-reflect, he lost hold of the few identity commitments that he had made. Slowly, without his conscious knowledge, he was consumed. His citadel was overrun, and the banner that arose above the grief-blackened battlements belonged not to my brother, but to our dead stepfather.

The Promethean Citadel

When Victor Frankenstein sought to create man he used for his clay the body parts of the recently deceased (Shelley, 1818). The stitching together of dissecting room organs and mortuary limbs gave Victor's homunculus form, a physical shape echoing the humans from which its body was made. From chimerical beginnings the creature matured. It became an intelligent, articulate being with hopes, drives and beliefs far removed from those of its creator and with a strength and dexterity that outstripped the musculature of the limbs that had once belonged to others. Through hardship,

abandonment, and the self-insight this inspired, the creature became more than the sum of its parts. And though it may have been hideous in form, it ultimately became what Victor Frankenstein had first sought to create. It had become a man.

Victor Frankenstein would have had no trouble imagining the citadel of his identity. Like his monster we are, all of us, crafted from other people. We do not become who we are alone. Our identities are shaped by the people around us and by the culture and time in which we live. They are shaped by the way we respond to these influences, whether we reject them, incorporate them, or remain oblivious to their power. No man is an island, entire of himself (Donne, 1999). And yet without solitude and the sudden pain of loneliness we can never truly break free of the influence of others. Victor's monster discovered the positive influence that solitude and loneliness could have on his formative identity when he fled to the Arctic hinterlands, but if we wish to become our true selves, unique, and gloriously differentiated, we do not need to go to such extremes. It is enough to simply recognise that sometimes we need to be alone, that we need to form a close friendship with our selves, and that loneliness is not always the monster it is made out to be. Sometimes, in small doses, loneliness can save our souls.

References & Bibliography

Ainsworth. M. D. S., (1965) Further research into the adverse effects of maternal deprivation. In Bowlby, J., (Ed.) *Childcare and the Growth of Love*, 2nd ed., London: Penguin Books. 220-230

Alden. L. E., & Auyeung. K. W., (2014) Social anxiety disorder and emotional solitude. In R. J. Coplan & J. C. Bowker (Eds.), *The Handbook of Solitude*. Chichester: Wiley Blackwell. 391-408

Arnett. J. J., (2014) *Emerging adulthood: The winding road from the late teens through the twenties.* Oxford: Oxford University Press

Babadi-Akashe. Z., & Zamani. B., (2014) The relationship between mental health and addiction to mobile phones among university students of Shahrekord, Iran. *Addict Health*, 6 (3-4). 93-99

Baumeister. R. F.; DeWall. N. C.; Ciarocco. N. J.; & Twenge. J. M., (2005) Social exclusion impairs self-regulation. *Journal of Personality and Social Psychology*, 88. 589-604

Baumeister. R. F.; Twenge. J. M., & Nuss. C. K., (2002) Effects of social exclusion on cognitive processes: Anticipated aloneness reduces intelligent thought. *Journal of Personality and Social Psychology*, 83. 817-827

Berlin. L. J.; Cassidy. J., & Belsky. J., (1995) Loneliness in young children and infant-mother attachment: A longitudinal study. *Merrill-Palmer Quarterly*, 41 (1). 91-103

Blos. P., (1967) The second individuation process of adolescence. *Psychoanalytic Study of the Child*, 22. 162–186

Bouchard. T J.; Lykken. D. T.; McGue. M.; Segal. N. L., & Tellegen. A., (1990) Sources of human psychological differences: the Minnesota study of twins reared apart. *Science*. *250*. 223-228

Bowlby. J., (1953) Child care and the growth of love. 1st ed. London: Penguin Books

Bowlby. J., (1973) *Attachment and loss. Vol. 2: Separation: Anxiety and anger.* New York: Basic Books

Bowlby, J., (1988) A secure base: Parent-child attachment and healthy human development. New York: Basic Books

Breuer. H., (1973) *Ego identity status in late-adolescent college males. as measured by a group administered incomplete sentences blank and related to inferred stance toward authority.* Unpublished

doctoral dissertation. New York University

Brod. M., (1988) The diaries of Franz Kafka. New York City: Schocken Books

Bronson. G. W., (1959) Identity diffusion in late adolescents. *The Journal of Abnormal and Social Psychology*, 59 (3). 414-417

Buchholz. E. S., (1997) The call of solitude: Alonetime in a world of attachment. New York: Simon & Schuster

Byrd. R., (1938) Alone. New York: G. P. Putnam's Sons

Cacioppo. J. T.; Cacioppo. S., & Boomsma. D. I., (2014) Evolutionary mechanisms for loneliness. *Cognition and Emotion*, 28. 3-21

Cacioppo. J. T., & Hawkley. L. C., (2009) Perceived social isolation and cognition. *Trends in Cognitive Science*, 13. 447-454

Cacioppo. J. T.; Hawkley. L. C.; Ernst. J. M.; Burleson. M.; Berntson. G. G.; Nouriani. B., & Spiegel. D., (2006) Loneliness within a nomological net: An evolutionary perspective. *Journal of Research in Personality*, 40. 1054-1085

Cacioppo. J. T.; Hughes. M. E.; Waite. L. J.; Hawkley. L. C., & Thisted. R. A., (2006) Loneliness as a specific risk factor for depressive symptoms: cross-sectional and longitudinal analyses. *Psychology and Ageing*, *21*. 140-151

Cacioppo. J. T., & Patrick. W., (2008) Loneliness: Human nature and the need for social connection. New York: W. W. Norton & Company

Coplan. R. J., & Ooi. L., (2014) The causes and consequences of playing alone in childhood. In R. J. Coplan & J. C. Bowker (Eds.), *The Handbook of Solitude*. Chichester: Wiley Blackwell. 111-128

Dimaggio. G., (2010) Impoverished self-narrative and impaired self-reflection as targets for the psychotherapy of personality disorders. *Journal of Contemporary Psychotherapy*, *41*. 165-174

Diamond. A., (1990) The development and neural bases of memory functions as indexed by the AB and delayed response tasks in human infants and infant monkeys. *Annals of the New York Academy of Sciences*, 60. 231–267

Donne. J., (1999) Devotions upon emergent occasions. London: Vintage Books

Dumontheil. I., (2014) Development of abstract thinking during childhood and adolescence: The role of the rostrolateral prefrontal cortex. *Developmental Cognitive Neuroscience*, *10*. 57-76

Dumontheil. I.; Burgess. P. W., & Blakemore. S. J., (2008) Development of rostral prefrontal cortex and cognitive and behavioural disorders. *Developmental Medicine and Child Neurology*, 50 (3). 168-181

Eifert. E. K.; Adams. R.; Dudley. W., & Perko. M., (2015) Family caregiver identity development: A literature review. *American Journal of Health Education*, 46(6), 357-367

Erikson. E. H., (1968) Identity: Youth and crisis. New York: W. W. Norton

Gerstein. L. H., & Tesser. A., (1987) Antecedents and responses associated with loneliness. *Journal of Social and Personal Relationships*, 4. 329-363

Goossens. L., (2014) Affinity for aloneness in adolescence and preference for solitude in childhood. In R. J. Coplan & J. C. Bowker (Eds.), *The Handbook of Solitude*. Chichester: Wiley Blackwell. 150-166

Goossens. L., & Marcoen. A., (1999) Adolescent loneliness, self-reflection, and identity: From individual differences to developmental processes. In K. Rotenberg & S. Hymel (Eds.), *Loneliness in Childhood and Adolescence*. Cambridge: Cambridge University Press. 225-243

Hegel. G., (2003) Independence and dependence of self-consciousness: Lordship and bondage. In, G. Hegel., *The Phenomenology of Mind*, trans. J. B. Baillie., New York: Dover Publications. 104-112

Hojat. M., (1987) A psychodynamic view of loneliness and mother-child relationships: A review of theoretical perspectives and empirical findings. *Journal of Social Behaviour and Personality*, 2. 89

Holmbeck. G., (1996) A model of familial relational transformations during the transition to adolescence: Parent-adolescent conflict and adaptation. In J. Graber.; J. Brooks-Gunn., & A. Petersen. (Eds.), *Transitions Through Adolescence: Interpersonal Domains and Context.* New Jersey: Erlbaum. 167–199

Hope. K., (2016) UK 'has never been more addicted to smartphones'. *BBC News*. [online] Available at: http://www.bbc.co.uk/news/business-37468560> [Accessed 14 November 2016]

Jung. C. G., (1938) Psychological types. London: Routledge

Luke Thompson

Jung. C. G., (1959) The Archetypes and the collective unconscious. London: Routledge

Katz. J. E., & Rice. R. E., (2002) Social consequences of internet use: Access, involvement, and interaction. Cambridge, MA: MIT Press

Kroger. J., (1985) Relationships during adolescence: A cross-national comparison of New Zealand and United States teenagers. *Journal of Adolescence*, 8. 47-56

Kroger. J., & Haslett. S. J., (1988) Separation-individuation and ego identity status in late adolescence: a two-year longitudinal study. *Journal of Youth and Adolescence*, 17. 59–79

Kwon. M.; Kim. D.; Cho. H., & Yang. S., (2013) The smartphone addiction scale: Development and validation of a short version for adolescents. *PLoS ONE 8 (12)*: e83558

Larson. R. W., (1997) The emergence of solitude as a constructive domain of experience in early adolescence. *Child Development*, 68. 80-93

Larson. R. W., (1999) The uses of loneliness in adolescence. In K. Rotenberg & S. Hymel (Eds.), *Loneliness in Childhood and Adolescence*. Cambridge: Cambridge University Press. 244-262

Larson. R. W., & Csikszentmihalyi. M., (1978) Experiential correlates of time alone in adolescence. *Journal of Personality*, 46. 677-693

Larson. R. W., & Csikszentmihalyi. M., (1980) The significance of time alone in adolescent development. *Journal of Current Adolescent Medicine*, *2*. 33-40

Luna. B.; Garver. K. E.; Urban. T. A.; Lazar. N. A., & Sweeney. J. A., (2004) Maturation of cognitive processes from late childhood to adulthood. *Child Development*, 75. 1357-1372

Mann. S., (2016) The upside of downtime: why boredom is good. London: Robinson

Marcia. J. E., (1966). Development and validation of ego-identity status. *Journal of Personality and Social Psychology*, 3. 551–558

Marcia. J. E., (1980) Identity in adolescence. In J. Adelson. (Ed.), *Handbook of Adolescent Psychology*. New York: Wiley and Sons

Marcia. J. E.; Waterman. A. S.; Matteson. D. R.; Archer. S. L., & Orlofsky. J. L., (1993) *Ego identity: A handbook for psychosocial research*. New York: Springer Science

Marcoen. A., & Goossens, L., (1993) Loneliness, attitude towards aloneness, and solitude: Age differences and developmental significance during adolescence. In S. Jackson & H. Rodriguez-Tome (Eds.), *Adolescence and its Social Worlds*. Hillsdale, NJ: Erlbaum. 197-227

Markus. H., (1977) Self-schemata and processing information about the self. *Journal of Personality and Social Psychology*, 35. 63–78

Matteson. D. R., (1977) Exploration and commitment: Sex differences and methodological problems in the use of identity status categories. *Journal of Youth and Adolescence*, *6*. 353-374

McPherson. M.; Smith-Lovin. L., & Brashears. M. E., (2006) Social isolation in America: Changes in core discussion networks over two decades. *American Sociological Review*, *71*. 353-375

Mijuskovic. B. L., (2012) *Loneliness in philosophy, psychology, and literature.* Bloomington: iUniverse

Moran. S., (2010) The roles of creativity in society. In J. C. Kaufman & R. J. Sternberg (Eds.), *The Cambridge Handbook of Creativity.* Cambridge: Cambridge University Press. 74-86

Moustakas. C. E., (1972) Loneliness and love. New Jersey: Prentice-Hall, Inc.

Murray. S. L.; Bellavia. G. M.; Rose. P., & Griffin. D. W., (2003) Once hurt, twice hurtful: How perceived regard regulates daily marital interactions. *Journal of Personality and Social Psychology*, 84. 126-147

Ohayon, M. M., (2005) Prevalence and correlates of non-restorative sleep complaints. *Archives of Internal Medicine*, 165. 35-41

Paterson. S. J.; Heim. S.; Friedman. J. T.; Choudhury. N., & Benasich. A. A., (2006) Development of structure and function in the infant brain: Implications for cognition, language and social behaviour. *Neuroscience and Biobehavioral Reviews*, *30*(8). *1087-1105*

Podd. M. H., (1972) Ego identity status and morality: The relationship between two developmental constructs. *Developmental Psychology*. 6. 497-507

Rousseau. J. J., (1979) Reveries of the solitary walker. London: Penguin

Rubin. A. M.; Perse. E. M., & Powell. R. A., (1985) Loneliness, parasocial interaction, and local television news viewing. *Human Communication Research*, *12*. 155-180

Russell. B., (1955) History of western philosophy. Cambridge: Cambridge University Press

Schur. E. M., (1971) Labelling deviant behaviour: Its sociological implications. New York City: Harper & Row

Segal. N. L., (2012) Born together – reared apart: The landmark Minnesota twin study. Massachusetts: Harvard University Press

Shelley. M., (1818) *Frankenstein; or, the modern Prometheus*. London: Lackington, Hughes, Harding, Mavor & Jones

Singh-Bhatia. M., (2008) Cell phone dependence: A new diagnostic entity. *Delhi Psychiatry Journal*, 11 (2). 123-124

Skaff. M. M., & Pearlin. L. I., (1992) Caregiving: Role engulfment and the loss of self. *The Gerontological Society of America*, 32 (5). 656-664

Soenens. B., & Vansteenkiste. M., (2011) When is identity congruent with the self? A selfdetermination theory perspective. In S. J. Schwartz, K. Luyckx, & V. L. Vignoles (Eds.) *Handbook of Identity Theory and Research*, 381-402. New York: Springer

Stafford. Z., (2015) We millennials lack a roadmap to adulthood. *The Guardian*. [online] Available at: http://www.theguardian.com/commentisfree/2015/mar/30/we-millennials-lack-a-roadmap-to-adulthood> [Accessed 10 November 2016]

Steele. J. R., & Brown. J. D., (1995) Adolescent room culture: Studying media in the context of everyday life. *Journal of Youth and Adolescence*, *24*. 551-576

Steinberg. L., (1990) Autonomy, conflict, and harmony in the family relationship. In F. S. Shirley & G. R. Elliott (Eds.), *At the Threshold: The Developing Adolescent*. Cambridge: Harvard University Press. 255-276

Stern. S. R., (2004) Expressions of identity online: Prominent features and gender differences in adolescents' World Wide Web home pages. *Journal of Broadcasting and Electronic Media*, 48. 218-243

Storr. A., (1960) The integrity of the personality. London: Penguin Books

Storr. A., (1988) Solitude. London: Harper Collins

Tellegen. A.; Lykken. D. T.; Bouchard. T. J.; Wilcox. K. J.; Segal. N. L., & Rich. S., (1988) Personality similarity in twins reared apart and together. *Journal of Personality and Social Psychology*,

6, 1031-1039

Turkle. S., (2015) Reclaiming conversation: The power of talk in a digital age. London: Penguin

Twain. M., (2013) The adventures of Huckleberry Finn. London: HarperCollins

Valkenburg. P. M., & Peter. J., (2008) Adolescents' identity experiments on the internet consequences for social competence and self-concept unity. *Communication Research*, 35. 208-231

Wang. Q.; Fink. E. L., & Cai. D. A., (2008) Loneliness, gender, and parasocial interaction: A uses and gratification approach. *Communication Quarterly*, *56*. 87-109

Wei. M.; Russell. D. W., & Zakalik. R. A., (2005) Adult attachment, social self-efficacy, selfdisclosure, loneliness, and subsequent depression for freshman college students: A longitudinal study. *Journal of Counselling Psychology*, 52. 602–614

Wilson. R. S.; Krueger. K. R.; Arnold. S. E.; Schneider. J. A.; Kelly. J. F.; Barnes. L. L.; Tang. Y., & Bennett. D. A., (2007) Loneliness and risk of Alzheimer disease. *Archives of General Psychiatry*, 64. 234-240

Wilson. T.; Reinhard. D.; Westgate. E; Gilbert. D; Ellerbeck. N; Hahn. C; Brown. C., & Shaked. A., (2014) Just think: The challenges of the disengaged mind. *Science*, *345*. 75-77

Winnicott. D. W., (1958) The capacity to be alone. *The International Journal of Psychoanalysis*, 39. 416-420

Wolfe. M., & Laufer. R., (1974) The concept of privacy in childhood and adolescence. In D. Carson (Ed.), *Man-environment Interactions*. Stroudsburg, PA: Dowden, Hutchinson & Ross

Yurgelun-Todd. D., (2007) Emotional and cognitive changes during adolescence. *Current Opinion in Neurobiology*, 17. 251-257

Zvosec. C. C.; Gordon. B. S.; Hyland. S T.; Oja. B.D., & Bass. J. R., (2019) An exploratory examination of role engulfment and NCAA teacher coaches. *The Journal of the Professoriate*, *10*(*2*). 47-77

6.

Chapter Six: Reflections on Ootavid Mann

"But you must realise that a hundred million times this matter, on the way to human shape, has been stopped to form now a stone, now lead, now coral, now a flower, now a comet..." (Bergerac, 1657)

"To be lonely means to experience the agony of living, of being, of dying as an isolated individual or to know the beauty and joy and wonder of being alive in solitude." (Moustakas, 1972)

In 1979 Italo Calvino released his postmodernist masterpiece 'Se una notte d'inverno un viaggiatore', known in English as 'If on a winter's night a traveller' (Calvino, 1979). The book was one of a kind. Its narrative, rather than conforming to contemporary structural standards, was a pathless labyrinth of beginnings, with each even-numbered chapter seeming to restart the book, pulling its reader back into the opening paragraphs of a new novel, one that felt dramatically different. Before the heat of each new story characters evaporate. Plots which showed promise became roads without destination, ending in the shrubbery and gorse of the reader's imagination. And yet, while each beginning was unique, certain elements remained consistent, humming beneath the feet of Calvino's ephemeral protagonists and hinting at some greater work, a magnum opus straining to be reified in ink... Such was my initial experience writing *Ootavid Mann*. For the first year of its creation I wrote like one stumbling blind through the passages of Calvino's post-modern epic, groping down dark avenues for a hint of thread, lost in the making of beginnings.

Frustration characterised this liminal period, in which the thesis awaited its metamorphosis from academic discussion into its creative form. But though I resented this wheel of restarting at the time, hindsight allowed me to recognise that if not for this process, the novel would not resemble the work I ultimately created, and would have failed to represent loneliness in the way I desired.

Traversing the Myrkviðr of Beginnings

There is something inarguably lonely about the vast, desolate landscapes of Iceland. Volcanic deserts black with basalt stretch from horizon to horizon, scarred with cleft gulleys filled with a dark antique ice, while glacier-tipped summits gleam raw in the midnight sun as if newly made. One can wander these landscapes for days and not see another human. In Iceland, a perfect, unbroken solitude can be experienced.

It was this strong association between loneliness, solitude, and the stark landscapes of Iceland that drew me to these northern lands for the environmental setting for *Ootavid Mann*. From its first iteration to its last, the bleak, beautiful north remained the novel's locus, even while the remainder of its components found themselves subject to vacillation. There was too much symbolism, too much of loneliness that could be drawn from the ornament of landscape for it to be abandoned. However, while the environmental atmosphere remained (the coldness, openness, and the emptiness) the exact geographical location varied. The pin wavered over the map, and when it thrust in, it often dug so deep that it proved stubborn to remove.

All night the bare blowing of snow, and when he woke to lightning and the ringing of stones he looked out and saw mountains shaped by blue fire and glaciers like diamonds. The birch coppice where he lay clattered in the thunder and blue djinns leapt and span through the tree boles. When the thunder was overhead the sound of it boomed like the breaching of the last lone leviathan. Sheet lightning rattled through the white trees and their thin black shadows scorched into the snow and through it all the boy lay flat and did not move. When the thunderstorm passed on he could see the lightning over the marshlands. The thin wires proceeding in single frames like the legs of enormous insects crossing the sky. (Thompson, 2020)

Iceland's frozen wetlands were the stage for the first iteration of *Ootavid Mann*, as illustrated in this extract. In addition to the general sense of place shown here, one might also find evidence of the temporal setting: the presence of a birch coppice suggests a period closer to the arrival of the Norsemen, as Iceland's once-forested countryside was gradually stripped bare during those first few centuries of settlement, as architects, boat-builders, and the burgeoning community of shepherds who required more and more land on which to graze their flocks laid waste to the natural landscape. The first hint of isolation is evident also, amplified by the smallness of the boy before a multitude of enormousnesses; the thunderstorm, the glaciers, and the imagery of a colossal insect.

But the beginning soon pales as it encounters the minotaur of plot. In violation of his father's commands the nameless boy ventures out into the boreal highlands in search of his stray sheep... and little emerges from this other than overworked descriptions of landscape. Thus the beginning is left in its infancy to fend for itself upon a mountain, and *Ootavid Mann* moves on towards its next form:

They ate porridge from clay bowls shaped by their fingers and when they were done they shouldered their packs and their lambskins and went out. The grotto gave onto a basalt plateau polished blackly in the rain. The cinderland was stark and interminable and held no life bar the two who walked upon it. When they navigated fissures hand in hand and could see down to the depths they beheld immense crags rising from the mist like longships foundered in the dark. Stillness and cold and no wind. The boy's legs were tired and he was cold and wet and hungry but he knew that the walk would warm him and there was dried stockfish in his father's pack. They descended towards the valley along basalt ridges and descended into stone and heath brushing aside the alpine woodsia that feathered from clefts in the columnar rock. When they had been walking an hour the boy looked back toward the plateau heights and the cave so small and so high which had disgorged them upon the earth. He thought he saw a figure in the ashen arch up there but he knew it was no spectre but a trick of the storm's light and he followed his father without looking back again. Their way opened onto frail grasses. Life more frail still. They crossed the declining land in silence (Thompson, 2020)

In this beginning landscape is as prominent as in the first. But human figures have been injected into the narrative, in the hope that their presence might provide some agency, and hustle the plot forward toward something more interesting than Baroque descriptions of landscape. This intent fails immediately. The characters feel somehow empty - it isn't that they feel two-dimensional, absent of interiority, but rather that they appear to serve only as mobile viewports, adding little more to the narrative than an illusion of movement.

But though there are numerous failures within this attempt, a few more threads appear in the mud. For one, there is a greater focus on detail and specificity, as seen in the presence of the alpine woodsia, a plant common to Iceland, and the poor but in-depth description of a slain snipe later in the narrative. There is also a stylistic advancement, an approach to narration that, in this early stage, has not quite found its feet, feeling clumsy, and almost exhibitionistic. The following beginning pulls on these threads further and adds another: an awareness and appreciation of history.

All night the bare blowing of snow and a sea without end. In the water fragments of ice and on this ice and the ship the cold northern wind. It scoured skin and froze eyelashes and it weaved mirrors into the beards of the oarsmen that reflected black sea, black sky. Flakes of snow butterflied over their arms and into the eyes of the animals tethered at the keelson. Icicles hung off the yard where the sail was furled. They had curved from the ship's continued movement into the wind. Sometimes the icicles broke onto the wet boards like dropped scimitars and sometimes they fell in the sea. The ship moved into a circle of sea ice. Ice like the molars of reindeer and other fragments like canines. An oar slapped a tooth and rang hollow. The oarsman pushed it away with his flat and watched it rotate in the water. In the sheer side of the ice he saw the ship in reflection, a cocoon of silver, spun between the veins of a perfect black leaf. (Thompson, 2020)

While the pin remains in Iceland, its location has shifted to the south sea, to a Scandinavian longship moving through ice-choked waters. Though the concept of time was only touched lightly in previous beginnings, relying on a reader's inquisitiveness, here we have a set period and an historical event: the first settlement of Iceland by Flóki Vilgerðarson and his entourage during the mid-9th century (Karlsson, 2000). The reason for this move towards a quasi-historical event was two-fold: one was due to a lack of structure or framework, the other was due to the influence of creative writing help-books and the formulaic approaches outlined within.

