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**The Curious Case of the Arrow of Time:  
The Vagaries of Preternatural Aging (No. 1)**

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## Time's arrow and aging

### The Curious Case of the Arrow of Time: The Vagaries of Preternatural Aging

*For what is time? Who can readily and briefly explain this? Who can even in thought comprehend it, so as to utter a word about it? But what in discourse do we mention more familiarly and knowingly, than time? And, we understand, when we speak of it; we understand also, when we hear it spoken of by another. What then is time? If no one asks me, I know: if I wish to explain it to one that asketh, I know not.*

St. Augustine

*What do we do with time?...Time, the supreme ambiguity of the human condition.*

Mircea Eliade

*Time- invisible, intangible, yet inexorable – is perhaps the most mysterious limit of all. Aging is about living in time. Born into the world at a certain historical moment, destined to pass out of it at a later, uncertain moment, we are creatures who change significantly over a lifetime. For groups as wells as individuals, time brings changes of form and condition.*

Thomas R. Cole (The Journey of Life)

### **Introduction**

In a substantive contribution to the literature on the intersect of aging and time, Baars (2007) recommended that there is the need to expand upon the significance of time across the life course beyond the dominant position of chronological time in our theoretical and methodological understanding of the aging process. Baars (2007) proposed that,

An important step toward the development of interdisciplinary conceptual clarification of temporality would be to acknowledge this complexity and threefold nature of its representations, which flow from three constitutive sources: natural rhythms (the foundation of chronological time), personal experiences or perspectives, and sociocultural contexts (including narratives) (p. 37).

One example of empirical research that expounds on the complexity and the interdisciplinarity of temporality is the work of Carstensen (2006) who proposed that the subjective sense of remaining time in life (versus passage of time since birth) is a better predictor than chronological age for a range of cognitive, emotional, and motivational variables. Carstensen (2006) found that there is a motivational shift in priorities with age (younger versus older people), yet whether young or old, when people perceive time as

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finite, they attach greater importance to finding emotional meaning and satisfaction from life and invest fewer resources into gathering information and expanding horizons. Other examples, include Draaisma's (2006) work on the debatable notion of "Why life speeds up as you get older" and why it seems like humans are "a long time young, and a short time old," and then the interesting study by Crawley and Pring (2000) who examined the question of whether time acceleration would be reflected in the objective dating of public events in people of different ages. They found that the tendency to date events too recently appears to diminish with age so that older people believe events happened earlier than they actually did, thus perhaps explaining why "time appears to fly past with age" (p. 120).

My goal in this review essay is to avoid the ground already covered in relation to epistemological and methodological concerns of the temporality of aging which has been previously addressed in the scholarship of many others in the field (Baars, 1997; Baars & Visser, 2007; McFadden & Atchely 2001; and Mizruchi, Glassner, & Pastorello, 1982). What I intend to do is to further examine the conceptual notion of time's arrow and temporality in the domain of life course development and aging in various *sociocultural contexts* especially as it has been presented as an overarching theme or motif in the media of film, music, and literature in the past sixty years and into the 21<sup>st</sup> century. In this regard, I hope to build upon the momentum of noted scholars such as W. Andrew Achenbaum (2008), Thomas R. Cole (1997) and Ronald Manheimer (2008) who have explored the nuances of the historical, the educational, and the sociocultural dimensions of aging by weaving a coherent system of meaning into our individual and collective selves as aging *beings* (see also Manheimer, 1999/2000).

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Perhaps the most cogent way to begin this review essay is to have you consider the phrase, “Once upon a time...,” and reflect on how this standardized opening to many stories, myths and fables usually sets the stage for a narrative with larger than life characters in far away lands (think: the Star Wars saga – “a long time ago, in a galaxy far, far away”) and a declarative message (“the moral of the story is...”) that the reader will weave into their imagination and personality. The narrative usually has a bookend phrase of “...happily ever after,” that connotes a vague trajectory of timelessness into the future – where the life course coasts into blissful and uneventful chronological aging. Or at least until another story comes long. And in between the bookends of opening and closing - are the stories, the music, and the art, and the cinematic creations that give meaning (similar to Stendhal's "walking mirror"; see Weinstein, 2006) to our lives *over time*.

And *in time* with all of its facets as painted in the numinous verse of T.S. Eliot (1971a) in “Burnt Norton” of *Four Quartets* (see Kramer, 2007; Verma, 1979),

If all time is eternally present  
All time is unredeemable.

### **Once upon a time...**

In the cinema classic, *Butch Cassidy and the Sundance Kid* (released in 1969 and directed by George Roy Hill), there is a great set of lines (among so many!) by Paul Newman playing Butch Cassidy who was talking to the card-playing Sundance Kid played by Robert Redford in a saloon setting,

Butch: He'll draw on ya. He's ready. You don't know how fast he is. (He moves around behind his pal) I'm over the hill, but it can happen to you.  
Sundance: That's just what I want to hear.  
Butch: Every day you get older. Now that's a law!

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Butch Cassidy spoke of the aging process as equivalent to the expectation of the sun coming up in the east each day; it was simply *the law* and there was no going around it. *Every day you get older.*

Of course! We take such a statement as so axiomatic and in every bit as fundamental that it carries the same heavy burden of other elemental certainties such as gravity, death and taxes. Yet, Butch Cassidy and The Sundance Kid broke the law many times over with robbing trains and banks and it also appears that breaking the law of getting older is an alluring theme in Hollywood too. And I'm not talking about plastic surgery, and laser and botox treatments; rather I'm referring to the movie industry tapping into the wellspring of literature and screenplays that not only challenges our understanding of the inevitability of the aging process as both inexorable and irreversible, but also having creative license with exhibiting visual techniques and plot devices that flip the unidirectional and linear flow of time on its head - and then some.

Case in point: The movie, *The Curious Case Benjamin Button*, which is scheduled for release for December 2008, represents a continuing thread of media projects that embrace the fantastical notion of reversing the aging process. The movie, directed by David Fincher, features Benjamin Button, played by Brad Pitt, as an old man who physically ages *backward*. It appears that Hollywood wanted to go for the daily double by having one of its perennial sex symbols not only play 'Death' (what better way to personify the grim reaper?) in the 1998 movie, *Meet Joe Black*, (and based on the 1934 film *Death Takes a Holiday*), and then in this movie, he is born an old man and ages in reverse until he becomes a baby and then finally vanishes from the earth. At age 50, he

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falls in love with a 30-year-old woman played by Cate Blanchett. And then he must come to terms with the relationship as they literally grow in opposite directions.

The movie is, of course, based on the short story written by F. Scott Fitzgerald and first appeared in 1922. Bruccoli (2003) indicated that, "Fitzgerald was probably attracted to this form by its tension between romanticism and realism, for the challenge of fantasy is to make impossible events convincing" (p. 159). Bruccoli indicated that Fitzgerald provided the inspiration for "Benjamin Button" when he collected it in *Tales of the Jazz Age* (1922):

This story was inspired by a remark of Mark Twain's to the effect that it was a pity that the best part of life came at the beginning and the worst part at the end. By trying to experiment upon one man in a perfectly normal world I have scarcely given his idea a fair trial. Several weeks after completing it, I discovered an almost identical plot in Samuel Butler's "Note Books" (p. 159).

Another example: The movie, *Youth Without Youth*, which was released in 2007 and directed by Francis Ford Coppola, was Coppola's creative exploration into two areas of cinematic language: Time and Interior Consciousness. He found both target areas in the work of Mircea Eliade's book of the same title (*Youth Without Youth*). *Youth Without Youth* is a World War II-era film about an elderly professor whose mysterious rejuvenation makes him a target for the Nazis and is further described as a love story wrapped in a mystery. Eliade's book was originally published in 1978 in Germany and first published in the United States in 1988, and is also available in the University of Chicago University Press edition (2007). Coppola, in the forward of the 2007 edition, stated that his interest in the intersecting topics of time and philosophical speculation were both professional and personal,

...at the time, I was a sixty-six year old man who had spent years on a screenplay that I was never able to complete to my satisfaction, reading about a man who had

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become seventy with the fear that he had begun to lose his powers and would never be able to complete his life's work, and who quite amazingly finds himself made young again. And not only put back into the prime of his life, in better physical shape than ever, but like Faust – granted his deepest wish, to have his intellectual abilities greatly enlarged along with his memory and other “powers” (p. viii).

Faust indeed. Here is an excerpt from Goethe's *Faust (Part One)* with

Mephistopheles raining down on Faust's parade,

MEPHISTOPHELES.

You are, when all is done – just what you are.  
Put on the most elaborate curly wig,  
Mount learned stilts, to make yourself look big,  
You still will be the creature that you are.

FAUST.

I know. In vain I gathered human treasure,  
And all that mortal spirit could digest:  
I come at last to recognize my measure,  
And know the sterile desert in my breast,  
I have not raised myself one poor degree,  
Nor stand I nearer to infinity.

No wonder Coppola made the literary and historical connection back to Faust in relation to both the plot of Eliade's book and to his own goal of directing another experimental movie into his late sixties (Coppola was born in 1939). It was though the inspiration to his first movie in over a decade was based on his desire to stay in the hunt as a master within the craft of filmmaking and to show the world, as Richard Corliss of *Time* magazine stated in his review, “the great American director of the ‘70s has survived with his operatic intensity intact.” But what is curious about Coppola's statement is the confessional tone that revealed a sense of regret due to the running out of time in his own journey of life while in search of the elusive holy grail within one's craft. This is especially surprising when put into context of him being a five-time Academy-award winner and directing the cinematic masterpieces of *The Godfather* trilogy and *Apocalypse*

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*Now.* It is though you can detect in the selected passages above that the quest for the magnum opus for both Faust (via Goethe) and Coppola is in jeopardy due to the finite properties of the human life course and the only solution is to have a another chance at the game of life so that a critical part of the Faustian equation is to regain youth and vigor, but with the added bonus of keeping a lifetime of knowledge and wisdom intact. Evidently this must be where the proverbial bargain is struck with the devil, because there are always strings attached for “having one’s cake and eat it too” when manipulating time’s arrow. And this seems to be the case whether the manipulation was the result of a lightning strike, an alchemical potion, a dip into the fountain of youth, or the flippant decree from one of the gods on Mount Olympus.

I would like to offer a taxonomy for clustering the various schemes that permeate the literature and media when experimenting and exploring the malleability of the arrow of time in the context of the aging process; but first, a quick review of the concept of the “arrow of time.”

First and foremost, it is important to recognize that the phrase “time’s arrow” has been an equal opportunity descriptor and label in the sciences *and* the humanities and in the electronic databases of both areas, such that it has currency in seemingly disparate domains of theoretical physics and metaphysics. And therein lies a whole nother thing.

Evidently, “time’s arrow” is one of those sacred-cow terms that can reveal contested turf issues in the academy. It is beyond the scope of this review to go any deeper into that tangent, but I will remind our readers of how we must all carefully cross the boundaries of multi-and interdisciplinary scholarship especially when the social sciences and humanities poach (and encroach?) upon the concepts of sciences and then in

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the process of (mis) translation there is the inadvertent misconstruing of the original meaning and the resulting outcome are the layers upon layers of shoddy claims and misguided implications for policy and interventions. <sup>1</sup> So, as a social-behavioral scientist I am keeping my feet on the ground and treading carefully into the domain of physics (opposite the approach of Uffink, 2007), yet I am comforted that by the thought when dabbling in the world of Stephen Hawking, Richard Feynman, and Brian Greene (see also Barbour, 2001; Pickover, 1999; Price, 1997) and trying to understand the nuances of time-asymmetric quantum mechanics, we can always fall back to Einstein's quip about explaining relativity and the bend-ability of time, "When a man sits with a pretty girl for an hour, it seems like a minute. But let him sit on a hot stove for a minute and it's longer than any hour. That's relativity," (see also Bourne, 2006; Lightman, 1993). And perhaps we can also give credit to the music group *Pink Floyd*, who in their own way, captured the essence of physics and aging and the onslaught of time, in their song "Time" (from the 1973 album, *Dark Side of the Moon*) when they succinctly stated that, "The sun is the same in the relative way, but you're older, shorter of breath and one day closer to death."

At the most basic level, the "Arrow of Time" (used by Arthur Eddington for the first time in 1927) or Direction of Time, Asymmetry of Time, Anisotropy of Time, Irreversibility of Time, Unidirectionality of Time, are all terms used in a synonymous way and used to imply that time is sliced into past, present and future and that it always passes from past to the future and not in a reverse way (Altekar, 1998). In the physical sciences, processes at the microscopic level are believed to be either entirely or mostly *time symmetric*, meaning that the theoretical statements that describe them remain true if the direction of time is reversed; however, macroscopic processes appear to be

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temporally “directed” in some sense and there is an obvious direction or flow of time.

Thus, an *arrow of time* is anything that exhibits *time-asymmetry* and thermodynamics (in particular the second law of thermodynamics) is the science that describes much of the time-asymmetric behavior found in the world (Callender, 2006; Carroll, 2008; Castagnino, Gadella, & Lombardi, 2005; Uffink, 2007).

If we take the thermodynamic arrow as a fundamental and use it to understand other temporally asymmetric features of the world, (e.g., causation, knowledge), we may be able to apply the significance of time's arrow to other phenomena as well. For example, in Draaisma's (2001) insightful book, *Why Life Speeds Up As You Get Older: How Memory Shapes Our Past*, there is the provocative lead-in and question,

When recalling the events you invariably enter from the other side, so to speak: in the filing system of your memory the most recent event lies on top, like bank statements in a folder, and if you page back you will find Y before X. But why then do we remember forwards and not backwards? (p. 55).

Although Hawking (1996) proposed three arrows of time: 1) a thermodynamic arrow of time where entropy or disorder increases; 2) a psychological arrow of time which allows us to remember a past but not a future; 3) and a cosmological arrow of time in which our universe expands rather than contracts (Davies, 2006; Hawking, 2008), the taxonomies offered by Altekar (1998) and Callender (2006) are more elaborate. For example, Altekar proposes six kinds of arrows of time: (1) Thermodynamic Arrow of Time, (2) Electromagnetic Arrow of Time, (3) Biological Arrow of Time, (4) Psychological Arrow of Time, (5) Sociological Arrow of Time, and (6) Cosmological Arrow of Time.

In essence, the biological arrow of time offers a framework of understanding for the evolutionary process, and pertinent to this discussion, the received view within

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biogerontology is that we all experience the aging process as unidirectional and irreversible. We do not expect to grow young with the passage of time. Yet, despite the fact the human organism is subject to the laws of thermodynamics, Uffink (2007) has proffered the necessary caveats when trying to *exclusively* apply these laws as a general theory toward aging, especially when taking into account the complexities of the human organism in the biological, psychological, and social domains.

Before we engage the contemporary concepts affiliated with the prospect of reversing the aging process (anti-aging), let us review some exemplars in the media and literature in relation to time's arrow and preternatural aging in: 1) *protracted aging* – where aging is extended in beyond normal expectations and sometimes to the extreme as a punishment or a curse; and then 2) *suspended aging* - where aging is “put on hold” or postponed for a period of time. I will then return to examples of preternatural aging where the aging process runs counter to time's arrow. This is categorized as 3) *contra-aging (contretemps)* or aging-in-reverse which offers a rich and imaginative catalyst in literary and historical fiction. All three sections will offer interesting intersections with the socio-cultural and psychological arrow of time.

### **Protracted Aging and the Flow of Time**

Jones (1999) starts the discussion here with the classic “be careful what you wish for” lesson when extending biological life. In Greek mythology, Tithonus was a handsome mortal who fell in love with Eos, the goddess of the dawn. Eos realized that her beloved Tithonus was destined to age and die. She begged Zeus to grant her lover immortal life. Zeus was a jealous god, prone to acts of deception in order to seduce beautiful gods and mortals, and he was not pleased with Eos's infatuation with a rival.

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Related to our earlier reference to the Faustian bargain with the devil, Zeus granted Eos's wish - *literally*. He made Tithonus immortal, but did not grant him eternal youth. As Tithonus aged, he became increasingly debilitated and demented, eventually driving Eos to distraction with his constant babbling. In despair, she turned Tithonus into a grasshopper. In Greek mythology, the grasshopper is symbolically identified with immortality. Which all brings to mind Tom Stoppard's perfectly stated angst in the play *Rosencrantz & Guildenstern Are Dead* about the dread and terror of existing *forever*, "Eternity's a terrible thought. I mean, where's it going to end?"