Frustrated by the processes of re-beginning, I turned to several creative writing guides in the hope that I might find a way through this pathless wood. Most dedicated a considerable length to the question of the 'novelist's process', outlining the myriad ways authors had approached the creation of their novels, from their initial plans through to the final editorial pass. In desperation I decided to

mimic one such approach, and it wasn't long until one wall of my study was plastered in post-it notes and blu-tacked illustrations and character personas, resembling less an out-pouring of ideas than a noir detective's evidence board. There was something cathartic about this process, and I launched upon my subsequent beginning with renewed vigour. But as the novel approached its fifth chapter I found myself once again afflicted with aporia, despite the wall of notes. Though the novel had been given a clear path forward, this act of preparation seemed to have stripped the work of its soul. I had been painting on a blank canvas with a palette of wild and vibrant colours, but here I was faced with a paint-by-numbers diagram, and the watercolours that had once excited me now seemed the tools of an unhappy labourer. It was at this juncture that I stepped back, and decided to re-evaluate what I was attempting to achieve.

Architectural Foundations: The Memetic Evolution of the Novel

In previous chapters of this thesis I have written on the subject of evolution, how loneliness has been an essential driver in mankind's development, and how early societies may have have been shaped by the adaptive influences of relational, intimate, and collective isolation. But evolution isn't the domain of biological organisms alone. It can also act on society, and upon the shared elements of that society, mutating them and causing them to respond to selective pressures. Richard Dawkins, the famous genetic biologist, coined a term for these aspects of society, or culture, that undergo a similar process of mutation and evolution as our genes: *mimeme*, or the shortened term, *meme*.

Examples of memes are tunes, ideas, catch-phrases, clothes fashions, ways of making pots or of building arches. Just as genes propagate themselves in the gene pool by leaping from body to body via sperms or eggs, so memes propagate themselves in the meme pool by leaping from brain to brain in a process which, in the broad sense, can be called imitation. [...] When you plant a fertile meme in my mind you literally parasitize my brain, turning it into a vehicle for the meme's propagation in just the way that a virus may parasitize the genetic mechanism of a host cell. (Dawkins, 1989. p.192)

This process of evolutionary, memetic change is responsible for the modern novel, with all its fleshed-out characters and meaningful plots. Just as mankind has its hominid ancestors, so too does the novel have its own, both in terms of construction and content (Diringer, 1982). Beneath the pulp of centuries, these ancestral bones may be found.

The novel's key art is that of interesting a reader in the fate of its characters. Each character, within a novel, has about them an aura of biography. The novel's author chooses which parts of each auroral biography to represent within their work, leaving lacunae in deliberate fashion, trimming off an event here and there, abridging wherever the author deems best. These characters then interact with one another. Biographies touch and part. Dozens of characters may populate an author's novel, but even when this is the case, the focus is usually on just one or two. It is much harder to manipulate a reader into being interested in the fate of several dozen people than it is a single character. This holds true both for modern novels and journalistic news stories, with their tendency to focus upon one or two people in larger tragedies, so that the reader may better empathise with those experiencing the event than a cold statistic allows.

When this thread of character development is followed back along its length one discovers its source: the biographies and autobiographies of saints and anchorites (Mandelstam, 1977). Known as 'hagiographies', these early religious works focused on the life of a notable figure, usually a saint or a person of ecclesiastical significance. While these hagiographies concerned themselves primarily with a recounting of the individual's life and trials, what is most interesting, and most pertinent here, is in how they often sought to portray the inner psychological landscape of their subject. In works such as *Revelations of Divine Love*, by Julian of Norwich, and *The Confessions of Saint Augustine*, we see the beginnings of that psychological focus which resides in the core of the modern novel. Accounts of thoughts, emotional states, and contemplative soliloquies (these latter usually addressed to God, who takes the role of audience which, in secular novels, tends to be occupied by the reader) weave a vivid tapestry of human interiority that can, at times, feel almost modern. Take a look at the below passage from *The Confessions of Saint Augustine*:

I stormed, sobbed, wept in turmoil, beyond rest or counsel. I bore along with me my lacerated and bloodied soul, itself impatient with my bearing it. But I could find no place to put it down - not in pleasant woods, nor amid dance and song, in sweet-scented gardens, elaborate banquets, in the pleasure of brothel or bed, nor even in books and poetry did it become quiet. Everything irked me, even the light of day, and whatever was not he was vile and wearisome to me, except groans and tears, in which alone I found a crumb of rest. (Augustine, 1983. p.86)

This above quote, translated by E. M. Blaiklock, comes from the autobiographical writings of Augustine, the Bishop of Hippo, a Christian saint who lived between the years 354AD and 430AD. If we ignore the necessities of translation (the original was written in Latin) but focus upon the content of the passage, the sense of interiority contained within feels almost as if it could have been written by an author alive today. Indeed, as we read further, not only does a communication of psychological interiority continue, but it shows mutation and change as the author's inchoate identity develops. In this respect it seems to leapfrog the Theophrastan form of novel-development that characterised the pre-Freudian period of creative writing (in which characters were set types, and floated along in the river of plot), landing square in the psychological, self-analytical period, where the consciousness of the character takes centre stage (Wood, 2009).

Here's another passage from a hagiography. This time from *Revelations of Divine Love*, by the female anchoress Julian of Norwich. Unlike the preceding example, this one is not autobiographical, only semi-autobiographical, as it was dictated to a monk who wrote on her behalf. Again, note the concern with the psychological landscape of its subject:

Then came a religious person to me and asked how I was doing. I said I had raved today. And he laughed loud and heartily. And I said, "The cross that stood before my face - I thought it was bleeding freely." At this the person I was speaking to became quite serious. And I felt very ashamed and amazed at my thoughtlessness, and I thought, "The man takes my least word seriously", so I said no more about it. When I saw how seriously he took it and with what respect, I wept, feeling much ashamed. I should have liked to received absolution, but it was no time for talking to a priest about it, for I thought to myself, "Why should a priest believe *me?"* (Norwich, 1966. p.181)

Julian of Norwich continues on to fall into a spiral of self-loathing as a result of her 'flippant speech', becoming so distraught at what others might now think of her (both mortals and her God) that she almost passes away. Once again, there is the texture of the modern novelist's concern with a character's inner-world - a focus not on narrative or shunting a plot along, but on the exploration of interiority. Contrast this with a short passage from Alan Sillitoe's *The Loneliness of the Long-Distance Runner*, a brief work of fiction written more than one and a half thousand years after the writings of Saint Augustine, and around six-hundred years after *The Revelations of Divine Love*.

I don't know why I think these thoughts are better than any I've ever had, but I do, and I don't care why. I suppose it took me a long time to get going on all this because I've had no time and peace in all my bandit life, and now my thoughts are coming pat and the only trouble is I often can't stop, even when my brain feels as if its got cramp, frostbite, and creeping paralysis rolled into one. (Sillitoe, 1959. p.46)

Sillitoe's novella concerns a character who, being incarcerated in a British borstal, could not be further removed from a devout late-Roman Bishop, nor a tormented medieval anchoress. While the narrative voice is different, the content with which it is concerned is identical - the interior life of the individual, and more specifically, a focus upon an interior conflict that influences and mutates the character's self from one form into another. Sillitoe's protagonist seeks to remain true to himself, his moralistic system, and his upbringing by throwing a race while attempting to come to grips with newfound powers of self-reflection (indeed, this self-reflection enables him to recognise that he *has* a self worth preserving). Hagiographies have for their locus a recounting of how the religious person changed due to the acceptance of God; Augustine mentions in his *Confessions* that he often pursued what he called "all manner of lusts", even engaging in borstal-worthy behaviour before overcoming the conflict within his own mind, and finding the path that most aligned with his desired, ideal self.

The modern novel is therefore a secular response to these hagiographies (Wood, 2009). If we did not have these ancient biographical accounts of holy individuals it is unlikely we would have any fictional characters as rich or as rounded as Raskolnikov, Bloom, or Robinson Crusoe. Indeed, any

fictional figure who relies on a shared interiority for their expression owes much of their existence to these early hagiographies.

But before we continue, a note must be made here. I am not suggesting that character itself is derived from such hagiographies, only that type of character possessing psychological depth who is steered less by destiny and more by their own decisions. Those stories told by the Ancient Greek poets have characters as well as clearly defined narratives, but their characters are often Theophrastan in form (we will return to Theophrastan characters soon), and more representative of a group than an actual, real individual. Even characters who seem to be more established from a characterisation standpoint than one might expect, such as Odysseus, the hero king of Ithaca, or the inventor Daedalus, architect of the labyrinth at Knossos, tend to be pawns tied to their narratives, with little if any interiority.

To illustrate this difference, and to better show what is meant by the 'psychological depth' portrayed in these early hagiographies, contrast these two short extracts: the first from the Calypso chapter of Homer's *Odyssey*, the second from the Calypso chapter of James Joyce's *Ulysses*.

It was with a happy heart that the noble Odysseus spread his sail to catch the wind and skilfully kept the raft on course with the rudder. There he sat and never closed his eyes in sleep, but kept them on the Pleiads, or watched the late-setting Bootes slowly fade, or the Great Bear, sometimes called the Wain, which always wheels round in the same place and looks across at Orion the Hunter with a wary eye. It was this constellation, the only one which never sinks below the horizon to bathe in Ocean's stream, that the wise goddess Calypso had told him to keep on his left hand as he sailed across the sea. So for seventeen days he sailed on his course, and on the eighteenth there came into view the shadowy mountains of the Phaeacian's country, which jutted out to meet him. The land looked like a shield laid on the misty sea. (Homer, 1997. p.69-70)

His hand took his hat from the peg over his initialled heavy overcoat and his lost property office secondhand waterproof. Stamps: stickyback pictures. Daresay lots of officers are in the swim too. Course they do. The sweated legend in the crown of his hat told him mutely: Plasto's high grade ha. He peeped quickly inside the leather headband. White slip of paper. Quite safe. On the doorstep he felt in his hip pocket for the latchkey. Not there. In the trousers I left off. Must get it. Potato I have. Creaky wardrobe. No use disturbing her. She turned over sleepily that time. He pulled the hall door to after him very quietly, more, till the footleaf dropped gently over the threshold, a limp lid. Looked shut. All right till I come back anyhow.

He crossed to the bright side, avoiding the loose cellarflap of number seventy five. The sun was nearing the steeple of George's church. Be a warm day I fancy. Specially in these black clothes feel it more. Black conducts, reflects, (refracts is it?), the heat. But I couldn't go in that light suit. Make a picnic of it. His eyelids sank quietly often as he walked in happy warmth. (Joyce, 1922. p.95-96)

Both extracts concern the 'setting out' of their respective heroes on their journeys - Odysseus to the country of the Phaeacians, and a battle with Poseidon; Bloom onto the streets of Dublin, and a visit to the outhouse. But note how these two characters are written in regard to their setting out. For Homer the focus is upon the act itself, the nautical art of sailing at night with the stars as one's bright navigator. All we know about Odysseus' internal state is that he has 'a happy heart'. His cognitive state is occluded in favour of movement and action. In contrast, Joyce has for his focus the interiority of his protagonist, often to an alienating degree. The reader is placed within the cockpit of Bloom's mind with full oversight of the buttons and knobs that cause him to engage on this or that behaviour, though without the manual that reveals what each button actually does. For instance, as Bloom takes down his hat and feels in his pocket, we are faced with a succession of internal images as they race through Bloom's mind - but what they might refer to, what meaning they have, is not immediately apparent. This experience of being 'inside' a character like Bloom is more chaotic and unstructured, and far more intimate, than the 'outside' experience of being with Homer's Odysseus. Not only that, but the text's narration is intrinsically linked to Bloom in Joyce's passage, allowing Joyce to portray the world from Bloom's perspective in every respect (for instance, though not a part of Bloom's interior dialogue, 'happy warmth' is clearly Bloom's phrase, as it is tied to his child-like pleasure as he wanders out into Dublin), whereas in Homer's passage, the language used to describe the world is disconnected from Odysseus' direct experience of it - the narration is connected to Homer, not his protagonist. Bloom, despite being an 'inside' character, leaks out into the wider text. In contrast,

Odysseus, despite being an 'outside' character, is securely caged.

And it is this Bloom-like character, the inside-focused character whose essence permeates the containing text, whose psychological landscape holds equal or greater weight than the setting, plot or wider narrative, which has for its foundation the hagiographies of history's saints and anchorites.

But hagiographies cannot claim full responsibility for the memetic evolution of the novel as we know it. There is another type of literature, another important ancestor of the modern novel that concerns itself with a psychological exploration of a central character: mirrors for princes.

Where the hagiography concerned the recounting of an established interiority, the mirror for princes form has for its purpose the manipulation of other interiorities, or consciousnesses, in order to meet a social or spiritual ideal. These consciousnesses tended to be young, upcoming monarchs who required guidance beyond the technical aspects of their future role. Recall the individuation discussion from an earlier chapter of this thesis, specifically that second stage of individuation which occurs in adolescence - a mirror for princes is functionally a self-help book for bringing its reader (a prince or future monarch) through the moratorium stage of individuation, in which one is actively involved in identity exploration, into the calm maturational or achievement stage, in which one has attained a secure and stable personal identity. This form of literature is therefore educational and is a psychological variant of medieval speculum literature - a form dating from the twelfth century that sought to encompass an enormous, even encyclopedic amount of knowledge (usually doctrinal or concerning the natural world) within a sole work (Ritamary, 1954).

Despite being educational, or perhaps because of it, mirrors for princes relied on the sharing of the author's own interiority in order to communicate the reasoning behind an instruction or piece of advice. There is a degree of psychological analysis within these mirrors that is absent from similar educational works at the time, which tended towards presenting guidance as either divinely ordained or as objective, unquestionable fact. Contrast these approaches to education in the following quotes, the first from perhaps the most famous instance of divine educational guidance, the sermon on the mount, and the second from Marcus Aurelius' *Meditations*:

Thou shalt not do that which is unjust, nor judge unjustly. Respect not the person of the poor: nor honour the countenance of the mighty. But judge thy neighbour according to justice. Thou shalt not be a detractor nor a whisperer among the people. Thou shalt not stand against the blood of thy neighbour. I am the Lord. (Bible, 2000)

Do not waste what remains of your life in speculating about your neighbours, unless with a view to some mutual benefit. To wonder what soand-so is doing and why, or what he is saying, or thinking, or scheming, - in a word, anything that distracts you from fidelity to the ruler within you means a loss of opportunity for some other task. See then that the flow of your thoughts is kept free from idle or random fancies, particularly those of an inquisitive or uncharitable nature. A man should habituate himself to such a way of thinking that if suddenly asked, 'what is in your mind at this moment', he could respond frankly and without hesitation; thus proving that all his thoughts were simple and kindly, as becomes a social being with no taste for the pleasures of sensual imaginings, jealousies, envies, suspicions, or any other sentiments that he would blush to acknowledge in himself. (Aurelius, 1964. p.55-56)

In the quote from the Bible there is no attempt at an explanation for the educational guidance presented, nor any appreciation for the inner psychological existence of those to whom it is directed. In terms of a reason for these educational commandments, all we are given is the deific variant upon 'because I told you so', which is little more than a veiled parental threat. Marcus Aurelius, in contrast, when giving a very similar lesson around one's behaviour toward a neighbour, indulges his audience with an explanation of *why* thinking overmuch about a neighbour can be detrimental. Furthermore, in doing so he demonstrates an awareness of one's internal, psychological state - he recognises that a mind tuned to its neighbour's business cannot give its full attention to those serious tasks involved in being a ruler, and also recognises that unkind thoughts about another, while hidden within one's cranial vault, can nevertheless be revealed in social situations, which may in turn hurt one's standing within an immediate social circle. By explaining this cause-and-effect relation, and by demonstrating an awareness of, and respect for, his audience's interiority, Aurelius is writing like a modern novelist who has for their focus the psychological motivations of their characters.

Through this archaeological work into the precursor of the novel, I found a way forward through the murky wood of beginnings. Reading both several hagiographies and mirrors for princes, I was often struck by how these works, in recounting what a saint or anchorite has experienced, or in exploring and guiding the developing psychological landscape of a future king, almost seemed to vibrate with a truthfulness that would not have been present if their authors had attempted to contort their content into something resembling a traditional, multi-act narrative. There was rawness in the works, a sense of honesty and a sense of freedom quite different to the modern novel, which often feels artificial in its architecture, in how it presents its narrative and characters. I wanted to capture this sense within *Ootavid Mann*. Therefore I needed to step back along the evolutionary chain, and settle in the mists of the pre-novel (a behaviour I later realised was considerably post-modern). But in order to do so, I would need to find some way to make my work, which at its root would indeed be artificial, feel as if it belonged, as if it had about it an air of authenticity. I began by thinking deeply about character.

Architectural Foundations: Character and the Umwelt

Around ten thousand years ago, the way humans interacted with the world changed. For millions of years humans had been hunter gatherers, and had a relatively light touch on their environment; they hunted goats and plucked berries without deciding which goat should mate with which, or where the berry bush should grow. This way of life was nomadic, and resulted in humans spreading across the surface of the planet as they searched for more berries, and more goats to eat. But then, sometime in the thousand year span between 9500BC and 8500BC, a group of humans shifted from this nomadic way of being, and instead started to domesticate plants and animals (Harari, 2014). It was in the rich, verdant, hilly countrysides of south-eastern Turkey that this shift began, and it wasn't long before the once-wild hills had been tamed and partitioned as these new agriculturalists practised the artistry of domestication. By 9000BC, the Asiatic mouflon and Bezoar ibex had been domesticated into sheep and goats (Alberto, Boyer, et al., 2018). By 8000BC, we had domesticated wheat, peas, and lentils - all core foods for a non-nomadic diet. This great shift, known as the agricultural revolution, marked the

beginnings of what we consider civilization, and suddenly, almost overnight from the perspective of our two-and-half-million year history as a species, the once-wild landscape became populated with settlements of farmers and shepherds.

The shepherd is one of the original, recognisable characters in literature. And it's easy to see why. In almost every corner of the world, wherever people settled, certain men and women would be tasked with the protection of those animals whose meat would feed the settlers, and whose flesh and wool would keep them warm during the nights and bitter winters. It was a socially important role to have, and therefore commanded a degree of respect. But despite holding a place in the heart of these early communities, the shepherding role was an isolated one. Flocks tended to be maintained outside of urban areas, upon hill pastures or in walled fields. And due to the ever-present risk of predation from animals and other humans, a shepherd needed to house himself close to the flock that it might be defended at a moment's notice. This meant that a shepherd lived a good percentage of their life in solitude, or at least in physical separation from the rest of their community.

Because of this, the shepherd role became imbued with a romantic element. This element was especially pronounced in the eyes of urban-dwellers who, being long-removed from nature, had the tendency to look upon the lives of sheep herders through a rosy filter (Kermode, 1952). One of the earliest examples of this perception can be found in the *Idylls* of Theocritus.

Shepherd, your song sounds sweeter than the water tumbling over there from the high rock. If the Muses take a ewe as their prize, yours will be a stall-fed lamb. If they desire to take the lamb, then you will carry off the ewe. (Theocritus, 2003. p.1)

Theocritus was born in the Sicilian city of Syracuse around 300BC. And Syracuse, despite its location off the main continent, was very much on par with the other Ancient Greek metropolises of the time, equalling Athens in terms of its scale and population (Morris, 2008). Cicero even described it as "the greatest Greek city", and it was often under siege due to its value (Cicero, 1903). Because of its size and importance, Syracuse was every inch the urban centre, and life within it would have been as far removed from the countryside as life within Manchester or London would be today. So when

Theocritus began his *Idylls*, he was not drawing from an ethnographic understanding of shepherding but from a removed, romanticised understanding, in much the same way as those writers of modern pastorals and idyllic poetry. This tendency for people to romanticise the shepherding life was noted in a recent autobiography by the real-life shepherd James Rebanks, during a high-school assembly in which a teacher discussed the Lake District where Rebanks lived and worked:

I listened, getting more and more aggravated, as I realised that curiously she knew, and claimed to love, our land. But she talked about it, and thought of it, in terms that were completely alien to my family and me. She loved a 'wild' landscape, full of mountains, lakes, leisure and adventure, lightly peopled with folk I had never met. the Lake District in her monologue was the playground for an itinerant band of climbers, poets, walkers and daydreamers... people whom, unlike our parents, or us, had 'really done something'. Occasionally she would utter a name in a reverential tone and look in vain for us to respond with interest. One of the named was 'Alfred Wainwright', another was 'Chris Bonington'; and she kept going on and on about someone called 'Wordsworth'. I'd never heard of any of them. I don't think anyone in that hall, who wasn't a teacher, had. (Rebanks, 2016. p.xv)

Shepherding is hard work, with long gruelling hours. Even if they wished to, most modern shepherds would have little time to conjure sweet music from a flute, like the shepherd of Theocritus' poetry. Recent statistics demonstrate the hard reality of such agricultural work, with shepherds and farmers having one of the highest suicide rates of any occupational group (Meltzer, et al., 2018). The stress of such a role, coupled with the economic uncertainties that often accompany such labour, has been expertly illustrated in several contemporary works, but perhaps nowhere better than in the epic novel *Independent People*, by the Nobel Prize-winning author Halldór Kiljan Laxness. Centred upon the plight of a poor Icelandic shepherd around the time of the First World War, Laxness eschews the romanticised image of countryside labourers for social realism. What follows is a novel packed with almost unceasing misery, toil, and pre-mature death. And yet its protagonist, being descended from ancient Norse settlers, and having a love for saga poetry, does occasionally find brief opportunities to indulge in daydream, meditation, and poetic creation. But unlike those pastoral poets against which *Independent People* stands in stark contradistinction, these opportunities do not occur while making

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hay in the sunshine, or while lounging about in nymph-riddled meadows. Instead they occur during times of great toil and strife, when the protagonist Bjartur strives to maintain his cognitive dexterity against overwhelming odds, as illustrated in this section where Bjartur, having fallen into icy waters during sheep gathering, attempts to find his way to shelter as a blizzard whips his sodden flesh:

> He swore repeatedly, ever the more violently the unsteadier his legs became, but to steel his senses he kept his mind fixed persistently on the worldfamous battles of the rhymes. He recited the most powerful passages one after another over and over again, dwelling especially on the descriptions of the devilish heroes, Grimur Aegir and Andri. It was Grimur he was fighting now, he thought; Grimur, that least attractive of all fiends, that foul-mouthed demon in the form of a troll, who had been his antagonist all along; but now an end would be put to the deadly feud, for now the stage was set for the final struggle. [...] Again and again he imagined that he had made an end of Grimur and sent him howling to hell in the poet's immortal words, but still the blizzard assailed him with undiminished fury when he reached the top of the next ridge, clawed at his eyes and the roots of his beard, howled vindictively in his ears, and tried to hurl him to the ground - the struggle was by no means over, he was still fighting at close quarters with the poisonspewing thanes of hell, who came storming over the earth in raging malice till the vault of heaven shook to the echo of their rush. (Laxness, 1946. p.91-92)

The shepherd of *Independent People* is an excellent representation of the shepherd character because it does not under-represent the difficulty of the role, and neither does it ignore the historical literary tradition associating shepherds with poetry, music, and volitional daydream. And further to this, it recognises the shepherd's relationship with the land he works, both in terms of how he shapes it, and how it shapes him. This personal, two-way relationship with an environment or landscape is perhaps best encapsulated in the German term u*mwelt*.

An *umwelt* (lit. self-centred world) refers to an individual's model of the world, specifically a semiotic, meaningful model (Kalevi, 2010). An *umwelt* consists of that individual's environment, and how that individual interprets that environment. For example, if a geologist goes for a walk in a field with a botanist, both will experience their environment differently. The geologist might notice how a

certain boulder is a glacial erratic, thereby signifying that the environment was likely carved out by a retreating glacier thousands of years ago. Whereas the botanist might not notice this, and instead see a certain type of flower which signifies to her that a particular rare breed of butterfly might be found nearby. Both will therefore appreciate this landscape differently, through the filters of their personal and private *umwelten*.

This aspect, the presence of one's private *umwelt*, tends to be absent in the romanticised view of shepherds captured in pastoral poetry and eclogues. Once again, the shepherd James Rebanks illustrates this point for us in a description of his grandfather's *umwelt*:

My grandfather had an eye for things that were 'beautiful' like a sunset, but he would explain it in mostly functional terms, not abstract aesthetic ones. He seemed to love the landscape around him with a passion, but his relationship with it was more like a long, tough marriage than a fleeting holiday love affair. His work bound him to the land, regardless of weather or the seasons. When he observed something like a spring sunset, it carried the full meaning of someone who had earned the right to comment, having suffered six months of wind, snow and rain to get to that point. He clearly thought such things beautiful, but that beauty was full of real functional implications - namely the end of winter or better weather to come. (Rebanks, 2016. p.72)

Few character types offer quite as much depth and history as the shepherd, which is why I decided to make the central character of *Ootavid Mann* a tender of flocks. And it was Laxness' depiction, that of a shepherd closely tied to his environment, striving against the challenges of his role - the combative elements and vagaries of fate - that I took as my foundation. The shepherd of *Ootavid Mann* needed to feel as 'real' as possible if I was to overcome its artificial nature and imbue the work with a sense of authenticity. But it couldn't be quite as real as James Rebanks - there needed to be a degree of fiction, of romanticism, and a sense of alienation from the contemporary reader to really meet that feeling of authenticity. This necessity led me to the isolated isles of the Shetland archipelago, and to the ancient language known as Norroena.

Architectural Foundations: Norroena, Estrangement, and the Perception of Wisdom-Value

Between 793AD and the closing days of the first millennium, the history of the Scandinavian people shifted from a focus on domestic development and the working of gold to an aggressive campaign of exploration, expansion, and colonisation (Karlsson, 2000). Pagan engineers crafted vessels capable of crossing oceans, and the successful raid upon the Lindisfarne abbey, coupled with problems at home, such as an increasing lack of viable farmland, inspired many families and individuals to seek strange new worlds where they might prosper and find independence. This diaspora laid claim to numerous lands, including Iceland, Greenland, the Faeroes, and the Shetland archipelago. Settlements sprang up like shoots from an ash, and to each land these Nordic settlers brought their pagan rituals, their technological prowess, and their native language, Norroena, of which the more commonly known 'Norn' is a contraction (Jakobsen, 1897).

But as the years progressed this universal language of the north began to metamorphose. Just as evolution can influence elements of a society (such as the novel) as well as biological development, prolonged isolation can influence the tongues of men (Livingstone, 2002). The changes take myriad forms, from the phonological (how words and their individual phonemes sound), to the lexical (the actual words in a language) and the syntactic (the rules that govern a language's construction, and how concepts and ideas are expressed). By the 12th century this universal Norroena had bifurcated into two main dialects: East Scandinavian, of which Swedish is a direct descendent, and West Scandinavian, from which both Norwegian and Icelandic derive (Jakobsen, 1897). Of these dialects West Scandinavian ran closest to its precursor, remaining in use across all of the newly settled islands; even so, the West Scandinavian employed upon one island differed to that employed on another, and the more isolated the land the more archaic it seemed to be, with ancient words, phrases, and pronunciations retained long after they were replaced in areas more frequented by outside influence, such as merchants. Thus each isolated island became a linguistic Galapagos, and none more so than the clustered lands which constitute the Shetland archipelago, in which the old language lasted the longest, evading the furious predations of Lowland Scotch and English until the late 19th century, at which time its final word was whispered through the wind-chapped lips of its last native speaker, Walter Sutherland of northern-most Unst (Jakobsen, 1897).

During the introduction of this chapter, I discussed the bleak, frozen wildernesses of Iceland, and how the country's ornament of landscape complemented the thematic core of the novel that was undergoing ideation. Norroena further enhanced this, infusing the inchoate novel with an additional layer of loneliness. Mankind is essentially unknowable - each individual exists within their own flesh coloured envelope, and only that which is scrawled upon the surface can be read and interpreted for meaning (Mijuskovic, 2012). Since the death of Walter Sutherland, this sense of the impenetrable has also applied to Norroena. All we have of this deceased language is a handful of fragments, old poetry and hymns, numbed aphorisms, and the occasional term that still lingers in the speech of those who currently call Shetland their home. And even these few relics are not always to be trusted, corrupted as they are by local mutations and the influence of the Scots language. Norroena's depth shall remain unknowable to us forever - a fact all the more frustrating when we consider the fascinating remnants that we do have, and how so much of that language seems tied to the land upon which it was spoken.

But there is another reason, beyond its parallels with loneliness, that I decided to incorporate Norroena into *Ootavid Mann*. And that relates to its strong estranging aspect, and how this serves to increase the perceived genuineness of the fabricated text, as well as the wisdoms contained therein.

Previously in the chapter we discussed mirrors for princes; secular artefacts of wisdom literature that sought to convey life-lessons both moral and pragmatic. These would become the foundation for the content of *Ootavid Mann*, as the novel evolved in development from a narrative driven piece (as seen in the section on beginnings) into a reflective, gnomic text centred on character. This decision freed the novel from the trappings of plot, but it also presented an additional issue. If *Ootavid Mann* was to be a fragmented collection of wisdoms there needed to be a significant separation between its author and its content, otherwise the wisdoms would not be judged by their own merit but would be gauged with reference to the author's character; which is to say, my character. Being neither a venerable sage nor a mountain-dwelling monk, but rather a middle-aged man of negligible reputation dwelling on a council estate near Birmingham, I did not see this panning out in my favour. Therefore, some degree

of estrangement was vital for the wisdoms within *Ootavid Mann*, many of which concern loneliness and one's relationship with it, to be assimilated in the desired fashion by the reader.

The perceived authenticity of wisdoms is inversely correlated with proximity (Huynh & Grossmann, 2018). In basic terms, this means that a parable, aphorism, or straightforward piece of advice will be perceived as possessing greater value for one's moral, ethical, or behavioural development if received from a distal source (one distant from the recipient) rather than a proximate source (one local to the recipient). The sayings of a Buddhist monk from Taiwan tend to be judged as being more valuable in terms of their contained wisdom than the sayings of one's next-door neighbour, even if their content and moral advice are identical. This was demonstrated in a 2017 study into how distance influences how one interprets wisdom-centred stories. To a collection of mixed-age participants the researchers presented the following short story:

One day, a young Buddhist reached the banks of a wide river. He started searching for how to cross the river. While staring hopelessly at the great obstacle in front of him, he noticed on the opposite side a teacher he knew from school. 'How can I get to the other side of this river?' Asked the student. The teacher pondered for a moment, looked up and down the river and yelled back: 'Young man, you already are on the other side.' (Ram, Liberman & Wakslak, 2017)

To a second group of mixed-age participants, the researchers presented the same tale, but this time with a twist; rather than it concerning a Buddhist crossing a nameless river, it was changed to refer to a young local man attempting to cross a well-known, local river. Once both stories had been related, the participants were asked to explain what the tale they'd heard was about; what it meant in general, and what it meant for them personally. The findings showed that those who had been given the original Buddhist story were more likely to recognise the abstract wisdom, or lesson, within the tale, whereas those who had been given the modified version tended to ignore the wisdom in favour of a more literal, concrete interpretation of the story:

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Coding participants' statements for the lessons they learned suggested that students were more likely to understand the bigger picture question when the story was presented in a distal rather than proximal fashion. Participants were also presented with two conclusions, varying in degree of abstraction, and were asked to rank the extent to which one was a good way to describe what happened in the story. One conclusion was concrete - 'The teacher did not understand what the student wants' (there was a misunderstanding between the student and the teacher). The other one was abstract - 'The teacher tried to convey a message to the student.' When presented with the distal rather than proximal story, students were more likely to pick the abstract conclusion. (Huynh & Grossmann, 2018. p.8)

The proximity of the wisdom to the listener therefore influenced how it was interpreted. This also showed that there was an assumed relationship between wisdom and abstraction. One aspect of the relationship between distance and the value of wisdom to bear in mind, is that it is not the literal, physical distance between the transmission and the receiver, but rather the subjective psychological distance (Trope & Liberman, 2010). This is due to mental construal. As psychological distance from a wisdom-centred story or fable increases, so too does the level at which construal takes place. When mental construal is occurring at the high-level (due to a high-distal rating within one's psychological perception), such stories are interpreted in a more abstract way, leading to the content of the wisdom being better apprehended. This concept is employed within psychotherapy to improve the reasoning capabilities of individuals who have experienced trauma or who are haunted by an issue perceived to be beyond their own comprehension. By encouraging such people to step back in their psychological space, to increase the psychological distance between their egocentric self and the trauma or issue, it becomes possible to take the bigger picture into account and to reason holistically as their viewpoint shifts from the proximate and concrete to the distant and abstract (Cohen, Hoshino-Brown, & Leung, 2007; Craft, et al., 2008).

Ootavid Mann employs several techniques to increase the psychological distance between the reader and the wisdoms within the text. The use of Norroena is one. This technique operates on two interrelated levels: firstly, *Ootavid Mann* is presented as a text that was translated from Norroena into English; secondly, *Ootavid Mann's* numerous translated fragments are interpolated with the original

Norroena words at various points. We will discuss the former level in a later section when we discuss the broader role of the translator, and how he serves to increase estrangement: for now, let us address the second level.

By leaving linguistic markers within the translated fragments in the form of salient Norroena terms, the reader is encouraged to repeatedly re-cognise (to consciously re-attend to) the text's status as an artefact patched together from the original language's incomplete lexicons. This creates a sense of psychological distance between a reader and the content within the fragments, which should serve to increase the likelihood that the text's wisdoms will be assimilated by a reader through an abstract framework rather than a concrete one. This should have the added effect of increasing the perceived genuineness of *Ootavid Mann*, leaving aside for the moment the question of whether or not a reader is aware of the text's true author. This approach to estrangement is consistent throughout the novel.

Another employment of the Norroena markers is in how they carve out apertures in the text through which the translator may draw attention to his own experience of translating that particular fragment. This increases the estrangement between the reader and the shepherd's text through the somewhat paradoxical technique of increasing the proximity between the reader and the translator by sharing the sense of distance, both temporally and in the psychological space (the translator often calls out the deficiencies in his own translation due to an unknown within the original text), a reader feels that his or her own sense of distance is affirmed, which again encourages high-level construal.

Before we turn to the translator and consider his role in far greater detail, let's remain with Norroena and its novel-scattered terms, and examine how this approach transforms *Ootavid Mann* from a text that is absorbed passively, into one that demands interaction on the behalf of the reader.

Architectural Foundations: Lisible and Scriptible

Fiction is a product to be consumed. It is made to be read; to be devoured by a million eyes. Because of this, the production of fiction is often shackled to various well-meaning chains of guidance - hook

your reader from the first page, write with your audience in mind, avoid undue complexity, ensure a consistent pace, craft characters with whom the public can easily identify, consider the shelf where the book-seller will home it. Fiction produced in such a manner is, when well executed, a pleasure to read. Our faces press against the glass pane of the page, and voyeuristically, we consume that which was designed to be consumed. This common type of fiction is what the French literary theorist and semiotician Roland Barthes categorised as 'lisible' or 'readerly':

Our literature is characterized by the pitiless divorce which the literary institution maintains between the producer of the text and its user, between its owner and its customer, between its author and its reader. This reader is thereby plunged into a kind of idleness -he is intransitive; he is, in short, *serious*: instead of functioning himself, instead of gaining access to the magic of the signifier, to the pleasure of writing, he is left with no more than the poor freedom either to accept or reject the text: reading is nothing more than a *referendum*. Opposite the writerly text, then, is its countervalue, its negative, reactive value: what can be read, but not written: the *readerly*. (Barthes, 1974. p.4)

The vast majority of fiction conforms to this categorisation. This does not mean that a lisible fiction is inherently bad; far from it, many of the greatest novels are lisible, and I doubt there would be many who would consider *Crime and Punishment*, or *The Grapes of Wrath* to be bad texts because of their lisible nature. But lisible fictions encourage, as Barthes notes, an idleness from their readers - these are products to be consumed, and like the act of eating the process of consuming is mechanical and rote, requiring little conscious engagement. Pleasure is derived from the process of consuming a lisible work of fiction (Barthes, 1975). But there is no challenge, no conflict between the text and the reader: the lisible text is passive, it lies on the china waiting to be eaten, and importantly, *it does not attempt to consume the reader themselves*. The lisible has been cooked and ornamented with thyme: the scriptible is vargur, and must be brought in upon the spear.

Fiction that is scriptible, or 'writerly', makes demands on the reader. It does not allow itself to be passively consumed. There is an onus on the reader to interpret what he or she is engaging with as he or she engages, not subsequently, as reflection, but in situ, as action. And that interpretation is not rewarded with answers nor with certainties; it is a personal product of the reader interacting with the scriptible, and is moulded by the reader's identity. In other words, one's interpretation of a scriptible fiction is a production created by the bilateral 'reading' of text and reader. In this way a scriptible text differs greatly from a lisible text. A lisible text is always a single artefact; if eighty people read a lisible fiction, each person will have read the same text - the experience is singular and shared. But because of the interpretation of a scriptible fiction being conditioned, modulated, by the individual reading its content, a scriptible text is inherently plural, for, depending upon its complexity, it may contain a potential infinity of texts.

Why is the writerly our value? Because the goal of literary work (of literature as work) is to make the reader no longer a consumer, but a producer of the text. [...] The writerly text is *ourselves writing* [as readers of a text], before the infinite play of the world (the world as function) is traversed, intersected, stopped, plasticized by some singular system (Ideology, Genus, Criticism) which reduces the plurality of entrances, the opening of networks, the infinity of languages. The writerly is the novelistic without the novel, poetry without the poem, the essay without the dissertation, writing without style, production without product, structuration without structure. (Barthes, 1974. p.4-5)

Ootavid Mann is a scriptible text by design. It encourages the reader to participate in the production of its meaning. But before we examine the ways in which *Ootavid Mann* is a scriptible artefact, let us analyse the initial psychological considerations behind this decision.

People place a higher value upon items in whose production or creation they have taken a significant part. This tendency, a cognitive bias known as 'the IKEA effect', due to the study in which it was first recognised, persists across all instances where an individual imparts significant labour in the making of a production, where the production reaches a satisfactory conclusion (Norton, Mochon & Ariely, 2012). When an individual successfully builds an IKEA chair, they will tend to perceive this object as holding equivalent value to similar chairs constructed by dedicated artisans; furthermore, they come to expect others to hold the same opinion, and experience displeasure if someone disagrees. A home

chef who makes their own Bakewell pie; a teenager who customises their dresses; an amateur scholar who concocts their own political theory - all become thrall to the IKEA effect (Marsh, Kanngiesser, & Hood, 2018).

There are numerous reasons as to why this occurs. One, proposed more than a hundred years ago, is that our concept of self extends into the objects we own, and that when we create an object we are putting our *self* into it, and so it becomes attached to our evaluation of self (James, 1890). Indeed, we hear an echo of this idea in the home-artisan who claims the end product of their labour contains their 'blood, sweat, and tears', a sort of secular, reverse transubstantiation. Another reason relates to the validation signal that a completed creation provides to one's social groups (Mochon, et al, 2012). When someone crafts a piece of furniture (even if they have been provided with machined parts, and an instruction manual), or bakes a cake (even if they are using a ready-made cake mix), a successful result signifies competence, both to themselves and to their social groups. Another reason, is that the value an individual imparts onto a self-produced 'thing' is reflective of the effort they have invested in its production (Aronson & Mills, 1959). When someone has had to toil night and day to connect a collection of flat-pack panels into a freestanding wardrobe, then they tend to place a higher value on that object than if they had been able to throw the wardrobe together in five minutes.

But what does this have to do with *Ootavid Mann*? As previously mentioned, *Ootavid Mann* is a scriptible text; it requires an investment from the reader to produce meaning. One of the central challenges of this text, from this author's perspective, lies in how to make the content of the artefacts in *Ootavid Mann*, especially those concerning the representation of loneliness, cognitively 'sticky', so that they remain in the reader's consciousness beyond the initial point of reading. The IKEA effect shows that designing *Ootavid Mann* as a scriptible document may solve this challenge, as by making the reader become involved in producing the text, they *create* an interpretation, and feel that they are a *writer* of the document (as an aside, the fictional translator functions as an in-text equivalent to the reader with whom the reader can easily identify; in recounting the effort expended in translating the Norroena artefacts, the reader finds in this translator kinship, as well as gentle guidance for scriptible meaning-production). Hopefully, this approach will result in a reader feeling a degree of possession,

or ownership, over Ootavid Mann which should make the content of the artefacts better resonate.

Architectural Foundations: Scriptible in Ootavid Mann

The scriptible in *Ootavid Mann* operates upon four levels: the interpolation of Shetlandic Norroena, the historiographic question of authenticity, the illusion (or assumption) of a unified authorship, and the temporal arrangement of the fragmentary text. *Ootavid Mann* avoids presenting the scriptible in an overt manner. In a previous version, the novel opened with questions around its authenticity and laid out the scriptible up front - the current version avoids this, as it frontloaded the scriptible, which undermined the text (including the attempt to represent loneliness) and did not allow the reader to naturally develop an ear for discordance. A far more subtle permeation of the scriptible is employed in the novel's current incarnation. By removing the neon signs for reader analysis the text's potential plurality is increased as the number of entrances is no longer artificially constrained (Barthes, 1974).

Shetlandic Norroena is presented as the original language of the text. In certain artefacts, this original language bleeds through the gauze of translation, giving far greater credence to its presented nature than a 'perfect' translation would. When the original Norroena appears the translator emerges in a footnote. This draws attention to the construction of *Ootavid Mann*; that the work is a labour of translation and academic guesswork, not an infallible representation of the original. Occasionally the footnote will profess uncertainty around the original word's interpretation. In such instance, a reader might reference the glossary included with the novel, recognise the term's alternative meanings, and choose a different translation. This can have the effect of changing the interpretation of an artefact in a fundamental way, as the reading of some artefacts is often predicated on the chosen translation of a certain word or phrase. The subtitle of *Ootavid Mann* operates as the first instance in which a reader is made to adopt the role of translator, and thus engage in production. The text's subtitle - *maumi du vara, frae maumi du vær myndaði* - can be interpreted in numerous ways, and the glossary facilitates these attempts at translation. One reader might interpret this subtitle as 'the soil you work is the soil from which you were shaped', while another might interpret it as 'take heed of your mother, for from

her are you made'. The first reading imbues subsequent artefacts with a philosophical hue, perhaps a northern take on samsāra philosophy; whereas the second imbues the novel with a pedagogical, or a parental hue, as if the artefacts were written to give guidance to a child.

Ootavid Mann opens with a preface written by the fictional translator, in which a claim is put forward that the translation is authentic to the original text:

It should also be known that, where possible, I have attempted to retain the ornate style present within the original pieces, and have taken gentle liberties only where meaning would have been lost without the subtle insertion of an additional word or without a more contemporary translation of an ancient, now insensible phrase. (Thompson, 2020. p.3)

However, this statement is called into question quite early, as one of the novel's first artefacts shows evidence of divergence. Artefact 463 is interpreted through a Freudian lens, with references in its translation to the theory of pre-natal infant-mother unity. It would seem unlikely that a shepherd at the time would possess such theoretical knowledge, and so the greasy fingerprints of the translator show themselves upon the text's body. Some readers may continue their reading with a more critical eye as a result of this, and may notice other instances in which the education of the translator seems to muffle the original voice of the shepherd. The peppering of academic words throughout the works encourages this wariness. But, staying true to the scriptible element, there is no definite answer that a section is not authentic to the original text, this is down to the reader's interpretation. Uncertainty in the accuracy and authenticity of the translation also raises a broader historiographic consideration: if this translator, acting as a recorder of history, feels compelled to project his personal education on an ancient text, to corrupt these original documents with modern-day sentiments or psychoanalytical understanding, however well-meaning his intention, then what is there to say that other translations of other historical artefacts have not been sullied in the same way? Through this the scriptible aspect of Ootavid Mann extends beyond the boundaries of the text, and encourages a scriptible approach to other historical works.

Ootavid Mann is an amalgamation of dozens of individual artefacts. The reader is told, at the

outset, that the artefacts represent the voice of a solitary author, penned over the meandering course of a life spent in northern-most Unst. But is this really true? Once again, a reader is given no definite answer, other than the assumption of the translator - a guide who may have proven himself fallible in the reader's eyes several times already. If a reader notices a shift in tone from one artefact to another, or a wild deviation of subject (such as from trading accounts to meditations) he or she is expected to chalk this up to belonging to a separate stage of the author's life. For some readers, this will be fine the construction of the text allows this reading. But the text also allows a different reading, in which the artefacts are not considered to belong to a single voice, but rather to many.

In this reading, *Ootavid Mann* can be considered a heteroglossia: a collection of voices within a single work. In some respects this remains so even during a vanilla reading of the text - the voice of the translator is always heard along with the voice of the shepherd. But when subjected to a scriptible reading, this aspect is further augmented, as not only can the artefacts be read as the production of a small collection of individuals, but they can also be read as the spirit or communal soul of the entire society present on Unst during their time - a representation not so much of an outward existence but of a private, internal existence that is nevertheless shared. The conflicting experiences in the artefacts then become, not so much the emotional development of an individual, but rather representations of the experience across that insular society, including everything from the development of medicines, to the perception of ritualistic events (as example, in artefact 164 the nameless author observes ritual performance from an external, even detached perspective, whereas the author of artefact 278 is very much a lead actor in such a performance). This would mirror the scriptible aspect present within the novel *One Day in the Life of Ivan Denisovich*, by Aleksandr Solzhenitsyn, which, on the surface, is a recounting of a single day in a Soviet labour camp, but which can be read as a representation of every individual's daily experience when imprisoned within the Soviet Gulag system (Zhores, 1973).