In a similar track, Nikolopoulos (2003) wrote a fascinating article that examines the representation of old age and its interplay of the theme on bodies changing shapes (transformations) in Ovid's *Metamorphoses*. In Book 14, Nikolopoulos (2003) highlighted the story told by the aged Sybil of Cumae to the hero Aeneas. She too made the mistake of asking for longevity without keeping her youthful appearance. When Apollo tried to persuade the Sybil to sleep with him, she pointed to a pile of sand, and asked for one year of life for every single grain. Apollo happily agreed to her terms but she forgot to ask for eternal youth. The Sibyl explained to Aeneas her decision – and regret,

Now the happier time of life is fled, and with shaky steps comes sick old age, which I must long endure. For, as you see me now, I have lived through seven generations...A time will come when I shall shrink from my present fine stature into a tiny creature, thanks to the length of my days, and my limbs, shriveled with age, will be reduced to a mere handful...So changed shall I be, and invisible to anyone (Ovid, 1995, p. 315).

Whatever the exact substance that the Sybil was holding, that specific measurement (handful) and that symbolic material (sand/dust or both; see Mandelbaum's 1993 translation of *The Metamorphoses*), serves to create interesting connections to other

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representations of time passing in an asymmetrical fashion (see also old age portrayed as “dry month”, “dry brain”, “dry season” in T.S. Eliot's *Gerontion* based on analysis in book by San Juan, 1970). For example, we can leap from Ovid's *The Metamorphoses* to the epigram (from Petronius' *Satyricon*, “For I saw with my own eyes that Sibyl hanging in a jar at Cumae, and when the acolytes said, ‘Sibyl, what do you wish?’ she replied, ‘I wish to die,’) at the beginning of T. S. Eliot's (1971b) poem *The Waste Land* where the enigmatic line reappears,<sup>2</sup>

I will show you fear in handful of dust (line 30)

And also for the title of Evelyn Waugh's (2002) book, *A Handful of Dust* and this could then lead to the use of the symbolic sand with Jorge Luis Borges and his short story “The Book of Sand” (1998) which connotes a magical book called *the book of sand*, because “neither sand nor this book has a beginning or an end” (p.481) which creatively leads to William Blake's metaphysical measurement of time in *Auguries of Innocence*,

To see a world in a grain of sand,  
And a heaven in a wild flower,  
Hold infinity in the palm of your hand,  
And eternity in an hour.

And back to Borges and his poem (1999) “The Hourglass” which appropriately enough indicated “sand” as the measurement of our time,

In the timing of the sand, I seem to feel  
a cosmic time...

and then via *synchronicity* could have us remember nostalgically the 1939 film, *The Wizard of Oz* where the Wicked Witch tells Dorothy that she has only has a short time longer to live as she watches the red sand drain downward in a large hourglass. And then we could carefully review the front cover of Robert Butler's (2008) new book, *The*

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*Longevity Revolution*, with the interesting depiction of an hourglass that appears to refill itself at the top opening. And the hourglass could remind us of the soap opera *Days of Our Lives* with the famous epigram, "Like the sands through the hourglass, so are the days of our lives." That television program has been running since 1965 and we will have to stay tuned to see if the sands are running out for the show in the near future. In any case, the motif of the hourglass with its movement of grains of sand from a higher to a lower level through a narrowed and constricted middle is the overarching symbol for the passage of time. For example, it serves as a prominent message in three engravings of Albrecht Dürer (1471-1528), *Knight, Death, and the Devil*, *Melancholia I*, and *St. Jerome in his Study*. The hourglass also makes several appearances within the genre of *vanitas* paintings such as Philippe de Champaigne's (1602 -1674) *Still-Life with a Skull* and Sebald Hans Beham's (1500-1550), *The Lady and Death* (see also Draaisma, 2004). The book, *The Journey of Life* (Cole, 1997) includes many illustrations that capture both the journey of life and the ages of life with the hourglass as a central and consistent image. It also ironically, and iconically, serves as a cursor symbol on your computer screen to indicate when the processor is waiting (or hung up) for an application to run. Along with gravity as an elemental law of nature at work in this otherwise symbolic and passive instrument, there is also the sense of physical entropy at work at the macroscopic level (time-asymmetry) so that there is the perceived irreversibility of the event. We do not expect the grains to flow upward, and in reverse (except on the front cover of Aubrey de Grey's book; De Grey 2007), and so we encounter the second law of thermodynamics and for some the existential angst and for others creative inspiration such as in nursery rhyme, "All the king's horses and King's men, couldn't humpty together again," or in the

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song *Fly Like an Eagle* by Steve Miller who discovered that, "Time keeps slippin' into the future," or in the Wislawa Szymborska's poem (1995) "View With a Grain of Sand" where she wrote, "Time has passed like a courier with urgent news," or to Sterne's (2004) eloquent passage in *The Life and Opinions of Tristram Shandy, Gentleman*,

Time wastes too fast: every letter I trace tells me with what rapidity Life follows my pen; the days and hours of it, more precious, my dear Jenny! Than the rubies about thy neck, are flying over our heads like light clouds of a windy day, never to return more – (p. 494).

and finally to Shakespeare's *Macbeth* (see McGinn, 2006) who captured the essence of *tempus fugit* with, "Tomorrow, tomorrow, and tomorrow, creeps in this petty pace from day to day..."

And not to be outdone by Macbeth's brief candle, we can leap forward to Wolfe's novel *Of Time and the River* (with chapters titled, strangely enough, "Young Faustus" and "Kronos and Rhea: The Dream of Time") where Eugene Gant ponders the significance of a gold watch as a gift from his brother, "What is this dream of time, this strange and bitter miracle of living?" And then to another symbolic image of time-asymmetry found in Borges (1964) from his reflections in the chapter, *A New Refutation in Time*,

Time is the substance I am made of. Time is a river which sweeps me along, but I am the river; it is a tiger which destroys me, but I am the tiger; it is a fire which consumes me, but I am the fire. The world, unfortunately, is real; I, unfortunately, I am Borges (p. 234).

and then back to Thoreau (1995) from *Walden* and his reflections on time-asymmetry,

Time is but a stream I go a fishing in (p. 94).

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And speaking of streams and rivers, I want to wrap up this section of the review on time asymmetry with a unique look at the emotive significance of time by the distinguished physicist, Hans Reichenbach (1999),

Our emotional response to the flow of time is largely determined by the irresistibility of its passing away. The flow of time is not under our control. We cannot stop it; we cannot turn it back; we have the feeling of being carried by it, helplessly, like a piece of lumber in the current of a river. We can know the past, but we cannot change it. Our activity can be directed toward the future only. But the future is incompletely known, and unexpected events may turn up which make our plans break down. It is true, the future may also have favorable turns in store. Yet we know that they are limited in number and that adjusting ourselves to what the future may bring cannot help us too much – there is only a limited stretch of time ahead of us, and the end of all this striving and responding to new situations is death. The coming of death is the inescapable result of the irreversible flow of time. If we could stop time, we could escape death – the fact we cannot makes us ultimately impotent, makes us equals of the piece of lumber drifting in the river current (pp. 3-4).

The imagery of the river, the inexorable flow of time, and developmental transformation is affiliated with the aphorism of Heraclitus who observed that,

The river where you set your foot just now is gone – those waters giving way to this, now this (p. 27).

and with Thomas Cole's four-part set of paintings, *The Voyage of Life*, capturing the stages of human life and is also eerily conjured up again in the song, "Time" by the Alan Parsons Project (from the album, *The Turn of a Friendly Card*, 1980) where "time keeps flowing like a river, to the sea," and then again in Robert Redford's movie and based on Norman Maclean's (1989) novel,

Eventually, all things merge into one, and a river runs through it. The river was cut by the world's great flood and runs over rocks from the basement of time. On some of those rocks are timeless raindrops. Under the rocks are the words, and some of the words are theirs. I am haunted by waters (p.161).

We expect the time flow to be moving forward and irreversible. And this is the case even when the aging process goes into hyper-mode and is extended beyond normal

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expectations and enters into the mythological arena. And yet when humans contemplate the fantastical and allow imagination to flourish with creative alternatives to time's arrow, we can think of time as being malleable – changeable – and altogether unexpected. It is very much like the dramatic opening in the Shakespearean play of when the grizzled-bearded spirit of King Hamlet visits his son, the Prince Hamlet – and something is not quite right in the state of Denmark. Indeed, Hamlet gathers his friends after the visitation of the ghost and proclaims that he needs to set things right in his world because: *The time is out of joint*. And that is the subject for the next two sections of this review: when time's arrow is frozen (in time) and then when the arrow of time is reversed. In both cases, these are anomalies in our known macroscopic world, yet deeply embedded in our cultural and artistic environments.