Again, there is no certainty around this reading of *Ootavid Mann*, and some aspects, such as the repetition of a dog's name, suggests that a straightforward reading is more likely correct (though the name 'Fenna' could be a communal term for a dog, perhaps as part of the cant, or tabu-language employed by the Unst fishermen to refer to 'significant' animals and phenomena). Nevertheless, the text remains open enough to support this alternative interpretation. In 1969 the experimental English author B. S. Johnson released his fractured work *The Unfortunates*, a deconstructed novel, composed of twenty-seven sections that could be rearranged at will, and read in almost any order (the first and final sections were fixed). According to Johnson, this approach was an attempt at replicating the randomness of human thought, especially his own cognitive landscape as it appeared on a particular Saturday, when Johnson was sent by the *Observer* newspaper to report on a football match in Nottingham:

The main technical problem with *The Unfortunates* was the randomness of the material. That is, the memories of Tony and the routine football reporting, the past and the present, interwove in a completely random manner, without chronology. This is the way the mind works, my mind anyway, and for reasons given the novel was to be as nearly as possible a recreated transcript of how my mind worked during eight hours on this particular Saturday. (Johnson, 1973. p.14)

This experimental novel has become the darling of many creative writing classes, and its easy to see why. The deconstructed nature of *The Unfortunates* encourages a reader to consider structure, and the very concept of the traditionally presented novel, in ways they might never have if they had not encountered Johnson's work. Through a designed potential for architectural rearrangement, *The Unfortunates* embraces the scriptible, and what could have been a dull, lustreless read if presented in the standard format becomes memorable and worthy of analysis.

Ootavid Mann echoes the design of Johnson's *The Unfortunates* both through its background and its construction. In its original form, the artefacts of *Ootavid Mann* were found loose, arranged in no particular order within an alder and bog-iron chest, similar to how *The Unfortunates* was sold to the public as a collection of unordered sections inside a laminated box. But where Johnson's work is given to us in this deconstructed state, *Ootavid Mann* is presented with an order imposed upon it, with the once-loose artefacts now arranged thematically, bearing upon them bracketed numbers that reflect an assumed chronology. This ordering is the work of the translator; the figure who shapes this novel's reading. And it is an artificial imposition, one that an alert reader may choose to disregard in favour of their own structure. There are several approaches that a reader might take in restructuring; they might attempt to read the artefacts in chronological order, using the bracketed numbers as their guide; they might flick from artefact to artefact for a subject that catches their attention; or they may take the following approach that I did with a similar novel...

While Ootavid Mann shares some of its DNA with Johnson's work it wasn't *The Unfortunates* that initially inspired me to take this structural approach, but rather *The Book of Disquiet*. Pessoa's novel presents its sections in a similar way to *Ootavid Mann*. Each section is numbered and arranged thematically, and can be read in any order the reader chooses. When I first encountered *The Book of Disquiet*, I attempted to read it in a traditional way. To paraphrase Lewis Carroll, I intended to start at the beginning, go on to the end, then stop. But this approach proved unsuccessful, as I soon grew exhausted with the dense, meditative prose. Instead, I decided to engage with this book in a way that felt complementary to both its contents and its author. I set it on a three-legged stool at my bedside, and just before falling asleep, I would open it at random, and read a single section. This transformed *The Book of Disquiet*. It no longer felt dense or arduous to read. By engaging with it in this scriptible manner, reading became more like absorbing a curious dream, and it remains at my bedside even to this day. By following a similar structure, *Ootavid Mann* aims to inspire such an alternative approach to reading, one as fragmentary as the artefacts it contains.

Now that we have examined the architectural foundations of *Ootavid Mann*, it is time to turn to the novel's three dominant figures: the translator, the ootavid, and the attekast. First, we will examine the man whose fingerprints lie upon every page of the text: the translator, William Marshall.

The Character and Idiosyncrasies of the Translator

On a narrow plank bridging ferry and port, Captain Simpson bade farewell to his passengers as they disembarked and set foot upon the sea-blasted earth of mainland Shetland. The year was 1817, and a recently constructed pier had increased the trade to Lerwick from the lands beneath. Merchants with designs upon Shetland's gold therefore made up the bulk of Simpson's passengers, but there was one

man amongst them who seemed driven not by greed, but by the pursuit of knowledge, and who had made quite the impression on all those who had shared that gruelling fifty-hour voyage, both due to his wealth of anecdotes and his zeal for adventure. This man was one Samuel Hibbert-Ware, a doctor of medicine and a soldier for the Royal Lancashire Militia, and he had come to Shetland at the behest of the Wernerian Society of Edinburgh to develop a geological account of this northern archipelago (Hibbert-Ware, 1882). This account would become more than a recording of geological information however, as even with a set goal and a fixed amount of funding, Dr Samuel's propensity for academic diversion could not be constrained, as the following overview in the *Manchester Guardian*, written several decades after the publication of Dr Samuel's account, makes quite clear:

The work commences with a preliminary essay on stratification; which is followed by an Itinerary through the Isles of Shetland, in four *Itinera*, or journeys, each having copious notes appended. The appendix contains additional miscellaneous notes, with notes on the various illustrative plates; a notice of the ancient music of Shetland, with specimens in notation; a geological map of Shetland, indices, etc. [...] Amongst other curious antiquarian topics investigated is that singular Udal system, which was derived from Scandinavia, and which gradually gave way before the later feudalisation of these islands. The rude agriculture is faithfully described, and a popular view given of the fisheries. Another prominent antiquarian department of the work is that relating to the superstitions of Shetland, some of which, the author observes, indicate a much nearer approach to the original pagan tenets of the Scandinavians than can be found in several districts of Norway itself. (Hibbert-Ware, 1882. p.291)

As a result of these diversions, Dr. Samuel Hibbert-Ware's ultimate work, *A Description of the Shetland Islands*, became a fascinating document that catalogued far more than mere geological data. And being ethnographic in construction, it possessed more than a hint of adventure, as Dr. Samuel recounts his various encounters with local crofters, violent weather, and the bleak, lonely landscape across which he walked; all told in a distinctive, almost boyishly academic tone that is peppered with esoteric words and phrases (the first sentence of his book's preface contains the term 'animadversion' for instance, which was already rare at the time of composition). This imbues what would have been

a dry document in the hands of another into an engaging work - it is a unique document indeed that begins with an investigation into mineral deposits, and that somehow comes to contain a chapter on mermaids without this latter feeling out of place.

The character of Samuel Hibbert-Ware and his experiences on the Shetland archipelago acted as both foundation and inspiration for the translator in *Ootavid Mann*. Throughout *Ootavid Mann*, footnotes are scattered which explore various aspects of Shetland's history, culture, flora, and fauna. These notes are often framed through the filter of the translator's personal experience and recount moments from his months spent wandering Shetland; a direct influence from Samuel Hibbert-Ware, who himself walked the breadth of the archipelago (according to his correspondences, he was gifted the services of a Shetland pony, but being too tall, could not sit on it without his feet dragging along the ground (Hibbert-Ware, 1882)). The cadence of Hibbert-Ware's style is best exemplified in these footnotes; a cadence I have attempted to replicate in the asides and commentaries of *Ootavid Mann's* translator. Compare these two footnotes. One from *A Description of the Shetland Islands* and another from *Ootavid Mann*:

There is an ancient statute in Orkney, dated A.D. 1632, "anent gripping lands" - "It is statute and ordained, that no man grip his neighbours lands, under the pain of £10 Scots". No act of this kind appears in the old country laws of Shetland, although Mr Shirreff and Dr Kemp have spoken of the habit as not being unknown to this country. The latter gentleman has been called to a severe account for this assertion: but, as I have no particular inclination to enter into a controversy with my Shetland friends, on the ancient custom of *gripping lands*, (which, by the by, has not been wholly unknown among much more southerly tracts of Britain), I shall preserve a cautious silence on the occasion. (Hibbert-Ware, 1882. p.59)

The shepherd appears to embody what our German ethologists describe as Umwelt, that is, an environment that does not just surround one, but that is held within, and defines one's subjective experience of the world. Having walked with a brace of Shetlanders during this work, I can verify that this aspect remains in the shepherd's modern equivalents; it would not surprise this translator if, should an autopsy be undertaken on a late Unst croftman, it were revealed that his organs were composed of nothing so much as ironstone and peat. (Thompson, 2020. p.5)

Dr. Samuel's influence continues in the number of subjects that *Ootavid Mann's* translator is knowledgable about, including medicine, botany, contemporary psychological theory, geology, and ethnography (Dr. Samuel's own interests were even broader than his Shetland account suggests, and included such disparate topics as classical literature, parochial history, volcanology, and the origin of ghostly apparitions (Hibbert-Ware, 1825; Hibbert-Ware, 1882)). Through his knowledge of myriad fields the character of the translator as an academic, antiquarian, and cultural historian becomes defined; he becomes better reified in the imagination of the reader, and thus his proposals of authorial attribution, and historical authenticity, gain additional validity. This is especially so when his communication with the reader takes on an anecdotal flavour.

Samuel Hibbert-Ware's influence is also present in the translator's propensity for the rare and unwieldy word. While such 'ten-dollar' words can be difficult for a reader to fathom they are integral to building and communicating the translator's character. After all, a use of rare words is common in those translators who find their delight in philology; a collective of which Ootavid Mann's translator is very much a member, and whose idiosyncrasies his character parodies (one philologist with whom the translator of Ootavid Mann shares considerable DNA is Lee Milton Hollander, whose fascination with Old Norse lead him to translate several prominent works of Old Norse literature in a way that sought to recreate the epic tone of the originals without regard for the reader's comfort, often using a spelling scheme that mimicked the correct Old Norse pronunciation to match the original cadence of a piece (Hollander, 1928; Hollander, 1936)). The translator's use of 'difficult' words demonstrates a tendency that might be considered exhibitionistic. These words draw attention to themselves; and by doing so, draw attention to the translator and the production of the text. Depending on the character of the reader, the interpolation of such words may have one of two results: it might inspire a sense of anger or exasperation, a sense that the translator is using these words to demonstrate his intelligence; alternatively, these words might delight in much the same way as a botanist might be delighted when encountering an unexpected specimen, in that it makes one pause and take note. This latter reaction is shared by Roland Barthes, and communicated in his work *The Pleasure of the Text*:

Luke Thompson

In short, the word can be erotic on two opposing conditions, both excessive: if it is extravagantly repeated, or on the contrary, if it is unexpected, succulent in its newness (in certain texts, words *glisten*, they are distracting, incongruous apparitions - it matters little if they are pedantic; thus, I personally take pleasure in the sentence of Leibnitz: "... as though pocket watches told time by means of a certain *horodeictic* faculty, without requiring springs, or as though mills ground grain by means of a *fractive* quality, without requiring anything on the order of millstones"). (Barthes, 1975. p.42)

In Ootavid Mann, we find this in lines such as "I could not convey to him that divine pleasure which is found in a modest meal, anticipated from the sun's appearance to the *deaccession* of its light, eaten slowly and in a silence" and "... from its hibernaculum in the wall of the crofthouse a solitary fly departs, torpid on its dream-heavy wings". Words of this kind betray the translator's fascination with language; a fascination which, following Barthes, has become exhibitionist. But beyond this they also represent the translator's firm adherence to the accurate translation of each artefact's meaning - he is writing for comprehension, at the expense of our comfort. So consider *deaccession*, and its dictionary meaning; 'to remove an item from a museum or art gallery so it can be sold on'. It is understandable to feel that the word strikes an odd chord when used in reference to waning sunlight. A word such as disappearance, perhaps, would fit better, and would not draw attention to itself. But if we were to act like scriptible investigators, and ask *why* the translator has chosen this word over another, we might find greater insight into the translator's psychological character. Again, as laid out in the preface, the translator is seeking to preserve the original meaning, or authorial intent, of each recovered artefact wherever possible. So let's look again at artefact 451, which contains this contested term. The general sentiment of this artefact is that objects and phenomena perceived by certain wealthy individuals (in this case, a magistrate) as either commonplace or simple possess a far greater spiritual value than the supposed treasures of imported fowl and wine, and that material wealth of this kind can erode one's spiritual wealth - the latter being of greater value to the shepherd. If we then invert the perceived low value of simple phenomena so that they match the shepherd's perception of them as high value, we can see how deaccession would fit and how disappearance would not - in the shepherd's eyes sunlight is equivalent to a framed artwork whose removal from the sky is a formal (ritual) process. It carries

weight, and it carries meaning. Of course, whether this is accurate to the original or is an invention by the translator and a bit of linguistic exhibitionism is down to the reader's own interpretation, but the approach is not unique to the fictional translator of *Ootavid Mann*.

In the 17th century the English poet John Dryden set down his three-fold theory of literary translation. This theory sought to delineate the various approaches to textual reproduction taken by translators who sought to transform texts from their vernacular languages into English.

First, that of metaphrase, or turning an author word by word, and line by line, from one language into another. [...] The second way is that of paraphrase, or translation with latitude, where the author is kept in view by the translator, so as never to be lost, but his words are not so strictly followed as his sense; [...]. The third way is that of imitation, where the translator (if now he has not lost that name) assumes the liberty, not only to vary from the words and sense, but to forsake them both as he sees occasion; and taking only general hints from the original, to run division on the groundwork as he pleases. (Dryden, 1844. p.6)

The first approach, noted as metaphrase, is the most literal approach to translation listed by Dryden. However, while this might seem like the most ethically sound approach to converting a text from one language into another, it often sacrifices meaning, tone, and atmosphere, as these may not be communicated well in the purely literal approach. Dryden's second approach is perhaps the most common, and is the approach that *Ootavid Mann's* translator professes to follow - though there are a few footnotes in the novel that suggest that he does not adhere to this second philosophy as closely as his preface suggests, but instead veers, on occasion, into the third approach, that of imitation. For a reader familiar with the approaches to translation outlined above, the hints of 'literary liberty' with the artefacts of *Ootavid Mann* should inspire further scrutiny of the text as is presented, in a similar way to how many translators and philologists engaged with the infamous *Poems of Ossian*, which we will return to shortly.

In this chapter, I have occasionally treated the novel's translator as if he was constructed of flesh and blood, rather than ink and imagination. But now is the time to consider his role as a piece of fiction,

why the conceit of a faux translator was used in *Ootavid Mann*, and what risks or dangers may follow this approach.

Antecedents of the Fictional Translator of Ootavid Mann

In the early 18th century, an English antiquarian discovered a manuscript hidden away in the back of the dusty library of a reclusive Catholic family. Through an analysis of the manuscript's materials, its orthography, and the subject of its text, the antiquarian realised that what he had unearthed was not just another partially preserved copy of an existing work, but something altogether unique. Here was a manuscript, written in 16th century Italian, that recounted a narrative dating back to the medieval era of the first crusades; older even than the *Magna Carta Libertatum*, a textual artefact that was very much at the front of political discourse when the antiquarian made his discovery. In 1764, just before Christmas Eve, the antiquarian published his translation of the Italian manuscript, titled *The Castle of Otranto*. The work was met with great acclaim. Its Gothic supernaturalism, combined with a tale concerning the restoration of a royal dynasty, struck a chord with its readers and critics, and allowed the aesthetic of the Gothic into the guarded pantheon of high literature. But then, four months after its first publication, a second edition was released. One that contained a second preface that revealed the true nature, and authorship, of the work:

The favourable manner in which this little piece has been received by the public, calls upon the author to explain the grounds on which he composed it. But before he opens those motives, it is fit that he should ask pardon of his readers for having offered this work to them under the borrowed personage of a translator. As diffidence of his own abilities, and the novelty of the attempt, were his sole inducements to assume that disguise, he flatters himself he shall appear excusable. He resigned his performance to the impartial judgement of the public; determined to let it perish in obscurity, if disapproved; nor meaning to avow such a trifle, unless better judges should pronounce that he might own it without a blush. (Walpole, 2014. p.9)

By the author's own hand, the work was revealed to be contemporary fiction; not an ancient manuscript translated by a hitherto unknown antiquarian. In some quarters this changed how *The Castle of Otranto* was perceived, with its transgressive elements, which were considered permissible when believed to be part of an ancient manuscript, now being seen as both unsavoury and immoral - a risk to the rigid social divisions of the time (Reszitnyk, 2012). Despite this turnabout in its critical perception, the book remained popular, and its transgressive elements, such as a focus on drawing out and exploiting a reader's primal emotions (e.g., fear and eroticism) became integral to the new genre of literature that it inaugurated (Walpole, 2014).

But why did Horace Walpole choose a faux translator in the first place? Why did he position his novel as an unearthed manuscript? Was it for artistic reasons? Was it for the reasons he publicly stated in his second preface, that it was mere modesty? While it is likely that his disassociation from authorship was partially motivated by a personal fragility, and a concern for how he was perceived in his social environment (being a member of parliament, Walpole can probably be excused for this), it seems probable that his initial reticence to claim authorship and instead ascribe the text to the work of a fictional antiquarian was motivated by a desire to manipulate the conversation around England's constitutional document - the *Magna Carta Libertatum* - that was ultimately, clumsily, undermined by Walpole's subsequent egoistic claim to authorship as an attempt to elevate himself (Lake, 2013).

The Castle of Otranto commences with a gigantic helmet crushing the last heir to the castle's current occupying lineage. This accident, combined with the re-emergence of an ancient prophecy, "that the castle and lordship of Otranto should pass from the present family, whenever the owner should be grown too large to inhabit it" (Walpole, 2014. p.17), sets in motion a series of events which sees the current occupiers of the castle disenthroned by Theodore, a common peasant, who is found to be the legitimate owner of Otranto. With the plot outlined thus, the parallels with Walpole's own political beliefs become stark. Walpole was a constitutionalist, in the sense that he believed that those liberties outlined in the *Magna Carta Libertatum* were sacred, and that the monarchy should obey its laws especially those concerning the rights of the common man (Lake, 2013). During Walpole's time as a member of parliament, the current monarch, George III, often flouted the guides of the *Magna*

Carta Libertatum, purposely misinterpreting them with the aid of a conclave of supporters so that he might quash criticism and increase the power of himself and his office; actions which Walpole found altogether abhorrent (Lake, 2013; Kallich, 1971). This struck an even more personal note for Horace when his friend John Wilkes was arrested by the king's men for anti-monarchical sentiment, despite the protections of the *Magna Carta Libertatum*. This situation was worsened by the intercession of several antiquarians with pro-monarchical leanings, such as Phillip Webb, who actively manipulated and misinterpreted ancient documents to create legal precedents that would support the aims of the current king, and undermine the liberties of individuals like John Wilkes (Colley, 1992).

Read in this light, *The Castle of Otranto* is a work of propaganda, one that aims to restore the common man (Theodore) to his rightful place as custodian of England (Otranto), especially in that situation where its current custodian (George III) has begun abusing his position. Had Walpole kept to his guns and maintained the illusion of *The Castle of Otranto* as artefact, then the message of the work may have better resonated with the reading public, and the goal of this propaganda, that being to foment sympathy for Whig constitutionalism and the pursuit of liberty for the common man, may have been achieved (Lake, 2013).

For *Ootavid Mann*, the lessons of Walpole's literary experiment are clear. Under all the layers, *Ootavid Mann* is also politically motivated - not in that it prescribes to a particular political ideology, but in how it positions one's relationship to material objects, to social collectives, to religions, and to the cultural perception of loneliness and solitude. In order for its messages to resonate, the author of the text must be excised, just as we saw in the section on wisdom. As soon as the true author makes himself known the spotlight becomes split; Walpole undermined his attempt at manipulating the public's sympathies by succumbing to that human desire for validation from other consciousnesses, and *he* became the primary subject for discussion, not *The Castle of Otranto*. For *Ootavid Mann* to work in the way that it has been designed, the translator must remain as the filter through which the reader consumes the text; he must act as the framework through which the artefacts of the novel are presented. Therefore, the translator becomes not so much a character as a pragmatic tool employed for the purpose of increasing the resonance of *Ootavid Mann's* messages. Should I, the text's genuine

author, 'pull a Walpole', then the layers of mystery and magic around *Ootavid Mann's* artefacts would burn away. But this raises an additional question: what about the potential for *Ootavid Mann* to be labelled as a literary forgery?

Antecedents of the Fictional Translator of Ootavid Mann: Literary Forgery

Walpole managed to avoid claims of literary forgery by coming out as the real author of The Castle of Otranto. While this may have damaged the purpose of his work, it also saved him from legal trouble, not to mention a stay at the King's pleasure. One contemporary of Walpole's who chose not to follow his lead, and thus ended up as the subject of a literary scandal, was the young English poet Thomas Chatterton. From an early age, Chatterton began crafting poems that he passed off as the production of a 15th century monastic poet named Thomas Rowley, for which he was only their transcriber. His poetry was of such maturity that these works were accepted by many who read them, though there were some who recognised them as forgeries, including Horace Walpole himself (in large part due to the insight of his literary friend Thomas Gray), who somewhat hypocritically denounced the young Chatterton for attempting to pass off his poems as those of a faux historical author (Walpole, 2014; Chisholm, 1911). Despite the occasional educated person recognising his poems for what they were, this did not prevent the majority of those who came into contact with them believing that they were genuine. This resulted in several publications, released after Chatterton's suicide, which attempted to defend the authenticity of the Rowley poems. These included passionate defences by people such as Thomas Tyrwhitt, an 18th Chaucerian scholar; Reverend Jeremiah Milles, the President of the Society of Antiquaries between 1762 and 1784; and the antiquarian William Barrett whose work History and Antiquities of Bristol drew greatly on the content of Chatterton's false medieval poetry, and therefore was widely judged as being fundamentally flawed (Kaplan, 1989; Haywood, 1986).

This scandal around the authorship of the Rowley poems may have irrevocably damaged the careers and reputations of several prominent historians and antiquarians, but they also had another, more positive affect: they acted as creative inspiration for the artists and poets who followed. Samuel

Taylor Coleridge's *Monody on the Death of Chatterton*, is perhaps one of the most overt examples of this inspiration, along with Henry Wallis' painting *The Death of Chatterton* which currently hangs in the Tate Britain (Chisholm, 1911; Coleridge, 1921; Cieszkowski, 1982).

There is no real consensus as to why Chatterton decided to create a fictional author for the presentation of his poetry. Unlike Walpole, he was not attempting to promote some political agenda, nor did he seem particularly timid about putting himself forward as a writer. It is possible that he suffered from *pseudologia fantastica* (the tendency to lie, or myth-make, to a pathological degree) as a consequence of extensive volitional isolation during childhood, as recounted in the following:

His delight was to lock himself in a little attic which he had appropriated as his study; and there, with books, cherished parchments, saved from the loot of the muniment room of St Mary Redcliffe, and drawing materials, the child lived in thought with his 15th century heroes and heroines. (Chisholm, 1911. p.10)

We have seen this behaviour before, in the figures of Rudyard Kipling and Beatrix Potter. But whereas Kipling and Potter matured and were able to turn their fantasies into creative projects rather than allow them to remain as substitute realities, Chatterton never reached this stage of development or maturation, seeing as he killed himself with arsenic at the young age of seventeen, well before the cognitive systems needed for such maturation had fully developed (Storr, 1988; Luna, Garver, Urban, Lazar & Sweeney, 2004). If, as Chisholm implies, solitude, imagination and volitional loneliness had become Chatterton's world from a young age and had remained the primary filter through which his creativity was shaped and pressed into its physical form, then the young poet would appear to share many similarities for author-making with another prominent crafter of fictive figures: our old friend Fernando Pessoa.

Amongst Pessoa's numerous heteronyms (a fictional, created personality) there were several who translated various works into English and Portuguese (Green, 1982). Some of these heteronyms translated the poetry of other of Pessoa's heteronyms into languages other than that in which they were written, with Pessoa's other translator heteronyms then going on to criticise or comment upon the quality of those translations. While this heteronymic approach to writing is rightfully lauded for its bold creativity, it also possesses a significant degree of fraudulence. In many cases, the Portuguese poet was presenting himself (via his heteronyms) as someone with a certain cultural background and upbringing that he did not possess, often as a way to present his political ideologies without risking a backlash against himself. For example, the article contributors to Pessoa's short-lived self-publishing enterprise Ibis Press, and the publications that it was set to produce, consisted entirely of heteronyms that the author invented while his second-hand printing press was being set up in a rented property on Rua da Conceição da Gloria (Zenith, 2021). Among these numerous fictional contributors were Manuel Maria, who would author politically-charged articles that sought to turn readers against the monarchy and the conservative hierarchy of the Catholic Church; Carlos Otto, who was set to write *Treatise on Wrestling*, a book concerning the wrestling techniques of a French pugilist named Yvetot (who was another invention by Pessoa); and Father Gonçalves Gomes, a Catholic columnist whose articles, like those of Manuel Maria's, were designed to communicate Pessoa's belief that the corrupt alliance between the Catholic Church and the Portuguese monarchy needed to be dismantled, but in this instance from the perspective of a fervent republican (Zenith, 2021).

If Fernando Pessoa had attempted such literary subterfuge today, then it's quite likely that the bells of forgery would be rung aloud, so why wasn't Pessoa confronted about this during his lifetime? One big reason is that a lot of these plans never came to fruition. Even when they did barely anybody read his work, with most of Pessoa's writings only being appreciated after his death, when they came to be perceived as curious artefacts of literature, rather than anything that could have caused any real damage. Pessoa's Ibis Press shut down after just three months of operation and with nothing to show for it but a badly typeset newspaper, *O Povo Algarvio*, that was only published in a single town in the Algarve, and that contained nothing of Pessoa's (Zenith, 2021). Even his later publishing efforts only managed a handful of thin editions before shutting down due to an absence of both funds and public interest. Ironically, these failures contributed significantly to Fernando Pessoa's posthumous status as one of Portugal's greatest literary figures, as they saved him from the scandals that surely would have fomented if he had achieved the success that he sought in life.

The final crafter of literary forgeries we will examine is someone whose falsified texts had an

international, explosive impact, fooling many professional philologists, critics, and historical figures, including Voltaire, Thomas Jefferson, and even Napoléon. This individual is James Macpherson, the 18th century Scottish poet who claimed to be the translator of *The Poems of Ossian*, but who was, in truth, their veiled author.

Published in 1762, *The Poems of Ossian* was a collection of epic Gaelic poetry presented as a translation of the fragmented work of a hitherto undiscovered Gaelic poet. It was an immediate hit, praised by notable people from all sectors of western society, especially those connected to Scotland, and functioned as a catalyst for artistic and creative inspiration on par with the works of Shakespeare or Homer (Moore, 2017; MacDonald, 2017). However, while the majority accepted *The Poems of Ossian* without question, believing wholeheartedly that this was a genuine translation of authentic, original Gaelic texts, some had suspicions from the outset, with perhaps none more outspoken than famous lexicographer Dr Samuel Johnson who, when questioned on his opinion of Macpherson, declared that he was, "a mountebank, a liar, and a fraud", and claimed that not only were his poems forgeries, but they were of such poor quality that a child could have put them together (Magnusson, 2006). While one might assume such condemnations from key figures to precipitate the decline and eventual death of a work, in the case of *The Poems of Ossian*, the furore around its authenticity only enhanced its impact, as the Macpherson scholar Dafydd Moore states:

It is difficult to overstate the impact of *The Poems of Ossian* on the literature of Western Europe. They played a substantial role in the growth of interest in the native literatures of not only the British Isles but Northern Europe, sometimes by providing an uncomplicated inspiration for antiquarians and sometimes through spurring a desire to disprove or otherwise dispute their veracity. (Moore, 2017. p.6)

But what was it about *The Poems of Ossian* that caused its authenticity to be questioned? One key piece was the absence of any original manuscripts. Despite frequent requests to see the material from which the poems derived, Macpherson was unable to present anything at all. Suspicions were hardly waylaid when, in 1764, Macpherson travelled to the British colony of Florida in order to serve

as secretary to the new governor, and happened to drop all the original Ossian manuscripts into the alligator-infested waters of a Floridian swamp, where they could not be recovered (Moore, 2017). But this farcical anecdote, related by Macpherson himself, is likely untrue, invented to frustrate, and even exhaust, those individuals who had been biting at his heels around the issue of authenticity from the moment of *Ossian's* publication. Because while *The Poems of Ossian* was in many ways a production of the imagination, it was also a work of translation, just as Macpherson insisted. To understand this apparent dichotomy, we have to return to Dryden's three-fold structure of translation, and examine the third approach: that of inspiration.

The third way is that of imitation, where the translator (if now he has not lost that name) assumes the liberty, not only to vary from the words and sense, but to forsake them both as he sees occasion; and taking only general hints from the original, to run division on the groundwork as he pleases. (Dryden, 1680. p.68-72)

In 1756 James Macpherson retired to his old haunt of Bedenoch, where he spent the ensuing months as a schoolmaster to the local children. During his down time, when he was no longer under the mortarboard's shade, he collected Gaelic poetry, primarily through spending time with the old men and women who kept stores of this poetry in the vaults of their memory (Ramsey, 1888). There, gathered around a roaring fire, Macpherson would hear tales of heroism and tragedy, of respect and love for nature, and the foresight of seers. Vernacular poetry has always tended to be communicated orally, rather than inscribed on parchment or on other materials, and has been since the invention of storytelling (Harari, 2014). This was no different in the 18th century, when Macpherson was hunting for the poems and narratives of the old Gaelic world (Mhunghaile, 2017). And it was this corpus of tales, heard and noted down in a manner unlikely to be verbatim, that became the foundation for all Macpherson's Gaelic translations, including those collected in *The Poems of Ossian*.

Because the majority of the source material from which Macpherson was 'translating' was received in the oral tradition, there were no original manuscripts that could be shown, beyond those notes that Macpherson himself had made. His act of translation, therefore, was not one of rendering in literal or accurate form the old Gaelic tales, but of taking these old poems and narratives as a form of clay which could be moulded and reshaped to fit the cultural expectations and assumptions of the Homeric epic he was aiming to create, most likely as a means to augment the literary merit of Gaelic culture, as well as his own standing in London's literary circles (Kristmannsson, 1997; Mhunghaile, 2017). His approach to translation was wholly imitative. While that might seem abhorrent to many readers today (though it is exceedingly common when a text is translated into different media, such as from novel to film), this was a fairly standard approach to translation that only fell out of favour as a result of the furore around *The Poems of Ossian* (Kristmannsson, 2017). Perhaps the main reason for this furore, beyond the political, was that Macpherson presented *The Poems of Ossian* as a literal translation of original texts, rather than as the imitations they were, claiming that they held a close equivalence with the original Gaelic poems (Kristmannsson, 2017). Interestingly, this wasn't a purely isolated incident either, as Macpherson made the same bold (and erroneous) claim in the preface to his translation of Homer's *Iliad*:

To do all the justice, in his power, to his Author, as well, as to render his version useful to such, as may wish to study the original, through an English medium, he has translated the Greek VERBATIM: Even to a minute attention to the very arrangement of the words, where the different idioms of the two languages required not a freedom of expression, to preserve the strength and elegance of the thought. (Macpherson, 1773. p.xviii)

A claim which, as one might expect, with Homer's *Iliad* being one of the most famous, most translated works in existence, was soon identified as being fraudulent, and was quickly torn apart by reviewers upon its publication, damaging Macpherson's reputation further (Kristmannsson, 2017).

It seems likely that if Macpherson had not attempted to pass off *The Poems of Ossian* as being metaphrase or even paraphrase translations, but had admitted that they were imitations of oral tales, and were therefore largely of his own design, then the scandal around this work would not have been the century-spanning furore that it became. But if Macpherson had admitted such, then there is the possibility that *The Poems of Ossian* would not have made quite the same impact as it did, and the art

and creative responses to his text would never have been created.

All three of these authors sought to disassociate themselves from the work they created through the application of falsities. Chatterton found that he communicated best from a realm of daydream and fantasy, and felt that he needed that filter for his work to find acceptance. Pessoa constructed myriad false selves, partially from the pleasure the weaving of his heteronymic labyrinth provided but also as protection against the accusations that he believed could be levied against him for the content of his articles and essays. Macpherson believed that, by imbuing ancient Gaelic tales with his own creative flair, he could create a work on par with the epics of Homer that would elevate the literary reputation of the Gaelic people to empyrean heights - but only if the grease of his fingerprints on the translation were concealed. There were positives and negatives to these approaches, but what does all this mean for *Ootavid Mann*?

As mentioned in a previous section of this chapter, it is important to maintain an atmosphere of authenticity for the messages and the wisdoms in *Ootavid Mann* to hit their mark. And it is just as important to ensure that there is a scriptible element, so that the reader can feel greater affinity with the novel and its content. But it would be valid to recognise that, should the novel ever be published, and released into the hands of the public, claims of literary forgery would be liable to follow. For the author, and the publisher, this would be a considerable risk. Therefore, while it may damage the aims of the text to some degree, it is important that the novel lays out its fictional roots from the outset, so that there is some legal protection present. I have done this in the form of a legal disclaimer (the text of which is below) that aims to provide legal protection while also maintaining some of the style and subterfuge of the parent text, so that the soul of *Ootavid Mann* isn't undone entirely.

This is a work of fiction. Although its appearance is that of a translated collection of documents, it is not, but is rather a result of the imagination presented in this form. Any resemblance to persons, living or dead, is purely coincidental. Information that is historical, such as reference to the rituals and implements of crofters, is accurate to the author's historical knowledge. William Marshall does not exist. As such, this author does not advise pursuing investigations into the identity of the translator or his works. There

is no original miscellanea. No record of its existence is kept within the collections of the British Library. Neither the author nor publisher of this work can be held accountable for the opinion of readers regarding the veracity of these statements or inquiry thereof, nor can these same parties be held responsible for misadventure caused by the pursuit of fact relating to the work and its artefacts, up to and including death. (Thompson, 2020)

The Archetypes of the Ootavid and the Attekast

While *Ootavid Mann* is a fractured novel about Shetland and the life of an ancient crofter-fisherman, it is also a novel about loneliness and how it can affect an individual over a long span. The preceding chapters of this thesis have explored loneliness in all its myriad forms, and the primary way that this research is expressed in the novel is through two opposed archetypes: the ootavid, and the attekast.

Before we explore these in detail an important point must be clarified. Despite the book's title the shepherd is not an ootavid; he is pursuing the state of being that is contained within his notion of an 'ootavid mann', which we shall come to shortly, while attempting to stave off or avoid that state of being embodied in the attekast. He exists on a spectrum between these twinned poles. And his place upon that spectrum vacillates over the course of his fragmented chronology. In this respect these two archetypes do not represent any actual character or individual, but skew somewhat closer in concept to the Big Five in psychological trait theory (e.g., the extraversion - introversion scale), as refined by Goldberg and the other identity theorists (Goldberg, 1993).

The Archetypal Dimensions of the Ootavid

Of the many archetypes found in literature, the ootavid resembles most the archetype of the sage, otherwise known as the 'wise old man'. In literature, this archetype stems from the venerable Mentor in Homer's *Odyssey*, an individual who was renowned for his wisdom in matters commonplace and political, and from whom we have the word 'mentor', meaning 'a trusted counsellor or guide'. In an action curiously prescient of the recent wisdom-related research covered in this chapter (Huynh &

Grossmann, 2018; Trope & Liberman, 2010), when Athena wished to share her wisdom to the young Telemachus, she chose to disguise herself in the form of Mentor, knowing that Telemachus, being the son of Odysseus and a ward of Mentor, would recognise him as a trusted source of wisdom within his familial and cultural circle, and therefore be more likely to heed the given advice (Homer, 1997).

The archetype of the sage or wise old man contains the following personality and behavioural components: empathy, wisdom, awesome (in that they inspire awe), advanced age (beyond the age of the hero or character they are advising), humility, confidence, cultural difference (the sage must be a resident of some place other than those they advise, or be liminal), discipline, and lastly adherence to traditional codes or rituals (Campbell, 2008; Jung, 1991). The sage often holds a patriarchal position, and has about them an aura of paganism or pre-religion, as we see in those contemporary 'superstar' sages of fiction, Gandalf and Yoda. On occasion, they will possess an air of distraction, as if their thoughts operate on a higher plane. And finally, in a narrative, the sage will tend to operate on the sidelines, providing guidance at a key juncture (such as during the 'supernatural aid' or 'the crossing of the first threshold' sections of Joseph Campbell's monomyth), before fading from the spotlight in one way or another, often as a result of death, especially when that death acts as a further catalyst for action on the part of the narrative's protagonist - the murder of Obi-Wan Kenobi being a familiar contemporary example (Campbell, 2008; Ferrell, 2000).

The archetype of the ootavid, while similar in many respects to the sage archetype as outlined above, has some significant differences. The ootavid possesses empathy, wisdom, and humility, but is not necessarily advanced in age. Further, while an ootavid requires discipline, they are not culturally different from those that surround them, with the sole exception of their relationship to solitude and to loneliness. Indeed this latter point functions as the core of the ootavid archetype, from which the rest of their characteristics, behaviours, and traits derive.

The ootavid archetype has a positive relationship with loneliness and solitude. For loneliness, an ootavid allows its beneficial aspects to guide his or her behaviours, as well as the movement of the thoughts that occur when alone. The two main aspects of this relate to the concept of re-framing and the cognitive changes that happen during prolonged periods of social isolation (Cacioppo & Patrick, 2008; Korpela & Staats, 2014; Storr, 1988). As discussed in a previous chapter, a large part of how one

responds to loneliness depends on how that loneliness is framed. An ootavid sees themselves not as disconnected or isolated from others, but as temporarily apart in order to enjoy their own company, and to exist without the burden of social expectation on their behaviours, manners or thoughts. This echoes Winnicott's concept of the capacity to be alone; the ootavid, like the child, is separated from society (the mother) but is confident that they can return to it whenever needed, and that the time spent alone will not be weaponised against them; therefore this alone time is experienced as pleasure without anxiety or fear (Winnicott, 1958). The second main aspect relates to how the ootavid derives their sense of satisfaction not from social, but from natural environments. As discussed in a previous chapter, individuals high in loneliness experience oxytocin release not when faced with social scenes, such as when seeing lovers holding hands, but when faced with natural scenes devoid of dangers and other human beings (Korpela & Staats, 2014). An ootavid leans into this rewiring of brain chemistry and finds their pleasure in a closer relationship with nature, such that this connection with the plants and animals of the land supersedes any connection with other human beings, *but not in a way that denigrates human connection.* This last is important, as the ootavid archetype is not misanthropic; it simply prefers to maintain a close relationship with nature and solitude.

So far we have looked at the ootavid from the perspective of western archetypes and found in the sage archetype a close, if somewhat awkward fit. Now let us crash an eastern equivalent into our ootavid: that of the 'man of realisation'. This archetype stems from various Hindu and Buddhist texts including the *Shrimad Bhagavad Gita* and the *Vivekachudamani*, a collection of 8th century spiritual verses written in Sanskrit (Campbell, 2008; Berger, 2005). The central tenet of the man of realisation is that of self-reduction. Through introspection, experience, and meditation, the man of realisation becomes aware of the nature of existence, notably its cyclical processes, and its enormousnesses, and thus engages in either purposeful or casual self-negation. This tends to involve the relinquishing of one's ego-centric elements, such as ambition, pride, material lusts, and any desire to have a *presence*, either during their life-time or afterwards (Campbell, 2008). There are aspects of this in the ootavid (and in the shepherd, who seeks the state of ootavid). This is no accident. As outlined in the initial chapters of this thesis, there is an epiphenomenon of authentic solitude (objective social isolation) in which a person undergoing a prolonged solitude experience becomes overwhelmed with an 'oceanic feeling'. This 'oceanic feeling' tends to inspire strong emotional attachment to something beyond the boundaries of the self, whether that be a god, the universe, or something more alien or metaphysical (Mascaro, 1965; Merton, 1958; Freud, 1930). Here is an example: in the late 1970's, the renowned single-handed sailor Frank Mulville, a veteran of several long solitary ocean-crossings, was alone in the Caribbean when he was overcome with the overwhelming desire to see his beloved yacht from the outside. Letting himself down into the water, he allowed himself to float away from his boat, and as he was gently buoyed along by the waves, alone in the enormous emptiness of that ocean, having neither seen nor heard from another person in many months, he experienced an up-rush of joyous fulfilment so profound that he almost allowed himself to surrender his life and merge with the sea:

This, it struck me, was the supreme moment of my life. I had never achieved anything to equal it before and I was never likely to again. This was the ultimate experience – alone in an ocean, surrounded by the calm beauty of the sea and the sky and with my boat, also a thing of beauty, on a string in front of my eyes. It was my dream and I had it. Why not let go of the rope? To melt into the sea at this apex of experience would be the crowning touch – the only thing left. Nothing that could happen in the future could better this. (Mulville, 1972)

As this sense of metaphysical connection as a result of prolonged solitude is a component of loneliness, it was important to capture this in the archetype of the ootavid. That this characteristic is present in the archetype of the 'man of realisation', but not the archetype of the sage or wise old man, suggests that this element of the loneliness experience may find its expression most frequently in the east, rather than the west. And indeed it is to an eastern character that we first turn as we explore the literary antecedents of the ootavid archetype.

Antecedents of the Ootavid Archetype: Review of Literature

Midway through Hermann Hesse's *Siddhārtha* the eponymous Brahmin's son experiences an intense disorientating nausea brought on by the sudden awareness of his loneliness. His loneliness was not

one of isolation from family or friends, nor of exile from his homeland, but a sense of disconnection from his inner-most self. Through several years spent in playful pursuit of material wealth he had become divorced from the soul in his breast; he had come to value goods and social status over those elements that he had, in his youth, sought to protect and nurture; empathy, serenity, a consistent awareness of his connection with nature and the forces that underlie all life. Sickened by this sudden realisation of his state, he decided to snuff-out the flame of his life in the waters of a nearby river. But slumber overtook him, and when, stirred by rippling water and the movement of sunlight through the palms of coconut trees, he regained consciousness, he found himself infused with a bright feeling of divinity, and an intense awareness of the present moment. Siddhārtha felt rejuvenated, and his connection with his inner-self, and those beloved aspects of his youth, was restored (Hesse, 1951).

In this moment Hesse captures a moment of metaphysical connection, as described by Mulville and Byrd in earlier sections of this thesis. That this might be the catalyst for Siddhārtha's ascension from ordinary man to enlightened man (e.g., the 'man of realisation'), seems plausible and works well in a narrative context; we might say also that Siddhārtha has transitioned into a state that is quite similar to that of the 'ootavid mann' in that he regains a connection with his inner-self that is genuine and not shaped by social expectations. His transformation in this moment is not complete however, and he goes on to spend several years with an old boatman who resides on the same river, spending most of his time in quiet contemplation until he achieves enlightenment.

What is especially interesting about Hesse's representation of the transition from the ordinary life into one that is akin to an ootavid state, is how he frames it as a process of surrendering. In order to gain the ootavid state, and ultimately reach a point of enlightenment, Siddhārtha had to give up everything he had owned or worked to achieve, including his wealth, his home, his lover, and eventually his son. For Siddhārtha this surrendering was quite simple; being rich, successful, and a Brahmin's son, he had quite a lot he could give up. For the shepherd of *Ootavid Mann*, the challenge to surrender was quite different, as he had very little to begin with. It is for this reason that the novel suggests that the shepherd is bereaved of his child, and that the surrendering of his grief is key to a similar transition that we see here, in the figure of Siddhārtha.

Another point is raised in Siddhārtha that is integral to an understanding of the ootavid state

the shepherd seeks to achieve, and that relates to 'knowing without knowing'. When Siddhārtha is told by the boatman to listen to the river, and to attend to its voice, he does so. But it takes several years for him to actually hear what the boatman has been telling him to listen for, and to *know* what he has known during these sessions of quiet attentiveness (he recognises that he is listening not just to moving water, but to time's movement, and all things within the flow of time, including himself). We can understand this quite easily. Many people know that the universe is enormous, but we do not truly *know* that the universe is enormous. If we did, it is quite possible that the awareness of its size would afflict us with paralysis. Such an existential moment, the sudden *knowing* of that which is known, is best captured in Jean-Paul Sartre's *Nausea* in which the protagonist becomes acutely aware that a chestnut tree is a living thing with its own existence (something known becoming *known*), which causes him to have an existential panic attack:

So I was in the park just now. The roots of the chestnut tree were sunk in the ground just under my bench. I couldn't remember it was a root any more. The words had vanished and with them the significance of things, their methods of use, and the feeble points of reference which men have traced on their surface. I was sitting, stooping forward, head bowed, alone in front of this black, knotty mass, entirely beastly, which frightened me. [...] I had not seen the seeds sprout, or the tree grow. But faced with this great wrinkled paw, neither ignorance nor knowledge was important: the world of explanations and reasons is not the world of existence. A circle is not absurd, it is clearly explained by the rotation of a straight segment around one of its extremities. But neither does a circle exist. This root, on the other hand, existed in such a way that I could not explain it. Knotty, inert, nameless, it fascinated me, filled my eyes, brought me back unceasingly to its own existence. In vain to repeat: "This is a root"- it didn't work any more. I saw clearly that you could not pass from its function as a root, as a breathing pump, to that, to this hard and compact skin of a sea lion, to this oily, callous, headstrong look. The function explained nothing. (Sartre, 1938. p.64-66)

Roquentin, the novel's young protagonist, responds to this realisation, this *knowing* of what is known, with disgust, terror, and nausea. We see a similar response to such a realisation in the short

story *Terror*, by Vladimir Nabokov, when his protagonist suddenly starts seeing human faces in a deconstructed fashion - being composed of eyes, a nose, a mouth, and other shapes (Nabokov, 1981). Both stand in direct opposition to the response in Hesse's *Siddhārtha*, in which a similar moment of existential awareness is received joyfully - we can imagine that, should it have been Roquentin who had heard the voice of the river, his response would have been to recoil in fear, rather than lean in so to hear better. A character who embodies the archetype of the ootavid would have responded in the same way as Siddhārtha, as part of the ootavid archetype is the ability to recognise, and accept, both the spiritual and pragmatic aspects of nature and all the natural processes which underlie existence; something that is very much present in our second example of the ootavid archetype in literature - *Walden; or, Life in the Woods*, by the 19th century American writer Henry David Thoreau.