### **Suspended Aging and Embedded-in-Time**

What appears to serve as a kind of frontispiece in J.T. Frazer's (1966) incredibly rich and comprehensive book, *The Voices of Time*, there is a reproduction of Pieter Brueghel's artistic creation titled, *The Triumph of Time*. It is an amazing and richly symbolic piece of work highlighted with "Father Time" (Saturn or Cronus) on a horse driven chariot and elaborate objects signifying the march of time. While there are other symbols that also indicate time as a cycle and time as an endless wheel driven by supernatural forces, the predominant theme is asymmetrical time (moving forward from left to right) and just below Father Time sits the requisite hourglass. Brueghel's work is both haunting and meditative. While that art work may not have us rethink the portrayal of *time* in the way in the way that Salvador Dali did with his paintings *The Persistence of Memory* (1931) and *The Disintegration of the Persistence of Memory* (1954), the

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message in *The Triumph of Time* is still clear: time will invariably pass and we must existentially confront the time we have and deal with it as the “familiar stranger” (see Fraser, 1987). Time is our constant companion - and burden. It is measured, moving and mysterious. And it is no wonder that Heidegger (1962) regarded the “Temporality of being” as one of the key phenomenological themes in his landmark work, *Being and Time* (originally published in 1927), as it related to a critical context in which humans are enmeshed (see also Baars, 2007; Wood, 2007). Our socio-cultural fabric and language is awash in temporal terms, phrases and analogies (see Baars & Henk, 2007; Fraser, 1966; 2007; Levine, 1997; Lippincott, 1999; Northgate, 2006; Ricouer, 1988; Robinson & Godbey, 2000). A stitch in time saves nine. Time out. Off the clock. Face time. Quality time. Stop the clock. Slowing the tenure clock {for those in academe}. Time flies when you're having fun. The eleventh hour. Zero hour. Killing time. Time will tell. Time heals all wounds. Making up for lost time. Time waits for no one. Big time. Small time. Overtime. Crunch time. Daylight saving time. Like clockwork. Nick of time. Pass the time of day. Not on my watch. Pressed for time. To the end of time. In Search of Lost Time.

*A la Recherche du Temps Perdu*. And that is where we shall begin with this section of the review and an interesting statement from Lehrer (2007) about the monumental contribution of Marcel Proust and his literary magnum opus,

The title of Marcel Proust's novel *In Search of Lost Time* is literal. In his fiction, Proust was searching for the hidden space where time stops. Obsessed with 'the incurable imperfection in the very essence of the present moment,' Proust felt the hours flowing over him like cold water...Proust knew that every time he lost himself in a recollection he also lost track of time, the tick-tock of the clock drowned out by the echoey murmurs of his mind. It was there, in his own memory, that he would live forever. His past would become a masterpiece (pp. 75-76).

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And the trigger point for Proust reaching back into time (via remembering his past and sojourn in Combray) was the tasting of a Madeleine cookie and the smelling of tea, which served as a catalyst to create a form of mental time-travel and a suspension of time itself. It is interesting that memory function is connected with the *temporal* lobes of the brain (the hippocampus within the limbic system) of which emotional responses and spatial memory are closely associated (see Buchanan, Tranel & Adolphs, 2006; Gold, Smith, Bayley, Shrager, Brewer, Stark, Hopkins, & Squire, 2006 for more on the neuroscience details). Proust's literary creation was a whopping 4,300 pages (published in six volumes by Modern Library, 2003) and in the last volume, "Time Regained" not only is *time* the last word (literally) but it also served as a dominant theme throughout his literary labyrinth,

This notion of Time embodies, of years past but not separated from us, it was now my intention to emphasize as strongly in my work (p. 529).

At some point, a reader of *A la recherche du temps perdu* may wonder what the difference is between the intent "to emphasize...strongly" versus a pathological obsession with time, but Kristeva (1993) suggested that Proust was engaged in a "learning process" that involved "a return trip from the past to the present and back again" (p. 3). A similar conceptual experience can be found in Erik Erikson's (1978) interpretation of Ingmar Bergman's movie (and screenplay) *Wild Strawberries* that depicted the story of Dr. Isak Borg and is laden with symbolism to connect with and illuminate Erikson's theoretical approach of the human life cycle (see also Friedman, 2000). And *time is of the essence* in the story and in the dream memoir. The old man will encounter a large clock (and his own watch) with no hands, and one of the many

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messages to carry from the instructive movie is: *what have we done with the time that we have?* (the “full engagement in the one and only life cycle permitted...”, p. 26) And if the accounting of the time spent is found to be lacking and unsatisfactory, then a sense of despair is bound to be manifested because “time is too short if not altogether too late for alternate roads to Integrity.” (p. 26). In Erikson’s analysis, there is the opportunity for progressive psycho-social meaning and enduring significance as the result of the individual navigating through the contextual journey of life, and with limited time left and imminent mortality in later life, there was little regret over the time spent in “looking back,” but whether the outcome be integrity or despair, there was a complete life-time to have it come to fruition, and for us, perhaps a lesson to figure it out – *sooner instead of later*. Thus, the primacy of the Eriksonian notion of individual *and* inter-generational interdependence along with the transmission and sharing of meaning and cultural values; all of which assumes the epigenetic movement forward with the ability to “look back” with greater understanding – and *integration*.

Of course, if the individual is going through the first-the one-and only life but is stuck in the chasm of “adulthood” (or “eternal adolescence” as Carl Jung would call it) there is the possibility of repeating the same “life” over and over again - whether it be in some hellish Sisyphean loop or a grand cosmological design found in Nietzsche’s “eternal recurrence” (see Kain, 2007; Lukacher, 1998). Or in the case of the 1993 film, *Groundhog Day*, where the person (“Phil Connors” played by Bill Murray) would experience a time loop by experiencing the *same day* over and over again until he finally figured his own set of priorities and “woke up” to a new day (see Voeltz, 1998).<sup>3</sup> But instead of hearing the “same old song” each day – day in and day out – Proust delivered a

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counter-argument and his sibylline message gets channeled in Jean's Amery's work, *On Aging: Revolt and Resignation* (1994) specifically in the chapter, "Existence and Passage of Time." Amery begins his book with an epigram taken from Proust's *Time Regained*, and it is here the reader can sample the acquired wisdom of Proust, which is fixed in the realm of posterity,

I had lived like a painter climbing a road overhanging a lake, a view of which is hidden from him by a curtain of rocks and trees. Through a gap he catches a glimpse of the lake, with its whole expanse before him, and he takes up his brushes. But already night is coming, the night in which he will not be able to paint anymore and upon which no day will follow.

And Amery has his own take on *lived* time,

The more definitively we recognize ourselves as aging persons, the more exactly we experience time in its irreversibility, the more in despair we fight against it, and at the same time and in the same breath the more intimately we belong to it (p. 20).

Kristeva (1993) proposed that Proust engaged in a new form of temporality to help guide the reader through the "fragments of disparate time which are nowadays dragging them in every direction, with a greater force and insistence than ever before" (p. 3). Proust's artistic creation was the result of his effort to *lock in* on the kaleidoscopic moments of life in the past, one-by-one, from the mosaic of his memory in order to experience a form of *timelessness* in a world growing deeper into a dislocated chronology (see Shattuck, 1983). It would be ludicrous to claim that one must engage in a writing marathon like Proust in order to create a sense of timelessness or that the mere act of writing a behemoth memoir is the holy grail to stepping outside of time's arrow, but it is instructive to contemplate De Botton's (1998) prescriptions for a meaningful and attentive life based on Proust's great work (see also Birkerts, 2008). De Botton (1998)

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proposes that Proust can offer a literary antidote to the modern dilemma of increasing fragmentation and harried time schedules in our socio-cultural fabric,

*In Search of Lost Time* had the advantage of pointing directly enough to a central theme of the novel: a search for the causes behind the dissipation and loss of time. Far from a memoir tracing the passage of a more lyrical age, it was a practical, universally applicable story about how to stop wasting time and start to appreciate life (p. 9).

If you think you don't have time to read six volumes of Proust, you are not alone. And because of our focus on the cultural nuances on the vagaries of time's arrow, I am obliged to make reference to the humorous Monty Python video segment, "All-England Summarize Proust Competition" which is highly contradictory (and ironic) because the contestants have to summarize all 4,000 + pages and multiple volumes in 15 seconds! Although the humor of Monty Python is in the mind of the beholder, the concept of time in this sketch is given a healthy dose of parody and also gives more meaning to the phrase, "So many books, so little time."

In contrast to the multi-mega-tome approach of Proust, there is the more sparse and pithy language of haiku, which in the form of "death poems," captures the transient nature of all things and evokes the conceptual notion of *Dasein* in the Heideggerian sense. Here is an example of words by Kozan Ichikyo (see Hoffman, 1986) serving as an expression and reflection on the slippage of time,

Empty-handed I entered the world  
Barefoot I leave it  
My coming, my going –  
Two simple happenings  
That got entangled. (p. 108).

Or this classic "frog haiku" by Basho, which is a frozen artistic moment in the transitory process of life and death, and of time and eternity.

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The old pond  
    frog jumps in  
Sound of water.

While the reader waits for the froggy *plop!* to reverberate from the pond, there is the slowing down, a putting on the brakes, an attentiveness, a heighten state of awareness, an enhancement of reminiscence, a *carpe diem*, a *memento mori*, and a “gather ye rosebuds while ye may, Old Time is still a-flying.”<sup>4</sup> There is also the concentrated effort in making most of the time that we have and that experience in turn serves as a catalyst to reassess our priorities and values. Instead of a Faustian bargain to make up for wasted time, we might want to consider instead some Proustian binoculars instead (Shattuck, 1983). In a highly illuminating analysis of *A la recherche* Shattuck (1983) proposed that Proust transcended the formulaic opening of *Once upon a time...* in his writings to create a form of double consciousness (stereologic or binocular vision) so that he as writer and – you the reader – could experience a *Twice upon a time*. Shattuck explained it this way,

The double consciousness of recognition and re-creation heightens and strengthens our life to the point where it is no longer subject to the erosion of time's flow (p. 132).

The gateway of double consciousness for Proust was through his “inner optics” of memories and remembrance and then framed into his artistic creation.

And now we shall examine another literary creation that explores time's arrow and when human development is held in abeyance for one individual while the rest of world seemingly moves forward. At the end of Shattuck's book on Proust, there is the illuminating comparison between *In Search of Lost Time* and the folklore story of Rip Van Winkle. Shattuck noted that,

The real sleep of Rip Van Winkle confronts him, when he returns to his village, with a foreshortening of time and a scene of recognitions like the one at the close

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of *A la recherche*. Time, however, has bested Rip, passed him by and left him nothing more than his 'his place on the bench at the inn door' and a good tale to tell any traveler who would listen to a garrulous old man. Marcel's literary sleep, on the other hand, has the opposite effect. It allows him to best time, to rise out of contingency (p. 138).

In both cases, the "long sleep" is the symbolic equivalent to death, and Shattuck argued that the stories project a reawakening of a new consciousness of existence that can "resurrect ourselves from the death we face every moment" (p. 139). But there is more to the Rip Van Winkle story than that.

Ferguson (2005) proposed that Washington Irving created a story in Rip Van Winkle that unfolds with many meanings surrounding the familiar tale of the vagabond who wanders away from Sleepy Hollow and into the mountains only to return 20 years later and transforms himself from "shunned pariah into an instant hero." (see the front cover art, "The Return of Rip Van Winkle" by John Quidor {1849} on Thomas R. Cole's book, 1997, *The Journey of Life: A Cultural History of Aging*). But by foregoing the passage of responsible adulthood by going off to hibernate for twenty years, Rip moved right into old age where he "arrived at that happy age when a man can be idle with impunity." In effect, Rip made a fairly successful return despite his preternatural aging experience and it is here that Ferguson offers a provocative thesis:

Figuratively, Rip dies and miraculously comes back to life on his own terms, thwarting a community that has consigned him to oblivion. Rapid change in America compounds the normal fear of death by forcing the elderly toward obsolescence before their time. These patterns begin in the early republic, and Irving sees them with great clarity. Because they believe that they have created a new world, the first citizens in the new nation dismiss the immediate past and everyone associated with it. Irving illustrates the problem by turning his protagonist into nothing in just 20 years (p. 536).

In other words, while Rip remained "trapped in amber" for twenty years in a state of suspended animation up in the hills, meanwhile back in Sleepy Hollow, the world had

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been transformed into a new era. Ferguson (2005) proposed that Rip Van Winkle is a story of satire that indicated the generational tensions that exist in the new world where there is a premium on a fast-moving and forward-thinking young republic. For example, those who represented the past (or anachronistically prefer the past) like Rip are left behind as the social threads between the generations were (and are) stretched, and in some cases, *unraveled*. The new and younger generation becomes the pace car, but the older models are slower to keep up; thus, the gap widens and theoretically so does (or the lack thereof) the sense of generational cohesiveness.

And in our present era, many can relate to the feeling of not staying “on top of things” especially as it relates to the domain of information technology where “clock speed” and “overclocker” takes on a whole new meaning. The replacement rate of hardware and software (and the soon outdated manuals that go with them) is at warp speed and for those can remember the quaint days of the telegraph – no wait, let’s make that the “old” dial-up days of the 28K modem – the unveiling of a fiber-optic 40 gigabits per second connection makes it seem like we are the ones who just woke up from a twenty year hibernation sleep (see Carr, 2008; Weinrich, 2008). Even though I try to keep up with the latest gadgets and whiz-bang computer programs, I often feel like the Precambrian professor as I try to juggle good ol’ lecturing with instant messaging, texting, podcasting, Blackboard discussion boards, microblogging, video streaming and calls on my phone that acts more like a Swiss-army knife, along with Bluetooth, BlackBerry, Blu-Ray, Wi-Fi, HD, GPS, and petabyte data clouds. And I knew that “time was out of joint” when I recently heard that e-mail was already “old news” (a cyber-dinosaur) and that one of the most important positive aspects of playing video games (as

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reported by the high-frequency players) was (you guessed it): *losing track of time* (Wood, Griffiths & Parke, 2006). And to top it all off, the name of the new backup utility developed by Apple Inc. is called *Time Machine* which captures the most recent state of data on your disk with the following explanation: "As snapshots age, they are prioritized progressively lower compared to your more recent ones." But the new world of information technology is here to stay and the generational issue of early adopters versus hesitant laggards is just a part of the profile of socio-techno-cultural change.

Speaking of *generations* past and present (see Gillon, 2004; Strauss & Howe, 1991), the boomers (as example) have always been enmeshed in the world of fantastical, romantic, and metaphysical time adventures. The fascination of time was in the heart and soul of movies, television, music, and literature as the boomers expanded into the American landscape into the 1950s, 60s, and 70s. The 1960 film, *The Time Machine*, based on H.G. Wells book where the time traveler travels into the future (and remade several times thereafter); the Wayback (WABAC) machine used by Sherman and Mr. Peabody in the early 1960s *Rocky and Bullwinkle Show*; the television show *Lost in Space* (1965-1968), *Star Trek* (1966-1969) where in several episodes the crew of the Enterprise revisit Earth back in time e.g., 1969); *The Planet of the Apes* series; the *Back to the Future* trilogy where in the first movie (released in 1985) Marty McFly travels back to the year 1955 and in the second movie travels ahead into the future to the year 2015; *Time Bandits* and *Somewhere in Time* in 1980; *The Terminator* series; *Star Trek: The New Generation* (1987-1994) series with a two-part episode titled "Time's Arrow." And what I consider to be as the penultimate example: the 1968 film, *2001: A Space Odyssey*, where the segment at the end ("Jupiter and beyond the Infinite") presents a

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richly textured set of camera techniques that captures the rapid aging of the main character Dave Bowman. The final scene sequence in that movie is so full of metaphorical imagery that it (and still to this day) becomes a metaphysical inkblot that begs for multiple interpretations, especially in the intersection of aging and the humanities.