Unlike Hesse's *Siddhārtha*, which presents a fictional account of an individual from history, *Walden; or, Life in the Woods* is a non-fictional autobiographical account that concerns two years of the author's life during which he retired to a cabin beside Walden Lake in Concord, Massachusetts. It is one of the first secular accounts of a retreat into semi-hermitage, and for this reason shares several aspects with *Ootavid Mann*, primarily its secluded natural setting, its reclusive character, and a focus upon philosophical matters both personal and societal (Thoreau, 1854). Despite being non-fictional, the character of Thoreau, as portrayed in his own writing, skews remarkably close to the eastern idea of the 'man of realisation', with his interactions and reactions to the world marrying to the definition of this archetype within the *Vivekachudamani*:

Sometimes a fool, sometimes a sage, sometimes possessed of regal splendour; sometimes wandering, sometimes as motionless as a python, sometimes wearing a benignant expression; sometimes honoured, sometimes insulted, sometimes unknown - thus lives the man of realisation, ever happy with supreme bliss. (Madhavananda, 1944. p.250)

Thus we find Thoreau engaged in activities that might be considered foolish, such as when he oversees an imaginative war between two species of ant near his woodpile:

[...] the ground was already strewn with the dead and dying, both red and black. It was the only battle which I have ever witnessed, the only battle-field I ever trod while the battle was raging; internecine war; the red republicans on the one hand, and the black imperialists on the other. On every side they were engaged in deadly combat, yet without any noise that I could hear, and human soldiers never fought so resolutely. I watched a couple that were fast locked in each other's embraces, in a little sunny valley amid the chips, now at noon-day prepared to fight till the sun went down, or life went out. (Thoreau, 1854. p.148)

And not many pages before we find him engaged in meditations over the ethical issues of the meat-based diets of his fellow men, offering an optimistic prophecy that the fate of mankind's diet is in the vegetarian:

Is it not a reproach that man is a carnivorous animal? True, he can and does live, in a great measure, by preying on other animals; but this is a miserable way,– as any one who will go to snaring rabbits, or slaughtering lambs, may learn,– and he will be regarded as a benefactor of his race who shall teach man to confine himself to a more innocent and wholesome diet. Whatever my own practice may be, I have no doubt that it is a part of the destiny of the human race, in its gradual improvement, to leave off eating animals. (Thoreau, 1854. p.140)

There are many more examples within *Walden; or, Life in the Woods* that tie Thoreau to the eastern archetype of the man of realisation. Whether this is an accident or engineered by Thoreau on purpose to present himself in a certain way to society is down to a reader to decide for themselves, but it is interesting to note that Thoreau's two-year retreat was largely initiated by personal politics, notably a desire to demonstrate a pragmatic application of transcendentalist philosophy - that people are at their best when truly self-reliant and independent (Russell, 2015). This sentiment is echoed in modern American culture, especially in rural, right-wing America where it has undergone mutation, and become more aligned with selfishness, self-interest, the shedding of responsibility, and a distrust of educated figures and those in positions of traditional authority, as we have seen in recent years (Krugman, 2020). Unlike the North America that Thoreau's descendants would inhabit, the ootavid

archetype in *Ootavid Mann* stays closely aligned with the transcendentalism that runs throughout Thoreau's book. This forms another aspect of the ootavid archetype: self-reliance and the acceptance of personal responsibility, but not at the expense of others.

Walden; or, Life in the Woods, contains another key element that is important to the ootavid archetype: one's relationship, and connection to, the natural world. In this respect I am not talking about the 'processes of nature', such as discussed in the section on Sartre and Siddhārtha. Rather, the relationship with nature that Thoreau expounds upon, and demonstrates, is far more grounded, far more tactile. While we have discussed how a strong relationship with natural environments can be tied to the changes in brain chemistry engendered by long periods of solitude, it doesn't mean that this cognitive shift is required for one to simply enjoy being in the presence of nature - only for the chemical response as outlined in a previous chapter on oxytocin release (Cacioppo & Hawkley, 2009; Cacioppo, Ernst, et al., 2000). A social person can enter into nature fresh from their busy gatherings and find a good amount of pleasure in the entertainments of flora and fauna that nature presents; a pleasure which, while not as uplifting as it would be for a brain undergoing a prolonged solitude (the oxytocin release would be far higher), still provides a significant improvement in mood (Korpela & Staats, 2014). Interestingly, there is a passage in Walden; or, Life in the Woods where Thoreau seems to pinpoint the exact moment where he shifts from the 'social' experience of nature to the 'prolonged solitude' experience; where his appreciation of nature deepens due to a (what we can assume) shift in his brain's chemical response as caused by his physical isolation from others:

> I have never felt lonesome, or in the least oppressed by a sense of solitude, but once, and that was a few weeks after I came to the woods, when, for an hour, I doubted if the near neighbourhood of man was not essential to a serene and healthy life. To be alone was something unpleasant. But I was at the same time conscious of a slight insanity in my mood, and seemed to foresee my recovery. In the midst of a gentle rain while these thoughts prevailed, I was suddenly sensible of such sweet and beneficent society in Nature, in the very pattering of the drops, and in every sound and sight around my house, an infinite and unaccountable friendliness all at once like an atmosphere sustaining me, as made the fancied advantages of human neighbourhood insignificant, and I have never thought of them since. Every

little pine needle expanded and swelled with sympathy and befriended me. I was so distinctly made aware of the presence of something kindred to me, even in scenes which we are accustomed to call wild and dreary, and also that the nearest of blood to me and humanest was not a person nor a villager, that I thought no place could ever be strange to me again. (Thoreau, 1854. p.85-86)

The response captured in the above passage is akin to the shepherd's response to nature when he is moving toward the state of the ootavid, in that there is a sense of consanguinity between oneself and the natural world that increases one's appreciation of natural phenomena, especially phenomena that might otherwise be considered antagonistic towards human life, such as lashing rain or the rush of gales across a Shetlandic moor.

Finally onto the point of loneliness. Thoreau, even more so than Siddhārtha, seems to best represent the ootavid archetype's relationship with loneliness and aloneness. Thoreau encounters the beneficial sort of loneliness during his time at Walden Pond, finding in it freedom rather than exile (a consequence of framing), and is able to enjoy solitude without social pain. Often, when he talks of being alone, he draws on comparisons with nature to highlight the absurdity of feeling disconnected when apart from others, as we see in; "I am no more lonely than a single mullein or a dandelion in a pasture, or a bean leaf, or sorrel, or a horse-fly, or a bumble bee." (Thoreau, 1854. p.89). Therefore he appears to be positioning loneliness (the social pain of disconnection, specifically), as both a purely human emotion, and one over which a strong will has considerable control. In the first of these he is incorrect - animals, even the lowly fruit fly, can experience loneliness (Li, Wang, et al., 2021). But in the latter he is correct; through the wilful re-framing of one's isolation from others, through spiritual recognition of one's connection with existence (nature), and through finding absorption in creative or fulfilling tasks, one can overcome feelings of loneliness and even turn them to their advantage - an achievement which is made considerably easier if the capacity to be alone has been developed during childhood (Winnicott, 1958; Storr, 1988; Larson & Csikszentmihalyi, 1980). This ability, to turn the pain of loneliness into a sense of freedom that facilitates pleasure and production, is another tenet of the ootavid archetype.

To close this section on loneliness, there is no better quote than Thoreau's famous eulogy to

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solitude. In this we find a mindset reminiscent of that of *Ootavid Mann's* shepherd: a sense of pleasure to be in one's own company, a recognition that to be physically alone does not necessarily equate to feelings of loneliness, and, perhaps, a dangerous undercurrent of pride:

I find it wholesome to be alone the greater part of the time. To be in company, even with the best, is soon wearisome and dissipating. I love to be alone. I never found the companion that was so companionable as solitude. We are for the most part more lonely when we go abroad among men than when we stay in our chambers. A man thinking or working is always alone, let him be where he will. Solitude is not measured by the miles of space that intervene between a man and his fellows. The really diligent student in one of the crowded hives of Cambridge College is as solitary as a dervish in the desert. The farmer can work alone in the field or the woods all day, hoeing or chopping, and not feel lonesome, because he is employed; but when he comes home at night he cannot sit down in a room alone, at the mercy of his thoughts, but must be where he can "see the folks," and recreate, and as he thinks remunerate himself for his day's solitude; and hence he wonders how the student can sit alone in the house all night and most of the day without ennui and "the blues;" but he does not realize that the student, though in the house, is still at work in his field, and chopping in his woods, as the farmer in his, and in turn seeks the same recreation and society that the latter does, though it may be a more condensed form of it. (Thoreau, 1854. p.88)

The Archetypal Dimensions of the Attekast

The attekast is unwanted by men. He desires solitude as does an ootavid, but his desire for isolation is forged from a poorer material. He is shunned, chased from the social weave; the solitude he seeks is that of a mouse who has heard the screech of a hawk. His solitude is chthonic in nature, as different to the luminous solitude of the ootavid mann as winter is different to summer. An exiled attekast descends into a cave in whose depths neither beam nor breath of sunlight may penetrate, and in this self-sealed oubliette thinks ever upon mankind and the society that excluded him until the stitching of his thoughts frays loose. (Thompson, 2020. p.36)

The attekast is the second of our two archetypes. It represents the polar opposite to the elements held

within the ootavid - where there is light in the first, there is shadow in the second. The archetype of the attekast is the embodiment of all the detrimental aspects of chronic loneliness, and therefore has for its grounding not so much a literary foundation, but a psychological one. To understand a person who is an attekast, one must bear in mind that their behaviour is predicated upon a need for social connection with others, the rebuffs they have encountered while pursuing this need, and the specific coping mechanism they have employed to deal with their repeated rejection. A common feeling that a person who has become an attekast engenders in others is discomfort, a sense of unease. This tends to be due to the attekast's hunger for social reconnection, a hunger which shows itself in the frantic, one-sided approach they take to conversation, and a blindness to the unease and social cues of their overwhelmed listener (Cacioppo & Patrick, 2008; Pickett & Gardner, 2005). In this, an attekast is like a man who has gone without food for several days suddenly being presented with a hamburger - that hamburger will be quickly devoured, and it won't be pretty.

The attekast archetype is circumvallated with a vortex of self-delusion. This is a result of the coping mechanisms mentioned previously. In the initial period of chronic loneliness, an attekast will tend to strive for social reconnection. They will seek others, attempt to engage in colloquy, or engage in some behaviour that they believe will lead to social acceptance - this latter often takes the form of boasting about some quality they possess believing that this will result in assimilation into the group, "these people would benefit from my skill"; a belief which tends to be flawed. When these attempts at reconnection result in further rejection, the negative assumptions brought into their early attempts -"they don't like me, they don't understand me, they despise me" - are perceived as justified, they are seen as being on the mark when in truth they are likely far off, and the only reason that rejection has occurred is down to the attekast's starving-man approach. The negative beliefs become self-fulfilling prophecies (Snyder & Swann, 1978), and from this point the attekast's vortex of self-delusion begins to swirl. To acknowledge the true reason for one's exile or rejection from others can be destructive to one's sense of identity. To avoid this, an attekast will tend to fabricate their own narrative to explain their isolation from others, often contorting factual information in odd ways, spinning events so that they seem the injured or justified party, or inventing events and circumstances to keep themselves in a state of moral elevation over those who have rejected them (Cacioppo & Patrick, 2008). Eventually

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these delusions will result in the attekast convincing themselves that they have *chosen* to be removed from other people, and will embrace their solitude all the more, even as their chronic loneliness goes unaddressed and continues to gnaw at their health and mental well-being. Here is one contemporary example of such an attekast, taken from John Cacioppo and Stephen Patrick's book *Loneliness*:

> One gentleman from our study of older Chicago residents, Mr. Diamantides, seems like a poster child for the power of positive thinking as well as a certain kind of social savvy. [...] When he talks about social connection he peppers his description of his life with phrases like "I'm just lucky"; "I'm blessed"; "Attitude is everything." He is also proud to say that he knows a great many movers and shakers. "I have a wealthy clientele... but my customers treat me well because I really like them. I make people feel important. I make them feel special." [...] Mr. Diamantides says that he has maintained his religious faith, but does not attend church regularly. He was married once, briefly, but for more than twenty years he has lived alone. [...] When asked to describe his loneliest moment, he mentioned the time when he was in his forties and both parents died [...] But when asked to describe his warmest moment of social connection, he was stumped. [...] In conversation, Mr. Diamantides is so convincing in his claim that everything is great in his life that it is easy to assume that he is low in loneliness. [...] But when we looked below the surface we found quite a different story. Mr. Diamantides completed the UCLA Loneliness Scale for us. He also allowed us to test his sleep quality, blood pressure, morning levels of the stress hormone cortisol, and other factors. What the psychological test showed, and what the physiological data confirmed, was that Mr. Diamantides had one of the highest loneliness scores of all the people we had ever studied. The clues to this apparent contradiction are scattered all throughout his selfreport. For instance, it is hard to discount all the people with whom Mr. Diamantides had fallen out. The cousin who said the wrong thing, the brother with whom he argued about money. "I can't forgive or forget," he told us. "I'm not hostile or bitter... you're just never in my heart again the same way." (Cacioppo & Patrick, 2008. p.75-77)

Mr. Diamantides had formed such an effective vortex of self-delusion around himself, that even these world-leading researchers into loneliness were initially fooled. But here a question might arise: how does the self-delusion of the attekast who claims to enjoy, or at least not mind, his solitude differ from the professed fondness for solitude in the ootavid? The difference is in the physiological response. An attekast can say that he or she enjoys being alone and doesn't feel lonely, but their poor sleep quality, high levels of cortisol, high blood pressure, elevated caloric intake, and oxytocin levels all reveal the truth (Cacioppo & Patrick, 2008) - a truth which ultimately makes itself clear in a way that even the most opaque delusion cannot conceal; through an early death (Hawkley, Masi, Berry, & Cacioppo, 2006; Baumeister, et al., 2005). In contrast, an ootavid experiences none of these aversive physiological reactions to their solitude. This is largely due to their perceived relationship with their distanced social environment; an ootavid knows they will be welcomed when they return, whereas the attekast anticipates additional rejection.

While the rotten roots of the attekast archetype are embedded in the psychological literature that has come about following the past few decades of loneliness research, a number of cousins to the archetype do exist. These can be found in the work of Theophrastus: an ancient Greek scholar, and a student of Plato, who was renowned for his wide-ranging knowledge and appreciation of the human condition (Edmonds, 1929).

The *Characters* of Theophrastus is one of the earliest attempts to categorise certain thoughts, behaviours, morals, and beliefs into distinct compartments: archetypes. *Characters* contains thirty of these archetypes, and all appear to derive from his own observations of people in reality, rather than from shared mythologies, giving them a more grounded flavour. Of the thirty archetypes, those that skew closest to the attekast are: querulous man, the man of petty pride, and the backbiter.

The querulous man is one who complains about his current circumstance, often to an almost absurd degree. This archetype finds the negative in all things, even in those events which should be a source of great joy: "When they bring him the good news that he has a son born to him, then it is 'If you add that I have lost half my fortune, you'll speak the truth."(Edmonds, 1929. p.99). Here we find an echo of the attekast's tendency to both anticipate the negative and to portray themselves as a weak victim, brought low by the cruelty or perfidiousness of others. And, just like the attekast, this outlook on the world is self-perpetuating - when one approaches a conversation with arms folded and brow furrowed, then that conversation is less likely to have a positive outcome than if it was approached in an open manner, with a smile and bright eyes (Cacioppo & Patrick, 2008).

The man of petty pride is one who is ravenous for appreciation and validation in their social

collective, to the point where they will take advantage of any small occasion to elevate themselves, no matter how vulgar. One who is a man of petty pride will attempt to impress others based upon his or her assumptions of what is impressive within that particular culture or social environment. So, in the description within Characters we find: "Should he sacrifice an ox, the scalp or frontlet is nailed up, heavily garlanded, over against the entrance of his house, so that all that come in may see it is an ox he has sacrificed (Edmonds, 1929. p.109). Where the attekast diverges from this somewhat is in their knowledge of those assumptions about what is or isn't impressive. The attekast is self-centred - this is a common cognitive state for those who are chronically lonely as to extend empathy outwards invites the potential for personal annihilation (in fMRI tests, where individuals are shown photographs of a person being mugged, the socially contented people demonstrate perspective taking with the victim - activity within the temporoparietal junction implies empathy - whereas the chronically lonely show nothing of the kind, only an increased concern for their own safety) (Cacioppo, Norris, Decety, et al., 2009). Because of this self-centred state, the attekast has their own, personal, assumption about what is impressive to other people, usually based on what would be impressive to them, or will construct their own schemata of what is impressive from propaganda they have unquestioningly assimilated (a chronically lonely person is more vulnerable to the manipulating influence of propaganda than one who is socially contented (Baumeister, Twenge & Nuss, 2002)). In modern times we find the most salient example of this kind of attekast in the online Incel (involuntary celibate) movement: a group of chronically isolated individuals who hold questionable beliefs about chivalry, and perceive women as objects with quantifiable beauty whose possession demonstrates the social worth of the man. That this group of chronically isolated attekast-individuals have been responsible for a number of terrorist attacks in recent years - usually instigated by a hatred of women generated by their inability to 'get' a woman of sufficient physical beauty to match their targeted social position - suggests that an attekast or Theophrastan 'man of petty pride' can be a considerable danger to the society from which they are removed (Casciani & Simone, 2021; Jeltsen, 2018).

Last of the three Theophrastan archetypes that share some consanguinity with the attekast is that of the backbiter. The backbiter is one who has noticed that bad news in more popular than good news, and thus seeks social validation through the sharing of negative gossip, believing that it gives him or her worth in the social environment: "he will say to you about quite respectable women, 'I know only too well what trollops they are whose cause you are so mistaken as to champion to these gentlemen and me; these women seize passers-by out of the street" (Edmonds, 1929. p.129). For the attekast this is the vocalisation and sharing of those negative assumptions which cause them to be an exile, and whereas the Theophrastan backbiter is likely aware of the fallacies of their statements, the attekast believes them wholeheartedly. This relates again to the points raised before. The attekast is a self-centred individual, and when a person acts in a negative way towards them, the attekast believes that this is because they are a mean, unpleasant, or otherwise foul individual, rather than that they themselves may be at fault (Cacioppo & Patrick, 2008). By unloading these negative opinions upon whoever will listen, the attekast expects two outcomes: one, that this will increase their social worth in the eyes of the listener, and two, that their opinions will be validated. Once again the attekast is on to a losing game, as research has shown that when a person shares a negative evaluation of someone else, or gossips about another with malicious intent, this causes their social standing to be damaged, rather than the person that they are attempting to malign (Skowronski, Carlston, Mae & Crawford, 1998). This is an effect called spontaneous trait transference, and is yet another example of how the attekast is their own worst enemy.

In this section we have explored some of the dimensions of the attekast archetype, as well as a few of its ancestors. Now let us turn our attention to representations of the attekast in literature. We will begin with the nameless protagonist of Dostoevsky's *Notes from Underground*.

Antecedents of the Attekast Archetype: Review of Literature

The archetype of the attekast appears more frequently in literature than the archetype of the ootavid. A large reason for this is down to the frequency at which we encounter such characters in real life: it is quite unlikely that we will ever meet someone who embodies the characteristics and traits of an ootavid, but we have all known someone who exhibits the behaviours of an attekast, at least to some degree. In literature characters who conform (partially or fully) to the attekast archetype tend to float on the periphery of the narrative. So in Jean-Paul Sartre's *Nausea*, for example, the protagonist is met with the autodidact, or self-taught-man, in the local library - a character who is, without doubt, an attekast - and in the kitchen-sink plays of Harold Pinter, we encounter many characters defined by a frustrated anger arising from their subjective sense of isolation and loneliness, as well as the inability to address their need for meaningful connection.

But rather than focus on these secondary characters, we will examine a triumvirate of novels that have an attekast as their protagonist, and where the flow of the narrative derives from this state of being. As mentioned before, we start with Dostoevsky's *Notes from Underground*.

I have stated before that the loneliness of the attekast is chthonic in nature. That it is a loneliness of the dark, unvisited place; a loneliness of shadows and unswept corners that even the sufferer himself cannot bear to face (hence the tendency toward self-delusion). *Notes from Underground*, or the more literal translation of this title, *Notes from Under the Floorboards*, provides a perfect representation of this aspect of the attekast (Dostoevsky, 1861). The novel consists of two halves. A monologue, where we are presented with the bitter, distorted inner-world of Dostoevsky's protagonist takes the opening half, with the second focusing upon that character engaging with others. In the first half of the novel Dostoevsky's nameless protagonist shares his innermost thoughts and feelings, as well as his opinion on society and those who - he believes - hold him in contempt. Immediately do we hear the voice of the attekast; that tone which is burdened with bitterness and a distaste for society, but that conceals a longing for meaningful connection.

Dostoevsky's protagonist endeavours to present himself to us in a particular way. He wants us to feel disgust, to experience a shiver of repulsion as he describes his wants and behaviours. There is a suggestion, however, that this presented self is not accurate but is rather a construct that the sour protagonist has constructed in order to deal with his two decades of loneliness and physical isolation from others - a construct that he himself has come to believe as true. Our first hint appears following his description of his own behaviour during his tenure as a civil servant. He claims that: I was a spiteful civil servant. I was rude and took pleasure in being rude.[...] When, occasionally, people came up to my table to ask for information, I used to snarl at them and was delighted every time I succeeded in upsetting them. (Dostoevsky, 2010. p.7)

But just a short while later he reveals that this description of his prior behaviour was a lie and that he lied out of spite. There is a suggestion at this point that all is not as it seems as the protagonist mentions that he had 'elements' inside himself that prevented him from being a rude person within his role as civil servant - it is possible that these 'elements', which seem so distant and obscure to him now, writing twenty years after the fact, represent the 'social man' that he was previously, and which has been undone by his unaddressed chronic loneliness.

This loneliness is present in his every word. Every past action he describes, even those whose meaning he cannot comprehend, is founded in his chronic loneliness. At various points he mentions facts about his life that he cannot explain. He cannot leave Petersburg where he currently resides, but he cannot put into words why this is the case, even though he knows Petersburg is not a good locale for him (it is expensive; the climate disagrees with him). But if we look at these 'unexplainables' with an eye to chronic loneliness we find a suggestion of a reason. For example, those who are deep inside the oubliette of loneliness experience paralysing anxiety about venturing beyond the confines of the nest they have made for themselves (Cacioppo & Patrick, 2008; Pehlivanidis & Papakostas, 2014). If we consider the three spheres of connection too, we can see that, while the protagonist no longer has any connections on the intimate or relational spheres he does have a thin, tenuous connection (weak as it is), we can understand his reticence about leaving Petersburg, even if he cannot articulate this to himself (Stroebe, 2015).

Beyond the broader forms of connection, Dostoevsky's protagonist also reveals his loneliness when discussing physical encounters with others. Thus we find the protagonist confused by a desire to be struck by another:

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But there have been actual moments in my life when, if somebody had slapped my face, I would perhaps have been glad of even that. I'm being serious: I probably would have been able to find a kind of delight, even on such an occasion. (Dostoevsky, 2010. p.11)

It is understandable that this desire might seem absurd to the person feeling it, perhaps even transgressive or otherwise deviant. This would enforce the sense that he is a 'bad' person, which he reminds us of throughout *Notes from Underground*. But there is nothing strange in this desire, as all he is longing for is physical connection with another, something that is integral to our sense of social satisfaction, (physical touch stimulates oxytocin release; the 'gladness' he finds in the slap is a desire to be touched due to an absence of this chemical (Goossens, Roekel, et al., 2015)). It's worth mention that chronically lonely people will often make poor choices, socially, if it means they might receive a hit of oxytocin - goading out a slap from someone would indeed be such a poor choice, but it would also provide some oxytocin (Cacioppo & Patrick, 2008). The absence of oxytocin triggers from a lack of physical contact with others may also explain the negative self-perceptions mentioned in the text, such as the protagonist referring to himself as 'insect' and a 'villain', as prolonged oxytocin deficiency can cause one to perceive themselves in a much more negative light (Cardoso & Ellenbogen, 2011).

The way that Dostoevsky's protagonist describes his reactions to other people is also attekast, in that it is likely another negative effect of ongoing chronic loneliness. He describes himself as being "terribly touchy", "mistrustful", "quick to take offence" (Dostoevsky, 2010. p.11). Such reactions come about as a result of the brain's shift into a state of hypervigilance, combined with the negative social assumptions that occur following repeated bouts of rejection upon attempted reconnection. His shift in vigilance is a natural response to physical isolation that we, as Homo sapiens, evolved to increase our likelihood of survival - hence his mistrust of others (Cacioppo, Hawkley et al, 2002). Assuming its isolation (the actual objective state does not count; what matters is the person's subjective sense of loneliness), the brain takes on the responsibility of lookout, and continuously scans its environment for potential threats. For our ancestors this was an efficient survival strategy, reducing the chance that a hunter, if isolated, would be devoured by a lion or butchered by members of a rival tribe - but for a modern person, such as Dostoevsky's protagonist, all this results in is a distrust of others, poor-

quality and non-restorative sleep, and higher blood-pressure (*Notes from Underground* begins with a confession of poor physical health, which suggests that the compounded health impacts of chronic loneliness are beginning to make themselves felt).