The topic of time has also served as cohort marker in music, and for the boomers, it might have started with Bill Haley and His Comets (1955) with *Rock Around the Clock* and then later something was blowing in the wind because, *The Times They Are A-Changin'* (1964, Bob Dylan, Columbia Records) and along with the exuberance of youth we thought *Time Was On My Side* (sung by the Rolling Stones), how could we forget that *Time Has Come Today* (1968) by The Chambers Brothers. Or that it has been a *Long Time Gone* (1969 by Crosby, Stills and Nash, Atlantic Records) when capturing the angst of the events in 1968 (i.e., assassination of Robert F. Kennedy which just passed its 40<sup>th</sup> anniversary on June 6, 2008). Sometimes, things were so out of joint, we had to ask: *Does Anybody Know What Time It Is?* (1969, Chicago Transit Authority, Columbia Records). And along Jim Croce, we strove to save *Time in A Bottle* (from album *You Don't Mess Around with Jim*; ABC Records) and perhaps began to realize that any of us could die - even when young – as Gregg Allman eluded to in *Ain't Wasting Time No More* (his tribute to his bother Duane who was killed in a motorcycle accident; from the album *Eat A Peach*; 1972; Capricorn Records) and so the lesson: don't waste your time, “‘cause time goes by like hurricanes,” which sounds very similar in message to the lines in the Shakespeare play *Richard II*, “I wasted time, and now doth time waste me.” And

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then while we were *Reeling in the Years* (Steely Dan, ABC Records, 1972) and hoped we were “stowing away the time.”

And growing up into adulthood we thought we would be out of time by the end of the decade with *1999* (released in 1982, Prince, Warner Bros.), and we finally arrived at the *Big Time* (Peter Gabriel, from the album *So*, Geffen Records, 1986), and got a chance to reminisce over forty years in historical time with Billy Joel's (1989) song, “We Didn't Start the Fire,” and then felt like we were *Out of Time* with R.E.M. (1991). Later on, we wished we could be “wasting time” and letting “the hours roll by” (by The Dave Matthews Band, 1998 from the song *Stay* in the album *Before These Crowded Streets* – RCA), and with Y2K, the time going on anyway (see *1999* with Prince), and then it was the haunting song “Clocks” by Coldplay (2002) from the album *A Rush of Blood to the Head* singing about “ticking clocks” and “missed opportunities” which makes us wonder in our turbo-charged world that even if we have gained in life expectancy, why does it all seem to wash-out in an era of what Northgate (2006) calls “accelerated living”? In other words, the more we try to understand it and gain mastery over the temporal domain, it becomes even more elusive in our lives. For many people, time has simply spun out of control. It appears we are not even sure of what were *saving* when we spring forward with daylight savings time (Downing, 2005). Even the ability to “multi-task” has been called into question as a modern strategy to squeeze out more time. Rosen (2008) believes the new world of “intentional self-distraction” has taken its toll on our ability to pay attention and engage in deep learning, and although our culture “may gain in information...it will surely weaken in wisdom” (p. 110).

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Whybrow (2005) captured the modern social-cultural landscape in this fashion with his book *American Mania: When Enough Is Enough*,

In the ultimate paradox of America's Fast New World we are running short of time. Time is now our precious commodity. In the headlong pursuit of prosperity we have traded time for money. We no longer speak of 'passing' time, and certainly not of 'killing' it, but of 'spending' it as we would spend money. And so, as with money, we guard our time, we hoard it, and we hunger for more (p. 157).

If only we could control the seconds, the minutes, and hours that tick away in our lives, each day, and each year (see Weinrich, 2008). Not one-shot in life (a la *The Deer Hunter*) but to be given a second or a third chance in our lifetime and then to pick the one with the preferred ending (see movies *Run Lola Run* and *Sliding Doors* and both released in 1998). Just enough time so that we can stop and smell the roses. To get off the hamster wheel and the merry go round, and break out of the nine-to-five grind. To go off the clock and to leave the great river of time. To find a back eddy and deeply reflect amidst the time pollution and what Kundera (1997) analyzed to be "speed as a form of ecstasy" and in his book, *Slowness*, waxed philosophical and wondered, "Why has the pleasure of slowness disappeared?" (p. 3). It is as though we want (and need) an adult-sanctioned "time-out" in our hurry-and-wait existence. I suppose one could point to Kenny Chesney's country music song (from the album *The Road and the Radio*, 2005) as an anthem in that direction where he sings that he has been "living in fast forward, now I need to rewind really slow."

The cruel joke in our 21<sup>st</sup> century hyper-technological lifestyle is not lost on travelers who rely on jet planes to get them "there" in a hurry only to find hassles, delays, and cancellations so that they are going nowhere fast. Russo (2008) noted in the ironic premise to a new novel, *Dear American Airlines* (Miles, 2008), where the protagonist is

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caught up in the “purgatory” of being stalled in an airport where “time crawls...it feels like an eternity.” But there is a silver lining after all as the cancelled flight gives him time to stop and smell the roses – or in this case to write a novel and reflect on his own life.

And so, even though we know time to be scientifically Newtonian, there are on occasions where we probably wished it was more Taoistic. To make matters even more

complicated, our language systems and semantics woven into our culture beg the

question in our day-to-day lives (see Heise, 1997) - *Which time are you talking about?*

The supreme expression (or fear) of this surreal experience is in Baudrillard's (2005) assessment,

Time itself, lived time, no longer has time to take place. The historical time of events, the psychological time of affects and passion, the subjective time of judgment and will, are all simultaneously called into question by virtual time, which is called, no doubt derisively, ‘real time’ ... So nothing and no one is truly real and real time does not exist. We do not even perceive the sun in real time, since the speed of light is relative. And so is it is with everything (pp. 30-31).

Whatever time it is we are talking about (i.e., real, virtual, historical, subjective, objective), what if we could stop the clock? What if we take a little detour from the trajectory of time and human development? In effect, we could also place the aging process in abeyance, at least in a psychological sense. And if we could tinker with the “sense of time,” what would be the gains and the costs for both the individual and society?

First of all, we need to appreciate that the importance of time in human affairs is not just a contemporary concern or the stuff of therapeutic intervention for the new millennium. One only has to read the *Meditations* of Marcus Aurelius (written in the years 170-180) and appreciate his attempts at making a personal philosophy out of the limits of existence and offering guidance in the face of certain mortality (see also

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Gilleard, 2007; Parkin, 2003). Going further back, Seneca (5 BC - AD 65) suggested in his writings, *On the Shortness of Life* (2005)

It is not that we have a short space of time, but that we waste much of it. Life is long enough, and it has been given in sufficiently generous measure to allow the accomplishment of the very greatest things if the whole of it is well invested (p. 1).

Seneca had the wisdom to realize that although we (for both his Roman friends and for us) may complain how fast the years go by and then express bewilderment and regret at “death’s final constraint,” he suggested that it is *we* who make life short. “It is small part of life we live. Indeed, all the rest is not life but merely time” (p. 2). Seneca proposed that instead of living, most of us are in the process of dying prematurely because we act as though time “were something superfluous and replaceable.” In effect, when it comes to making most of time we have – moment-to-moment – Seneca offers a stoical blend of Horace’s poetry capturing the phrase of *Carpe diem*, and then a dash of some *memento mori*, and then mix in Pogo’s (via Walt Kelly) famous line, “We have met the enemy, and he is us.” And there are two songs to weave in at this point in the article to match the reflections of Seneca: 1) by *The Verve* where in their song “Bitter Sweet Symphony” (from the album *Urban Hymns*, Virgin Records, 1997), where there is the modern lament of working and being “a slave to the money and then you die,”; and 2) the other by *The Doors* in the song *The Soft Parade*, (1969, Elektra Records), “All our lives we sweat and save, building for a shallow grave.”

To a large degree, the scholarly work of Mihaly Csikszentmihalyi (1990; 1998) is very close and contemporary equivalent of Seneca’s philosophical approach by offering a substantive mechanism and practical applications through which optimal experiences (or cultivating “flow”) can occur. Csikszentmihalyi’s (1990; 1998) approach has both

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cognitive and “hands-on” features (the merging of action and awareness) to the cultivation of optimal experiences. One of the interesting outcomes of engaging in optimal experiences is what Csikszentmihalyi (1990) refers to as the “transformation of time.” He has found that “flow” can change the way we experience and sense time, and perhaps more importantly, when we are in state of complete involvement and intense concentration, we have the ability to break free “from the tyranny of time” because typically “flow activities do not depend on clock time.” (pp. 66-67). Although it is proposed that we have the potential to create *time-less* and meaningful experiences, Csikszentmihalyi (1990) believes that many American’s simply waste the free time they have by engaging in vicarious participation experiences (“mock-meaningful action”) that mask the “underlying emptiness of wasted time.” (p. 162-163). Csikszentmihalyi (1998) proposed that,

Experience takes place in time, so time is the ultimate scarce resource we have. Over the years, the content of experience will determine the quality of life. Therefore one of most essential decisions any of us can make is about how one’s time is allocated or invested (p. 8).