So far our examples have been selected from the first half of the novel - the monologue. Does the second half, that in which the protagonist engages with the wider world of Petersburg, contain an event that is reminiscent of the attekast? Indeed it does. Several, in fact. But perhaps the most telling or insightful of these events occurs near the end of *Notes from Underground*, where the protagonist is involved with a young woman named Liza, who works as a prostitute.

From what the protagonist reveals in the monologue, and subsequently in the second half, we know that his relationship with Liza is the only meaningful connection he has forged with another for a considerable time. She demonstrates interest in him, and his situation, and offers him kindness; something he has not experienced for almost two decades. This kind of reciprocity from another can be disconcerting for one who is in a chronically lonely state, and who has come to expect rejection in all their attempts at reconnection. We see this in the protagonist. When she physically touches him for the first time, the reaction is astounding. This interaction would have flooded him with a sudden, overwhelming amount of oxytocin (Goossens, Roekel, et al., 2015); this is clear when we observe his behaviour - he collapses as though struck down by a great weight, and for a quarter of an hour sobs uncontrollably:

She rushed towards me, flung her arms around my neck and burst into tears. I could not hold out either, but started to sob in a way which had never happened to me before... "They don't let me... I cannot be... kind!" I just managed to articulate, then I went as far as the sofa, fell on it face downward, and for a quarter of an hour sobbed in real hysterics. (Dostoevsky, 2010. p.109)

What's additionally interesting here is his outburst about being unable to be kind. In the way of an attekast, the protagonist suffers from numerous self-delusions, one of which being that he is an evil or villainous individual. As mentioned above, this is a result of his low oxytocin levels combined with the human tendency to shift reality until it aligns with something they can live with - better to think oneself a villain than to accept one's need to be with others, and one's inability to achieve this apparently simple goal. This self-delusion begins to re-manifest itself following the protagonist's sofa hysterics, and from his sudden surprise at compassion from another, he returns to his standard state (that of distrust) and assumes that Liza's kindness is a trick or an attempt at manipulation. He begins to regret sharing too much of himself and, in a pitiful display, he tries to get her to engage with him in the manner to which he is accustomed - that of rejection (he also holds to the lie that he enjoys his solitude and wants to be "left alone beneath the floorboards", something we, as objective observers, can see as cowardice (Dostoevsky, 2010. p.111)). Eventually he pushes her away despite the fact that he is longing for the connection she had offered, and it is only when she passes from his home into the snowy streets of Petersburg does he realise what he has done, and in a mad fit of panic, attempts to rectify the situation:

An instant later I rushed off like a madman to put on some clothes, flung on whatever I could in a hurry and ran headlong after her. She had hardly had time to take two hundred paces when I ran out into the street. Everything was quiet - snow was falling heavily, almost perpendicularly [...] I ran about two hundred paces to the crossroads and stopped. "Where had she gone and why am I running after her? Why? To throw myself down before her, to sob in repentance, to kiss her feet, to beg forgiveness! That was what I wanted; my whole chest was bursting, and I shall never, never remember this moment with equanimity. But why?" I thought. "Won't I hate her tomorrow, and precisely because I was kissing her feet today? Would I really bring her happiness? Haven't I learnt again today, for the hundredth time, just what I'm worth?" (Dostoevsky, 2010. p.112-113)

This encounter is an excellent demonstration of the spiral that chronically lonely individuals, and thus the attekast, find themselves trapped within. They approach social interaction in the same way that an abused dog approaches a bowl of food offered by a stranger; with an absence of trust and an expectation of a negative outcome (Cacioppo & Patrick, 2008). The longer the isolation continues the harder it becomes to override these negative social expectations, and when people's reactions to this wary and somewhat hostile approach are themselves negative (if someone approaches you with arms folded, brow furrowed, with a quavering voice and evasive eye contact, it is difficult to engage with them in an open and pleasant way), the deeper ingrained these expectations become, until the lonely person begins to believe that they are, like Dostoevsky's protagonist, a villainous, or rebellious outcast, or that the world is made up of people who are inexplicably cruel and cold-hearted.

For our next attekast in literature we turn to a British author, and a novel that has influenced several individuals to commit atrocious acts. This novel is *The Collector*, by John Fowles; a novel that shines a spotlight upon the darker side of the attekast - a darkness which resides at the heart of many online communities today.

The Collector has for its protagonist one Frederick Clegg; a lonely, working class young man who collects butterflies, and who wins a considerable sum on the football pools. With his new-found wealth he divines a way to fulfil a fantasy that has tormented him for years - to possess an intimate relationship, in which he is loved. However, due to his warped perception of self and of others, rather than, say, talking to a woman and building a relationship, Frederick decides to purchase an isolated cottage in the countryside and convert it into a soundproof prison. He then kidnaps a young woman he has been quietly fantasising about for several years, and attempts to make her to fall in love with him through a series of grotesque and distorted social performances (Fowles, 1984).

One of the core tenets of the chronically lonely is a belief that one is outside society, that one is either unwelcome or unable to join the standard social dance. In the attekast the belief is advanced an extra step. The idea that one is an outsider becomes central to the attekast identity, and to process this in a way that does not trigger cognitive discordance, the attekast convinces himself he is outside society because he is *above* society. This usually takes the form of a belief that one possesses a greater intelligence or moral position than the kind of people who indulge in such base and depraved acts as holding hands in public, having a nice time with others or, God forbid, exchanging pleasantries with one another. In *Notes from Underground*, Dostoevsky's protagonist regularly expresses this belief that he is above and better than society, even while denigrating himself. And in *The Collector*, Frederick Clegg makes derisive remarks about others and compares them negatively against himself, believing that he has a higher moral standard than his contemporaries. Given that he subsequently kidnaps an

innocent woman and holds her captive in an underground prison, this belief is tenuous at best:

If you are on the grab and immoral like most nowadays, I suppose you can have a good time with a lot of money when it comes to you. But I may say that I have never been like that, I was never once punished at school. [...] I know I don't have what it is girls look for; I know chaps like Crutchley who just seem plain coarse to me get on well with them. Some of the girls in the Annexe, it was really disgusting, the looks they'd give him. It's some crude animal thing I was born without. (And I'm glad I was, if more people were like me, in my opinion, the world would be better.) (Fowles, 1984. p.10)

Part of this belief - that one holds a higher intelligence or moral standard than those within society - is self-defensive. An attekast constructs a wall around him or herself, and through such self-deceptions, convinces themselves that they are not trapped *in here* but that they are defended from *out there*. The name for this type of self-delusion in 'rationalisation':

Rationalisation in self-deception sometimes knows no limits. A classic example is the case of the man who believes a certain woman loves him even though he possesses (and realises he possesses) strong evidence to the contrary. He is cognitively unmoved by the face that she has never wanted to go out with him, always hangs up on him whenever he calls, returns his unsolicited gifts, plans to marry someone else, etc. He 'knows' there must be some explanation for all this: her mother poisoned her mind against him, her father wants her to marry someone respectable, she thinks he is too good for her [...] The rationaliser does not disregard the evidence against what he desires but explains it away by constructing hypotheses that render it compatible with what he desires. These hypotheses may seem wild to us but not to him. (Bach, 1981. p.358)

We see the above phenomenon quite clearly within *The Collector*. Frederick Clegg believes that Miranda, the young woman he desires, will grow to love, cherish, and respect him as they spend more time together. That she is a prisoner, and regularly articulates her hatred of him, does not make much of a dent in this belief - he holds to the idea that, given time, she will desire him as much as he desires her (Fowles, 1984). There is a sense here too that Clegg sees Miranda not as a person with an

inner-world, but rather as an object - something to be possessed that will provide him with a form of social validation. This dehumanisation further enables his cruel treatment.

This self-deception is partly triggered due to our cultural perception of loneliness as a state of failure, that it is something of which one should be ashamed (Rokach, 2019). The chronically lonely work so hard to convince themselves that their isolation is not just volitional, but desired, because to be a lonely person is something they cannot bring themselves to acknowledge:

To be alone is to be different. To be different is to be alone, and to be in the interior of this fatal circle is to be lonely. To be lonely is to have failed. (Schultz, 1976. p.15)

Ironically, given that a recent study showed that 3.7 million adults in the UK are lonely at any given time, loneliness is likely something that many can relate to, and would be a shared experience that could engender connection if people were able to admit more publicly to their painful feelings of social disconnection (Office for National Statistics, 2021). Hopefully loneliness will shed the social stigma that it holds over time.

Another reason for these self-deceptions around higher intelligence and moral superiority in the attekast is that the chronically lonely tend to both perceive others in a more negative light and to over-estimate their own abilities due to an impairment in executive function (Cacioppo & Patrick, 2008). This 'see-saw' affect lowers an attekast's opinion of other people and raises their opinion of themselves with the affect becoming more pronounced the longer they reside within that chronically lonely state. This is seen in many lonely attekast-people who write and publish 'manifestos' prior to committing some atrocity against society. For example in Isla Vista, California, in 2014, a 22-year old man named Elliot Rodger murdered six people and injured many more in a violent spree inspired by his chronic loneliness and his warped perception of others and himself. His targets were primarily young white women - the kind of person he believed to possess the highest social value, and whom he believed himself unable to attain (again, as an object) - though he also sought to murder men that he perceived held - unfairly, in his eyes - a higher social position than himself (Lovett & Nagourney, 2014). Before committing his terrorist attacks, Elliot published a video on YouTube that outlined the rationale for his murderous plans. An extract from this online manifesto is below, and within it one can hear many echoes of Frederick Clegg:

Tomorrow is the day of retribution, the day in which I will have my revenge against humanity, against all of you. For the last eight years of my life, ever since I hit puberty, I've been forced to endure an existence of loneliness, rejection and unfulfilled desires all because girls have never been attracted to me. Girls gave their affection, and sex and love to other men but never to me. I'm 22 years old and I'm still a virgin. I've never even kissed a girl. I've been through college for two and a half years, more than that actually, and I'm still a virgin. It has been very torturous. College is the time when everyone experiences those things such as sex and fun and pleasure. Within those years, I've had to rot in loneliness. It's not fair. You girls have never been attracted to me. I don't know why you girls aren't attracted to me, but I will punish you all for it. It's an injustice, a crime, because ... I don't know what you don't see in me. I'm the perfect guy and yet you throw yourselves at these obnoxious men instead of me, the supreme gentleman. [...] You will finally see that I am in truth the superior one. The true alpha male. (Rodger, 2014)

In his short extract are many of the features of the attekast archetype, of one who has become corrupted through prolonged and unaddressed chronic loneliness. Rejection is mentioned as being a frequent experience. Jealously at other men who have achieved something (socially) that he has not. A belief in his own supremacy over others (the supreme gentleman). And a belief that his actions are justified - that those who will become victims deserve this fate because of their rejection of him. This last belief is echoed in *The Collector*, where Frederick Clegg puts forward his 'good intentions' as his justification for kidnapping Miranda. A justification which is absurd to us, but reasonable to him:

After, she was always telling me what a bad thing I did and how I ought to try and realise it more. I can only say that evening I was very happy, as I said above, and it was more like I had done something very daring, like climbing Everest or doing something in enemy territory. My feelings were very happy because my intentions were of the best. It was what she never understood. (Fowles, 1984. p.30) In *Ootavid Mann*, the attekast archetype never quite reaches these Stygian depths. As I have mentioned previously, both the ootavid and attekast archetypes exist as extreme poles upon the ends of a spectrum. Above, we see the far extremes of the attekast, where self-delusion and a warped point of view of others leads to acts of violence. When someone is described as an attekast within *Ootavid Mann*, they are within this red end of the spectrum, but not necessarily to the point where they have become essentially unsalvageable.

Further Representations of Loneliness in Ootavid Mann

In these following sections, I will provide an overview of some of the other aspects of loneliness that are covered in *Ootavid Mann*, along with examples drawn from the novel. Some of these sections will cover elements of loneliness mentioned previously, but will tie their representation closer to the creative part of the novel.

Further Representations of Loneliness in Ootavid Mann: Loneliness and Social Anxiety

Rejection from one's friends or peers is often the catalyst for early feelings of loneliness. It can come from being ignored or talked over during a group conversation, from being ostracised for a certain characteristic or behaviour, or from a hundred other negative social interactions. After a loneliness trigger of this ilk is experienced, most people will feel somewhat cautious about re-engaging in social interaction. As the saying goes, once bitten, twice shy. Nevertheless, this anxiety is usually addressed in some way, and the person, perhaps reassured by a recent positive social interaction, pushes back into the social sphere from which they were rebuffed, and life carries on as normal (Cacioppo & Patrick, 2008).

But this standard pattern of rejection, loneliness, retreat, repair, return, fails to encompass the breadth of possibilities deriving from social rejection and the loneliness it engenders. The third part of the pattern, retreat, can cause considerable trouble, especially for those people who suffer from attachment issues. When people retreat from a negative social experience, they tend to seek out areas in which they can be alone, as these solitary spaces provide the optimal environment for restorative, introspective thought (Larson & Csikszentmihalyi, 1980; Goossens & Marcoen, 1999). But for those who have not developed a strong capacity to be alone in childhood, or who have avoided being alone with themselves in adolescence, the very act of retreat can cause all manner of unpleasant sensations, including a big spike in anxiety (Winnicott, 1958; Coplan & Ooi, 2014). This can cause them to look to other methods to address their feelings of social loneliness, methods which tend to be unhealthy and self-destructive.

Another part of this pattern, return, can also be difficult. During attempts to reintegrate into a social sphere further incidents of rejection can be catastrophic, causing the ostracised individual to retreat once again, but this time with all their negative anxieties proven accurate. Return can present a challenge even to those who adore isolation, who are quite content to spend their time in their own company. Retreating from sociability into solitude can feel pleasurable to such people, and they may often question whether or not they need to attempt a return. However, while this mindset seems positive, in the long-run it usually works out for the worst, as they will find that the longer they stay in solitude the harder it becomes to reintegrate into society once they decide to do so. Just the idea of going outside and holding a conversation with another can cause feelings of nausea and distress. It can make them craft fantasies and self-delusions in an attempt to justify their continued isolation. It can also cause them to be aggressively defensive about their solitude. In such an instance, a behaviour one may deem 'ootavid' in nature turns out to be anything but, and requires a great deal of effort to escape.

Ootavid Mann touches on such experiences of loneliness and social anxiety in many artefacts, in ways that should resonate with certain people, and be easier to fathom than the Mariana Trench of academic and psychological terminology just discussed. One artefact, included below, demonstrates how an ootavid or one who strives towards ootavid-hood can succumb to social anxiety just as easily as any normal individual, and provides a relatable demonstration of the physiological affects of such a state:

I awake to the alder scorched with gold; a phantom squats upon my chest, the seeds in my stomach metamorphose into moths. For hours everything seems other than it is. The muslin of my isolation is torn; through the tear I behold sights convivial that shall disrupt my long-unbroken solitude. Descend through the circles of canvas and carts; here upon Haraldsvík's crescent are man's gregarious masses, the sheep-men and merchant-men who speak in languages strange. Glimpsed through the forest of masts, only the sea gives respite. Most trade is done in mime. Measures are taken by the rock. Violence is common; blood flows into rock pools where grey herons stand like swords thrust in. Departing, I am halted by a sudden halló: from a shadow steps the Undirfjalli man. Assailed by a vertiginous sickness I dredge both a greeting and lopsided smile from the waters of my untended well. Colloquy begins its banal siege on my frail stockade, and I turn to great distances to evade the eyes which seek the burning ochre of my own. And, as always, I feel within me that spreading poison; a petrification in limb and wit, in those muscles responsible for the animation of my reddening face. I await that first quietness... More talk. More talk. Then it comes; a curt farewell, and I ascend, newly burdened, to pursue across cardamine fields the white tail of my startled loneliness. (Thompson, 2020. p.17)

Further Representations of Loneliness in Ootavid Mann: Loneliness and Creative Expression

The shepherd of *Ootavid Mann* expresses his creativity in two core ways: in the setting down of words, and through the privacy of daydream. When analysed from a chronological perspective, a reader may notice how the shepherd's translated artefacts evolve, transforming from the basic noting of recipes and trades to the setting down of wisdoms, presumably to be passed on to children, into personal memoirs, poetic descriptions, and finally into meditations. This evolution walks hand-in-hand with his developing solitude. The shepherd's earliest wisdoms presume a future involving wife and child whereas his latter meditations assume nothing of the sort, and derive from an acceptance and appreciation of his isolation; though it could be argued that his early meditations are a way for the shepherd to cope with bereavement, in which he writes for a child who has been lost – such a behaviour has been shown to be beneficial for the grieving process (Neimeyer, Pennebaker & Dyke, 2009). I have included two artefacts below to help illustrate this creative evolution; one from an early

stage in the shepherd's life, and the one from his twilight.

Preparation of compound syrup of iron and birch: bore juvenile birches for askr of sap, three coin weight powdered juvenile birch bark, harvest in spring. Filter sap through lamb skins at moon rise. Heat mixture, stir until thickened. Do not permit solution to boil. Set aside two nights. Purify bog iron in boiling water; transfer ore into an askr of rainwater. Boil until discolouration occurs; remove ore and strain twice through lamb skin. Combine with the birch syrup. Revivifies sheep, children. Curative for winter fatigue. Ingest following haemorrhage, pregnancy, miscarriage. (Thompson, 2020. p.27)

There is a brygg between the sun and the moon. A man that nurtures kindness for the life which surrounds him, who is equally empathetic towards sawflies as the few creatures that depend on his compassion, who wanders through daydreams without losing sight of the path, and who can shepherd thoughts as well as his flock, shall be a man warmed in the sun's aureate light. But a man who circumvallates his meadow with high walls of stone, who turns his eye to a shadow and never its source, who in happiness digs through for a kernel of suffering, who sees in his sickness his spirit's foundation, and who assumes every fleece conceals a varg, shall be a man blackened and blistered by the moon's boreal light. But neither man is better than the other in Nature's mind. Each man's breath shall return to the air and neither deed nor name shall be found in those new structures formed from their mingled elements. (Thompson, 2020. p.105)

Memoir-making isn't the sole avenue through which the shepherd expresses himself: he also allows himself the joy of imaginative daydream. As mentioned earlier in this thesis, daydreaming is facilitated by objective isolation (Storr, 1988). And natural environments, such as mountains and moors, provide the ideal setting for constructive daydreaming (Korpela & Staats, 2014; McMillan, Kaufman & Singer, 2013). The shepherd is rich in both of these facilitators, and throughout *Ootavid Mann* he writes of a fondness for allowing his thoughts to drift. He often remarks on this behaviour as being somewhat shameful or childish, but allows himself the pleasure of it anyway, recognising that to ban himself from the creative expression that imagination allows would likely be detrimental to his mental well-being. It's important to note that the reader is never allowed into the shepherd's daydreams. His internal landscapes remain unknown, locked behind a keyless gate. The shepherd possesses a layer of loneliness that cannot be penetrated, and from a thematic perspective, this serves to increase the sense of separation between reader and author.

Further Representations of Loneliness in Ootavid Mann: Loneliness and Sleeplessness

Modern humans are not as evolutionarily removed from their ancestors as one may presume. Many of our day-to-day problems, such as workplace stress, our addiction to sugary sweets, and our desire for material wealth, all stem from the biological survival strategies employed by our plains-dwelling predecessors (Harari, 2014). The relationship between loneliness and slumber also derives from such ancestral roots (Ohayon, 2005; Cacioppo, Hawkley et al, 2002). When someone experiences the pain of loneliness, their brain shifts into a hyper-vigilant state. Assuming its isolation (the actual objective state is nether here nor there; what matters is the individual's subjective sense of loneliness), it takes on the responsibility of lookout, and continuously scans its immediate environment for any potential threats. For our ancestors this was an efficient survival strategy, reducing the chance that a hunter, if isolated, would be devoured by a lion or butchered by members of a rival tribe. But for a modern person, all this physiological reaction does is cause poor quality sleep, increasing unhappiness, and reducing the cognitive performance of the sufferer (Cacioppo & Patrick, 2008). In *Ootavid Mann*, the shepherd frequently mentions his trouble with sleep, especially in the beginning when his isolation is new and unexplored. Sleep deprivation is also mentioned as a core feature of an attekast, and it is implied that this may partially explain the disagreeable nature of such a person.

How incapable is the shepherd denied the benison of sleep. Ponderous in thought, I can no more control these creatures than those seasonal storms, which are capricious and the bane of those who live most on the sea. My eye is inattentive; fatigue gives weight even to a man's immaterial parts; this blooming incapacitation is a tiredness of the flesh and the soul. No instinct remains except that which makes me long for the embrace of the earth and the suppression of consciousness. (Thompson, 2020. p.97)

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Had I not accepted loneliness, but set my axes against it in attekast manner, sleeplessness and fatigue would remain for life's remaining portion, continuing unabated even should I return to the social breast. In this might one discern the source of some part of the attekast's disagreeable person, which resembles most closely an ill-treated dog, fast to bite even the kindest hand. No doubt his insomnia is the source of his dyspepsia; that frothing in the stomach which makes him so choleric. (Thompson, 2020. p.98)

The shepherd manages to regain control over his sleep by eliminating his subjective sense of isolation. As discussed in the section on the ootavid, he does this by re-evaluating his three spheres of connection: the intimate, the relational, and the collective. Once again, the key to understanding and controlling loneliness is to recognise its subjective nature – a man locked in a cell may be quite happy and unconcerned by his isolation if he is the one with the key, while a girl in a classroom of thirty peers might feel a profound loneliness if she believes that they all despise her. To modify the affects of loneliness is wholly within a person's grasp, though this is by no means an easy thing to accomplish, especially when loneliness itself can damage a person's ability to self-regulate and make healthy decisions.

Further Representations of Loneliness in Ootavid Mann: Loneliness and Executive Control

From the influence on sleep we shift to the impact on executive control: the ability to direct one's behaviour to the accomplishment of goals. When a person suffers from chronic loneliness, they tend to engage in behaviours that provide immediate benefit (such as a small dopamine release) over behaviours that are healthier but which do not provide such an instant up-lift (Hawkley, Masi, Berry, & Cacioppo, 2006; Baumeister, et al., 2005). One who is chronically lonely is more likely to smoke a cigarette or down several beers than go for a run, for example, even if that person is well aware of the benefits of such exercise. It's a lot harder to stay in control of behaviours, and to self-regulate, when loneliness enters its chronic state. The shepherd of *Ootavid Mann* experiences this decline in executive control at the start of his never-to-be-broken solitude, where even the act of lifting himself

off his sleeping bench seems almost Herculean:

Loneliness now is too large to ignore; its hoarfrost blackens my grasses and shrouds each thought in interminable shadow, as if that dread giant Saxa loomed over this croftland, occluding the sun's slenderest beams. Morning presents the hardest of all times, when the day begins in darkness with a cold that depletes the body's will and makes sluggish all the activities of the mind. I awake amongst the straw, switching from a numb darkness to one which is felt in this heart's heaviness. Only the distant bawling of ewes wrenches me from a phantasmic state in which I witness again that farewell, that sudden receding of light [...] into the coldness of the polar air, and the frost which burns my naked soles as I heave myself from the straw onto the trodden earth. (Thompson, 2020. p.87)

The prime catalyst for the shepherd's drive towards ootavid-hood is a desire to regain those powers of self-regulation blown away by the winds of his early loneliness. It can be heartbreaking for one who has attained a good solitude to discover that his loneliness makes it difficult to complete the tasks and goals he has set himself, especially if this is the reason for which he sought isolation. Many authors and artists have no doubt experienced this, and have exited their temporary hermitages with little to show for their isolation than a blank canvas and a satchel of torn-up pages. Several of the shepherd's meditations confront the challenge of retaining control in the face of loneliness indirectly, and give us some hint of the difficulties that maintaining an ootavid state, and keeping the discipline needed to remain within it, pose.