In the context of aging, it can be said that a rich and meaningful life can become and act as a counterweight to time’s arrow (see Klein, 2007). The aging experience is enriched and the continuity of flow activities can help to make living a *re-creation* such that the aging process is not a signal for reminding us of wasted opportunities or the limited time left – rather it is that time’s arrow can be trumped by a state of consciousness that heightens the awareness of the moment – and the next. This notion is captured in fine form in the award winning novel by Per Petterson, (2007), *Out Stealing Horses*, where the sixty-seven year old Trond Sander reflects back on fateful events during one summer in his distant past,

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Time is important to me now, I tell myself. Not that it should pass quickly or slowly, but be only time, be something that I live inside and fill with physical things and activities that I can divide it up by, so that it grows distinct in me and does not vanish when I am not looking (p. 8).

### **Contra-aging (aging-in-reverse) and Time's Arrow**

As a gerontologist, I have always been intrigued by the observation of Hegel in the preface of his book, *Philosophy of Right* (Wood, 1991) where he stated,

When philosophy paints its grey in grey, a shape of life has grown old, and it cannot be rejuvenated, but only recognized, by the grey in grey of philosophy; the owl of Minerva begins its flight only with the onset of dusk (p. 23).

This statement reflects Hegel's supposition that a culture's philosophical understanding reaches its peak only when the culture enters its decline. In other words, philosophy is by design "backwards looking" because it is not supposed to be prescriptive (forward-thinking), rather, it understands best while looking into the rearview mirror of time and place. In relation to things gerontological, I have wanted to build a bridge from Hegel's insight to the interdisciplinary study of aging so that the flight of the "wise" owl of Minerva *might* have a symbolic significance (and application) for the later stages of human development (into the dusk of life) as well. There is something about the quote that strikes me as less a Hegelian aphorism and instead more about the potential gain or outcome or benefit for living long and reaping the rewards of maturity and the experience of the passage of time.

In other words, the owl of Minerva begins its flight with the onset of the second half of life – and only with time passed through many years of experience. While this proposition has some correlation with the theoretical perspectives of both Jung and Erikson and perhaps to the prospect of "reminiscence work" as described and fleshed out by Gibson (2004), and with Kotre's (1996) substantive work on the links between

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generativity and transmitting values through the flow of culture (see also McAdams & de St. Aubin, 1998), and finally with Said's (2006) "late style," the key here is that aside from the prospect of later life evolving into living in the land of "geritopia" (see Blechman, 2008), there is the alternative path of social/community/civic engagement to be found in the intimate connections and embeddedness with all generations (Freedman, 2000; 2007). In the *grey of life*, the symbolism of both Minerva (Athena) and the Owl connotes a supposed "wisdom" to be had based on the experience flow of time *forward*, but the wisdom to be had is conditional upon the ability to cultivate cultural treasures via cognitive and emotional discovery through time experienced backward. The literature has addressed the nuances of wisdom as something that is both culturally and contextually bound (Le, 2008), and is *not* an automatic outcome of old age per se, but takes active cultivation and preparation (Gluck & Baltes, 2006), and can be expressed through competence, pragmatics, integration, interconnections, and the plentitude of critical life events (Webster, 2007). Wisdom, as the possible crown jewel in a life lived long, is understood as a combinational process of many factors over the course of one's life, *but at the end of the day*, the likelihood of wisdom increases with age (Gluck & Baltes, 2006) and reflects an Emersonian *self-reliance* along with an Eriksonian *integrity*. And even though Bloom (2004) offered that wisdom is to be found in both our sacred and secular contexts, he observed it as something very personal,

The mind always returns to its needs for beauty, truth, and insight. Mortality hovers, and all of us learn the triumph of time. We have an interval, and then our place knows us no more (p. 1).

And so to answer Bloom's (2004) question: *Where Shall Wisdom Be Found?* - I would offer that wisdom is very much a latent resource in the aged individual and is a gift

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to be harvested and shared *because* of time's arrow. Perhaps this relates closely to Kierkegaard's aphorism: *While life has to be lived forwards, it can only be understood by looking backwards.* And again with Schopenhauer's (2000) insight into the significance of later life as having the potential and ability to weave life experiences, but to also to see the connections that make up the fabric of social interaction and the transmission of culture,

Life can be compared to a piece of embroidered material of which everyone, in the first half of his time can see the top side, but in the second half the reverse side. The latter is not so beautiful, but is more instructive because it enables one to see how the threads are connected together (p. 482).

And these connections are eloquently captured in the insights of Kotre (1996),

Whether one looks at the stories we tell about ourselves or whatever one looks at the marks we leave when we die, culture inevitably appears. In the chill of death, dew forms on the web of significance on which collectively live our lives and for a time reveals its outline (p. 269).

But I am also in agreement with Said (2006) who offered that wisdom in later life does not necessarily always lead to reconciliation, resolution, and serenity; rather, there may be a desired dialectical tension and an "unproductive productiveness going *against...*". In other words, wisdom can raise more questions than answers; there is heroism, but there is also a degree of intransigence. There may not be transcendence involved nor may there be any great epiphany or grand unity discovered. In fact, for Said, "late style" may actually reflect and encourage anachronistic creative behavior so that "late style is *in*, but oddly *apart* from the present." (p. 24). Said's "late style" helps us to understand the role of being a part of the *Zeitgeist* (spirit of the *times*) and the sharing in cultural progression, yet also trying to maintain a creative "self-making" in the flow of

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time. It is an expression of *stepping outside of time* all the while acknowledging the fate of one's being - as time will (and does) end.

And it is here I am making the invocation to the grand quintessence a long-lived life and the establishment of the fruits and the crystallization of time's arrow in human development that inspire a theoretical and assumed higher order of contemplation, insight and eudaimonia *for the benefit of the individual, for the peer cohort, and for generations to follow* (Freedman, 2000; 2007; Kotre, 1996; Roszak, 1998; 2001).

A few examples of how the cinema has addressed the mythic qualities of a long life and the older adult as the fountain of wisdom (and tall tales) can be found in Jack Crabb in the film *Little Big Man* (1970) based on the book by Thomas Berger (1964) and it is believed that Dustin Hoffman holds the record for portraying the greatest age span of a single character, playing Jack Crabb from the age of 17 to 121. And there was Obi-wan Kenobi in *Star Wars* (1977) with Merlin mentoring Arthur in *Excalibur* (1981) and Gandalf (the Grey) in the *Lord of the Rings* (2001-2003) trilogy.

But if wisdom is proposed to be honorific laurel wreath of time's arrow in the aging process, it is also no surprise that the allure of *reversing time's arrow* (*contretemps: contra + temps = against time*) such that one could trade-in all of the wisdom and laurel wreaths of the world for a chance *to go back in time*. It is a measurable and sustainable theme in both the literature and cinema. Although related, I am not referring to the reversal of time's arrow in terms of short-term memory loss as portrayed by Leonard Shelby in the movie *Memento* (2000) where Christopher Nolan (the director) has offered a backwards-moving plot (through time?) with the color scenes told in reverse chronological order while the black and white scenes are done in chronological

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order. In essence, the viewer is caught up in a “remembering the future” experience (see Goh, 2008; Heise, 2000; Parker, 2004).<sup>5</sup> A similar theme is found in story told backwards through time with *Ray in Reverse* written by Daniel Wallace (2000)<sup>6</sup> where the main character, Ray Williams, is in heaven trying to sort out the significant events in his life going back to about ten years old (or young). But these are not necessarily artistic examples of reversing time's arrow in the context of the aging process. As you recall, I began this essay with a brief look at two movies that have been recently released (but both based on books published many years ago) that portray a reversal in time's arrow and thus a movement backwards through time from senescence and toward youth (*The Curious Case of Benjamin Button* and *Youth Without Youth*). And I presented them as benchmarks for our targeted discussion. And so, we arrive closer to the mark with the example of Martin Amis's (1991) book, *Time's Arrow*, with its short-on-pages but long on fictive plot considering the thermodynamics of history where the protagonist and the narrator share the same body and experience time passing in reverse. The beginning of the book is the death of the main character (the doctor Tod T. Friendly, and then into others: John Young, Hamilton de Souza and Odilo Unverdorben) but becomes younger and younger during the course of the novel and the ending of the story is when he enters his mother's womb. But it is the story in *between the start and the end*, which has the doctor revisiting the Auschwitz death camp, and with twisted logic, and the backward narration, history is indeed vastly different and the narrator “dies” when the protagonist is born (see Glaz, 2006; Menke, 1998).