> As I recline in the warm grass of the crag's perilous garden, where cloudshadows pool their darknesses amid the spring squill's bright sapphire stars, I pretend myself observed, and remain noble. When in isolation it is a simple thing to yield to man's vargur nature, which is often base and depraved, especially when one has for his witness only wildflowers. An ootavid man is master of the passions and emotions which drive others to ruin. (Thompson, 2020. p.50)

But for the shepherd, willpower eventually wins out, and he is able to control his loneliness to such an extent that he can self-regulate better than when he was socially connected. He attributes his

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success at this endeavour to mindfulness (though of course he does not use its modern terminology) and a better, more intimate relationship with the land he inhabits. Nevertheless, he remains aware of the absurd difficulty of this task, and with tongue gently set in cheek (and echoing Rudyard Kipling's most famous poem) creates the following artefact:

Weave within the soul a kesshie in which the past can be sealed and the future left to ferment. Lock away too every affliction, anxiety and desire of the body; chase off that chaotic murmuration which swirls and shapes itself around the turbulent mind. Before all thought drop a heavy portcullis, and grant the present its full independence. Hold tight to the reins of the eight-legged horse; it shall endeavour to shake you from the moment, and divert all your concentration from the sounds, sights, and scents that constitute the now that surrounds you. Ignore those similarities, memories, and chattering metaphors that this moment kindles within. Be concerned with this moment only; its sights, its sounds, the smell of it. Unto the present give the gentle regard of a bumblebee who lingers upon the distended lip of an orchid. Achieve this implausible task; then shall a soft happiness remain within you, and all life's remainder shall pass in a blissful freedom which is the domain of the animals of this earth, who in all their simplicity are far more deific than we. (Thompson, 2020. p.22)

Ootavid Mann: The Rendering of Loneliness

Throughout this chapter I have drawn on imagery evocative of places both dense and disorientating; the labyrinth, the gnarled murky wood. There is a reason for this. For whether or not *Ootavid Mann* succeeds in its aim to humanise the research on loneliness found in this thesis is a question I cannot answer, too deep am I in the brambled pathways of its making. That is something I leave to you. I only hope that I have captured the authentic, multifaceted experienced of loneliness in a way that resonates with its readers, and pushes them to examine the lonelinesses they have experienced, and their past and future relationship with solitude.

References & Bibliography

Akerlind. I., & Hornquist. J. O., (1992) Loneliness and alcohol abuse: A review of evidences of an interplay. *Social Science and Medicine*, *34*. 405-414

Aronson. E., & Mills. J., (1959) The effect of severity of initiation on liking for a group. *The Journal of Abnormal and Social Psychology*, 59. 177-181

Augustine. S., (1983) *The confessions of Saint Augustine*, trans. E. M. Blaiklock., London: Hodder and Stoughton

Aurelius. M., (1964) Meditations. London: Penguin Books

Bach. K., (1981) An analysis of self-deception. *Philosophy and phenomenological research*, 41 (3). 351-370

Barthes. R., (1974) S/Z, Chichester: Wiley Blackwell

Barthes. R., (2018) The death of the author, London: Routledge

Barthes. R., (1975) The pleasure of the text, New York: Hill and Wang

Baumeister. R. F.; DeWall. N. C.; Ciarocco. N. J.; & Twenge. J. M., (2005) Social exclusion impairs self-regulation. *Journal of Personality and Social Psychology*, 88. 589-604

Baumeister. R. F.; Twenge. J. M., & Nuss. C. K., (2002) Effects of social exclusion on cognitive processes: Anticipated aloneness reduces intelligent thought. *Journal of Personality and Social Psychology*, 83. 817-827

Berger. D. L., (2005) The Vivekacudamani of Sankaracarya Bhagavatpada: An introduction and translation (review). *Philosophy East and West*, *55* (4). 616-619

Bergerac. C., (1657) L'Autre monde ou les états et empires de la Lun. London: Henry Rhodes

Buchholz. E. S., (1997) *The call of solitude: Alonetime in a world of attachment*. New York: Simon & Schuster

Byrd. R., (1938) Alone. New York: G. P. Putnam's Sons

Cacioppo. J. T.; Cacioppo. S., & Boomsma. D. I., (2014) Evolutionary mechanisms for loneliness. *Cognition and Emotion*, 28. 3-21

Cacioppo. J. T.; Ernst. J. M.; Burleson. M. H.; McClintock. M. K.; Malarkey. W. B.; Hawkley. L. C.; Kowalewski. R. B.; Paulsen. A.; Hobson. J. A.; Hugdahl. K.; Spiegel. D., & Berntson. G. G., (2000) Lonely traits and concomitant physiological processes: the MacArthur social neuroscience studies. *International Journal of Psychophysiology*, *35*. 143-154

Cacioppo. J. T., & Hawkley. L. C., (2009) Perceived social isolation and cognition. *Trends in Cognitive Science*, 13. 447-454

Cacioppo. J. T.; Hawkley. L. C.; Berntson. G. G.; Ernst. J. M.; Gibbs. A. C.; Stickgold. R., & Hobson. J. A., (2002) Do lonely days invade the nights? *American Psychological Society*, *13*. 384-387

Cacioppo. J. T.; Norris. C. J.; Decety. J.; Monteleone. G.; & Nubaum. H., (2009) In the eye of the beholder: individual differences in perceived social isolation predict regional brain activation to social stimuli. *Journal of Cognitive Neuroscience*, *21* (1). 83-92

Cacioppo. J. T., & Patrick. W., (2008) *Loneliness: Human nature and the need for social connection.* New York: W. W. Norton & Company

Calvino. I., (1979) Se una notte d'inverno un viaggiatore. Turin: Einaudi

Campbell. J., (2008) The hero with a thousand faces. California: New World Library

Casciani. D., & Simone. D. D., (2021) Incels: A new terror threat to the UK? *BBC News* [online] Available at: https://www.bbc.co.uk/news/uk-58207064>

Chisholm. H., (1911) Chatterton, Thomas. *Encyclopaedia Britannica*, (11th ed.) 6. Cambridge: Cambridge University Press

Cicero. M. T., (1903) Against Verres. In C. D. Yonge., (Eds.), *The Orations of Marcus Tullius Cicero*. London: George Bell & Sons

Cieszkowski. K., (1982) The legend makers: Chatterton, Wallis, and Meredith. *History Today*, *32*, *11*.

Cohen. D.; Hoshino-Brown. E., & Leung. A. K., (2007) Culture and the structure of personal experience: Insider and outsider phenomenologies of the self and social world. In M. Zanna (Ed.),

Advances in Experimental Social Psychology, 39. San Diego, CA: Academic Press. 1-67

Coleridge. S. T., (1921) *The poems of Samuel Taylor Coleridge*. Oxford: Oxford University Press

Colley. L., (1992) Britons: Forging the nation 1707 - 1837. Yale: Yale University Press

Coplan. R. J., & Ooi. L., (2014) The causes and consequences of playing alone in childhood. In R. J. Coplan & J. C. Bowker (Eds.), *The Handbook of Solitude*. Chichester: Wiley Blackwell. 111-128

Craft. A.; Gardner. H., & Claxton. G., (2008) *Creativity, wisdom, and trusteeship: Exploring the role of education*. Thousand Oaks: Corwin Press

Dawkins. R., (1989) The selfish gene. 2nd ed., New York: Oxford University Press

Derrida. J., (1978) Writing and difference. Chicago: University of Chicago Press

Diringer. D., (1982) The book before printing. New York: Dover Publications

Dostoevsky. F., (1864) Zapiski iz podpol'ya. Saint Petersburg: Epoch

Dostoevsky. F., (2010) Notes from underground. London: Oneworld Classics

Dryden. J., (1680) Preface to Ovid's Epistles. Translated by Several Hands

Dryden. J., (1844) The poetical works of John Dryden, volume V. London: William Pickering

Edmonds. J. M, (1929) The characters of Theophrastus. London: William Heinemann Ltd.

Edmonston. T., (1866) *An etymological glossary of the Shetland and Orkney dialect*. London: Asher & Co.

Ferrell. W. K., (2000) *Literature and film as modern mythology*. Connecticut: Greenwood Publishing Group

Fowles. J., (1984) The collector. London: Triad Granada

Freud. S., (1930) *Das unbehagen in der kultur.* Vienna: Internationaler Psychoanalytischer Verlag Wien

Gibbon. E., (1789) *The history of the decline and fall of the Roman Empire.* London: Strahan & Cadell

Gibson. J.; Johnson. P., & Dimita. G., (2015) *The business of being an author: a survey of authors' earnings and contracts*. London: Queen Mary University of London

Goldberg. L. R., (1993) The structure of phenotypic personality traits. The American Psychologist. 48 (1). 26-34

Goossens. L., & Marcoen. A., (1999) Adolescent loneliness, self-reflection, and identity: From individual differences to developmental processes. In K. Rotenberg & S. Hymel (Eds.), *Loneliness in Childhood and Adolescence*. Cambridge: Cambridge University Press. 225-243

Goossens. L.; Roekel. E.; Verhagen. M.; Cacioppo. J. T.; Cacioppo. S.; Maes. M., & Boomsma. D. I., (2015) The genetics of loneliness: Linking evolutionary theory to genome-wide genetics, epigenetics, and social science. *Perspectives on Psychological Science*, *10*. 213-226

Grafton. A., (1997) The footnote: a curious history, Harvard: Harvard University Press

Green. J. C. R, (1982) Fernando Pessoa: The genesis of the heteronyms. Isle of Skye: Aquila

Harari. Y. N., (2014) Sapiens: A brief history of humankind. London: Harvill Secker

Hawkley. L.C.; Masi. C. M.; Berry. J. D., & Cacioppo. J. T., (2006) Loneliness is a unique predictor of age-related differences in systolic blood pressure. *Psychology and Ageing*, *21*. 152–164

Hawkley. L. C.; Preacher. K. J., & Cacioppo. J. T., (2007) Multilevel modelling of social interactions and mood in lonely and socially connected individuals: The MacArthur social neuroscience studies. In, A. D. Ong & M. van Dulmen (Eds.), *Oxford Handbook of Methods in Positive Psychology*. New York: Oxford University Press

Haywood. I., (1986) The making of history: a study of the literary forgeries of James Macpherson and Thomas Chatterton in relation to eighteenth-century ideas of history and fiction. Rutherford: Fairleigh Dickinson University Press

Hesse. H., (1951) Siddhārtha, trans. H. Rosner., New York: New Directions Publishing

Hibbert-Ware. M., (1882) *The life and correspondence of the late Samuel Hibbert-Ware.* Manchester: J. E. Cornish Hibbert-Ware. S., (1825) Sketches of the philosophy of apparitions; or, An attempt to trace such illusions to their physical causes. Edinburgh: Oliver & Boyd

Hibbert-Ware. S., (1822) A description of the Shetland Islands: Comprising an account of their scenery, antiquities and superstitions. Edinburgh: Archibald Constable & Co.

Hollander. L. M., (1936) Old Norse poems. Columbia: Columbia University Press

Hollander. L. M., (1928) The Poetic Edda. Texas: University of Texas Press

Homer., (7th Century BC) The odyssey, trans. R. Fagels., 1997. London: Penguin Books

Huynh. A. C., & Grossmann. I., (2018) A pathway for wisdom-focused education. Journal of

Moral Education. 1-21

Jakobsen. J., (1897) The dialect and place names of Shetland. Lerwick: T. & J. Manson

Jakobsen. J., (1928) An etymological dictionary of the Norn language in Shetland. London: David Nutt

James. W., (1890) The principles of psychology. New York: Holt

Jeltsen. M., (2018) The unmaking of an Incel. *Huffington Post*. [online] Available at: https://www.huffingtonpost.co.uk/entry/unmaking-of-an-incel_us_5b11a9aee4b0d5e89e1fb519? guccounter=1> [Accessed 21 September 2021]

Johnson. B. S., (1973) Aren't you rather young to be writing your memoirs? London: Hutchinson

Joyce. J., (1922) Ulysses. Paris: Shakespeare and Company

Jung. C. G., (1991) The archetypes and the collective unconscious. London: Routledge

Kabat-Zinn. J., (1994) *Wherever you go, there you are: Mindfulness meditation in everyday life.* New York: Hyperion

Kahneman. D., (2011) Thinking, fast and slow. New York: Macmillan

Kallich. M., (1918) Horace Walpole. New York: Twayne Publishers

Kaplan. L. J., (1989) *The family romance of the imposter-poet Thomas Chatterton*. Berkeley and Los Angeles: University of California Press

Karlsson. G., (2000) The history of Iceland. Minnesota: University Of Minnesota Press

Kermode. F., (1952) English pastoral poetry: From the beginnings to Marvell. London: Barnes and Noble

Korpela. K., & Staats. H., (2014) The restorative qualities of being alone with nature. In R. J. Coplan & J. C. Bowker (Eds.), *The Handbook of Solitude*. Chichester: Wiley Blackwell. 351-367

Kristmannsson. G., (1997) The subversive loyalty of Ossian: Politics, poetry, and translation in the eighteenth century. *Scotlands*, *4.1.* 71-85

Kristmannsson. G., (2017) Ossian and the state of translation in the Scottish enlightenment.

In D. Moore (Ed.), *James Macpherson and the poems of Ossian*. Glasgow: Scottish Literature International. 39-51

Krugman. P., (2020) The cult of selfishness is killing America. *New York Times*. [online] Available at: https://www.nytimes.com/2020/07/27/opinion/us-republicans-coronavirus.html [Accessed 21 September 2021]

Kwakkel. E., (2014) The medieval origins of the modern footnote. *Medieval Books*. [online] Available at: <https://medievalbooks.nl/2014/12/19/the-medieval-origins-of-the-modern-footnote/> [Accessed 05 July 2020]

Lake. C. B., (2013) Bloody records: Manuscripts and politics in the castle of Otranto. *Modern Philology*, *110*, *3*. 489-512

Larson. R. W., & Csikszentmihalyi. M., (1980) The significance of time alone in adolescent development. *Journal of Current Adolescent Medicine*, *2*. 33-40

Laviticus., (2000) The Holy Bible. Contemporary English version. London: Harper Collins

Laxness. H., (1946) Independent people. New York: Alfred A Knopf

Li. W.; Wang. Z.; Syed. S.; Lyu. C; Lincoln. S.; O'Neil. J.; Nguyen. A. D.; Feng. I., & Young. M. W., (2021) Chronic social isolation signals starvation and reduces sleep in Drosophila. *Nature*, 597. 239–244

Livingstone. D., (2002) The evolution of dialect diversity. *Simulating the Evolution of Language*. 99-117

Lovett. I., & Nagourney. A., (2014) Video rant, then deadly rampage in California town. *The New York Times*. [online] Available at: https://www.nytimes.com/2014/05/25/us/california-drive-by-shooting.html [Accessed 02 October 2021]

Luna. B.; Garver. K. E.; Urban. T. A.; Lazar. N. A., & Sweeney. J. A., (2004) Maturation of cognitive processes from late childhood to adulthood. *Child Development*, *75*. 1357-1372

MacDonald. M., (2017) The significance of James Macpherson's Ossian for visual artists. In D. Moore (Ed.), *James Macpherson and the poems of Ossian*. Glasgow: Scottish Literature International. 92-104

Machen. A., (1907) The hill of dreams. London: Grant Richards

Macpherson. J., (1773) The Iliad of Homer. London: T. Becket & A. Hondt

Madhavananda. S., (1944) *Vivekachudamani of Sri Sankaracharya*. Calcutta: Advaita Ashrama

Magnusson. M., (2006) Fakers, forgers & phoneys. Edinburgh: Mainstream Publishing

Mandelstam. O., (1977) Osip Mandelstam: Selected essays. Texas: University of Texas Press

Marsh. L. E.; Kanngiesser. P., & Hood. B., (2018) When and how does labour lead to love? The ontogeny and mechanisms of the IKEA effect. *Cognition*, *170*. 245-253

Mascaro. J., (1965) The upanishads. London: Penguin Books

McMillan. R. L.; Kaufman. S. B., & Singer. J. L., (2013) Ode to positive constructive daydreaming. *Frontiers in Psychology*, 4. 626

Meltzer. H.; Griffiths. C.; Brock. A.; Rooney. C., & Jenkins. R., (2008) Patterns of suicide by occupation in England and Wales: 2001–2005. *British Journal of Psychiatry*, 193(1). Cambridge: Cambridge University Press. 73–76

Merton. T., (1958) Thoughts in solitude. London: Burns & Oates

Mhunghaile. L. N., (2017) Ossian and the Gaelic world. In D. Moore (Ed.), *James Macpherson and the Poems of Ossian*. Glasgow: Scottish Literature International. 26-38

Mijuskovic. B. L., (2012) *Loneliness in philosophy, psychology, and literature*. Bloomington: iUniverse

Mochon. D.; Norton. M. I., & Ariely. D., (2012) Bolstering and restoring feelings of competence via the IKEA effect. *International Journal of Research in Marketing*, 29. 363-369

Moore. D., (2017) Introduction. In D. Moore (Ed.), *James Macpherson and the Poems of Ossian*. Glasgow: Scottish Literature International. 1-13

Morris. I., (2008) The greater Athenian state. In I. Morris., & S. Walter (Eds.), *The Dynamics of Ancient Empires: State Power from Assyria to Byzantium*. Oxford: Oxford University Press. 115

Moustakas. C. E., (1972) Loneliness and love. New Jersey: Prentice-Hall, Inc.

Mulville. F., (1972) *The loneliness of the long-distance sailor*. In Stocker. T., (Ed.) *Yachting Monthly*, 132., London: TI Media. 686-688

Nabokov. V., (1981) Tyrants destroyed and other stories. London: Penguin Books

Neimeyer. R.; Pennebaker. J. W., & Dyke. J. G., (2009) Narrative medicine: writing through bereavement. In H. M. Chochinov & W. Breitbart (Eds.), *Handbook of Psychiatry in Palliative Medicine*. Oxford: Oxford University Press

Norton. M. I.; Mochon. D., & Ariely. D., (2012) The IKEA effect: When labor leads to love. *Journal of Consumer Psychology*, *22*. 453-460

Norwich. J., (1966) Revelations of divine love. London: Penguin Books

Office for National Statistics., (2021) *Mapping loneliness during the coronavirus pandemic*. London: Office for National Statistics.

Ohayon, M. M., (2005) Prevalence and correlates of non-restorative sleep complaints. *Archives of Internal Medicine*, 165. 35-41

Pehlivanidis. A., & Papakostas. K. S., (2014) Constraint and loneliness in agoraphobia: an

empirical investigation. Psychiatrike = Psychiatriki, 25. 171-178

Pickett. C. L., & Gardner, W. L., (2005) The social monitoring system: Enhanced sensitivity to social cues as an adaptive response to social exclusion. In K. D. Williams, J. P. Forgas, & W. von Hippel (Eds.), *The Social Outcast: Ostracism, Social Exclusion, Rejection, and Bullying*. New York: Psychology Press. 213-226

Ram. H.; Liberman. N., & Wakslak. C. (2017) What if the princess is a commoner person? Learning from Afar: How psychological distance affects what we learn from stories. Talk presented at the *European Social Cognition Network Transfer of Knowledge Conference (ESCON)*, Gdansk, Poland.

Ramsey. J., (1888) *Scotland and Scotsmen in the eighteenth century*. Edinburgh: William Blackwell and Sons

Rebanks. J., (2016) The shepherd's life. London: Penguin Books

Reszitnyk. A., (2012) Backlash: Romantic reactions to the castle of Otranto and England's Gothic craze. [online] Available at: https://reszita.wordpress.com/2012/09/07/backlash-romantic-reactions-to-the-castle-of-otranto-and-englands-gothic-craze/ [Accessed 24 August 2021]

Ritamary. B., (1954) Backgrounds of the title Speculum in mediaeval literature. *Speculum* 29(1). 100–115

Robinson. D., (2002) *Western translation theory from Herodotus to Nietzsche*. Manchester: St Jerome Publishing.

Rodger. E., (2014) Transcript of video linked to Santa Barbara mass shooting. *CNN*. [online] Available at: <https://edition.cnn.com/2014/05/24/us/elliot-rodger-video-transcript/index.html> [Accessed 02 October 2021]

Rokach. A., (2019) Loneliness - the concept and experience. In A. Rokach (Ed.), *The Psychological Journey To and From Loneliness Development, Causes, and Effects of Social and Emotional Isolation*. Massachusetts: Academic Press. 45-83

Rubin. A. M.; Perse. E. M., & Powell. R. A., (1985) Loneliness, parasocial interaction, and local television news viewing. *Human Communication Research*, *12*. 155-180

Russell. G., (2015) Transcendentalism. *Standford Encyclopaedia of Philosophy*. [online] Available at: https://plato.stanford.edu/entries/transcendentalism/ [Accessed 21 September 2021] Sartre. J. P., (1938) La Nausée. Paris: Éditions Gallimard

Schultz. S., (1976) *Bittersweet: Surviving and growing from loneliness*. New York: T. Crowell

Shklovsky. V., (1993) Theory of prose, trans. B. Sher., Chicago: Dalkey Archive Press

Sillitoe. A., (1959) The loneliness of the long-distance runner. London: W. H. Allen & co.

Skowronski. J. J.; Carlston. D. E.; Mae. L., & Crawford. M. T., (1998) Spontaneous trait transference: Communicators take on the qualities they describe in others. *Journal of Personality and Social Psychology*, 74. 837-848

Snyder. M., & Swann. W. B., (1978) Behavioural confirmation in social interaction: From social perception to social reality. *Journal of Experimental Social Psychology*, *14*. 148-162

Storr. A., (1988) Solitude. London: Harper Collins

Stroebe. M.; Schut. H., & Maaike. N., (2015) Homesickness: A systematic review of the scientific literature. *Review of General Psychology*, 19. 157-171

Theocritus. (2003) Idylls, trans. A. Verity., Oxford: Oxford University Press

Thompson. L. M., (2020) Ootavid mann. Unpublished manuscripts (See addendum)

Thoreau. H. D., (1854) Walden; or, life in the woods. Boston: Ticknor and Fields

Trope. Y., & Liberman. N., (2010) Construal-level theory of psychological distance. *Psychological Review*, *117*. 440–463

Walpole. H., (2014) The castle of Otranto. Oxford: Oxford University Press

Wang. Q.; Fink. E. L., & Cai. D. A., (2008) Loneliness, gender, and parasocial interaction: A uses and gratification approach. *Communication Quarterly*, *56*. 87-109

Winnicott. D. W., (1958) The capacity to be alone. *The International Journal of Psychoanalysis*, 39. 416-420

Wood. J., (2009) How fiction works. London: Vintage Books

Zenith. R., (2021) Pessoa: An experimental life. London: Penguin Books

Zhores. M., (1973) 10 years after Ivan Denisovich. New York: Knopf