And closer still to our target of portraying a comprehensive (but not quite) reversal in aging is found in the book *The Confessions of Max Tivoli* by Andrew Sean

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Greer (2004). Greer has created in Max a character who is born quite old and ages *backward* physically (thus getting younger each year), but mentally and emotionally he progresses *forward* as do other children. In this case, Max Tivoli was born in San Francisco in 1871 looking like a 70 year old man, but on the inside still a child. John Updike (2004) provided an interesting book review on Greer's work and noted that, "Max differs from Benjamin Button in that Button begins with a fully stocked old brain and ends with newborn's tabula rasa; whereas Max learns as he goes, as do those of us not condemned to age in reverse." The meaning (and the confusion) of it all is that Max's condition is both a blessing and a curse ("Inside this wretched body, I grow old. But outside – in every part of me but my mind and soul – I grow young," p. 5), especially as he tries to navigate the turbulence of love (with Alice) and all the while, as Updike (2004) phrased it, "growing against the grain of time."

Greer further builds an interesting bridge (see page 5) via a connection to the Shakespearean play *Hamlet* by having Max see his condition as similar to the "ancient curse" as highlighted in the odd and cryptic dialogue between Hamlet and Polonius in Act II, Scene II where Hamlet is reading from a book ("words, words, words") and Polonius wants to know more about the book that ostensibly has so much of Hamlet's attention. The book that Hamlet had his nose in was claimed to be *a satire of old age* and Hamlet (after some ageist commentary) then says to Polonius,

"...for you yourself, sir, shall grow old as I am, if like a crab you could go backward."

Despite the temporal paradox within Hamlet's lines, the crab is an interesting allegorical device (to which Polonius thought at least representing method in the madness of even thinking about it) to dramatically capture the *motion and symbolism* of going

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backwards and is portrayed in Greer's novel and in Shakespeare's play (at least) as a bittersweet experience (at least) and as a *curse* (at most). Going backwards and against the grain is bound to create an "out of joint" existence for the individual within time's arrow, which brings along all else with it: family, friends, culture, and social structures, *except the protagonist*. The crab motif in effect conveys a going against nature and an oddity that is exceptional in life, and yet, not at all pleasing or desired. For example, I think of the derogatory comment to describe the person in the later years of life (*a crabby old man/woman*) who is unwilling, reluctant, irritable, dour, and basically an unpleasant person. Too much concern with going back and embracing backwardness reminds me of Nietzsche's aphorism, "By searching out origins, one becomes a crab. The historian looks backward; eventually he also believes backward."

I also interpret being-as-a-crab as someone who cannot break out of their shell and move forward; instead, the person is perceived to be "holed up" and Rip van Winkle like, out of date and out of time. The *crab* image and its attendant allegorical layers have also eerily served as prominent threads to several temporal issues in T.S. Eliot's poem *The Love Song of J. Alfred Prufrock* (see also North, 2001 and comment about connection Marvell's poetry). For example, Eliot's verse about Prufrock (who also ironically said that he was "not Prince Hamlet, nor was meant to be") is at once sad and frail in its connotations, "I should have been a pair of ragged claws scuttling across the floors of silent seas," in large part as it seems to me, because there is the inability of Prufrock to connect with others, and thus is disconnected with intimacy. He is seemingly crustacean-like in his inability to cultivate relationships and instead is only aware of the minutiae in his life as his life as it is "measured out in coffee spoons." Eliot also makes reference to

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things *crab-like* (along with our elemental words of “dust” and “sand”) “An old crab with barnacles on its back,” from the poem “Rhapsody on a Windy Night” (see Eliot, 1991) which only reinforces Eliot’s preoccupation with the themes of time, aging and the spectacle of existential angst and catharsis (“I grow old...I grow old...”) into the landscape of the second half of life. The cross-weaving of these themes are like flares in the sky to indicate a lesson, a warning, a message about the aging process that carries with it both loss and fragility, but there is also the opportunity to exact what makes us (more) human as we age (forward) and to re-examine our lives and redefine superannuation. The point here is that there has been much written about the allure of shifting time’s arrow by contemplating the journey of life in reverse and that the voyage back (theoretically) in time is much more “rewarding” than movement toward the inevitability of decline and death.

Ah yes, to be young again – to be vigorous and splendid in physical perfection (think of the *The Eagles* song “Twenty-One” and “strong as I can be and there is no reason why - I should ever want to die”). Instead of wondering, like *The Beatles* (1967) did, if someone will still need me when I’m sixty-four, we could, instead, go the route of *Nirvana* (1991) and don’t care *or mind* if we’re old. Or better yet, is there a way to have both the wisdom and peak of physicality so that George Bernard Shaw’s assertion, “Youth is wasted on the young,” could be flipped on its head by expressing it this way, “Wisdom is wasted on the old.” Could we reap the rewards of time’s arrow and yet have it reversed so that we can have our cake and eat it too? This is not just averting “this bank and shoal of time” by *holding back the years* as sung by *Simply Red* (1985; see also Templeton, 2007) or like jumping in swimming pools with cocoons (in Florida – of

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course!) from extraterrestrials (Antereans) in order to escape “the mortal coil” (see Haycock, 2008) of illness, aging, and mortality (see movies, *Cocoon*, 1985 and *Cocoon: The Return*, 1988). Even though Epstein (2007) describes the aging process as where Narcissus has been asked to leave the pool (“time passes, the day darkens, the grave yawns”), in contrast, the people of the high country town of Springhill, Colorado, and based on the novel by Clifford Irving (1996), *The Spring*, were really doing quite well despite their “age” and have decided to stay in the pool a little longer (maybe something in the water?).

No, instead of fantastical accounts and fairy tales we are seriously exploring the prospect of “the possibility of an island” *in time* where there is both immortality and the perpetuity of the same, which is beyond *Decrepitude* and *Senioritude*, and death itself (see Houellebecq, 2005). We have now reached the point of breaking time's arrow in half and the crucible for extended and eternal life is no longer science fiction (see Slusser, Westfahl & Rabkin, 1996). The pursuit of prolongevity is now on our doorstep (Cole & Thompson, 2001/2002; Post & Binstock, 2004). And the target of the arrow is no longer found within mythology, fictional stories, and the magic of special effects in film, rather it is purported to be found at the macro and systemic level of the body/mind/spirit connection (see Chopra, 2002), and perhaps deeper into the microbiological and the phylogenetic levels. Whether you belong to the evolutionary or mechanistic camp, (see Hughes & Reynolds, 2005) (or see both as complementary), or you buy into SENS (De Grey, 2007; see also Templeton, 2007) or SENSE (Rose, Rauser, Benford, Matos, & Mueller, 2007; Rose, 2008) as representing the most current scientific revolution in gerontology, or whether you are the *futurist*, the *optimist*, or the *realist* in regards to aging

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and mortality (Carnes & Olshansky, 2007) the message is clear: time's arrow in aging may have been seen as thermodynamic, but in the 21<sup>st</sup> century we may come to see time's arrow for the human species become more the domain of biological engineering.

Furthermore, it makes me wonder if the primary role of gerontologists in the year 2060 will be to primarily serve as historians of time – *in the way that it used to be – back in the old days*. Gerontology is dead. Long-live gerontology.

Speaking of time and aging and going *way back*, Sophocles and Ovid shall have the closing commentary on our topic,

*Dearest son of Aegeus, none but the gods  
Escape old age and death: all else  
time in its relentless flood sweeps away.*

Sophocles – Oedipus at Colonus

*Time glides away and we grow older through the silent years;  
the days flee away and are restrained by no rein.*

Ovid

We shall see - and *time will tell*.

#### Notes

1. Let us not forget Alan Sokal's now infamous 1996 article, "Transgressing the Boundaries: Towards a Transformative Hermeneutics of Quantum Gravity," that was published in the cultural studies journal *Social Text*, and then soon after, revealed to be a hoax. It was deliberate satire and parody. Sokal was apparently exposing the cavalier way in which constructs of science could be twisted and co-opted to fit postmodern rhetorical and political agendas (see Sokal, 2008 for a comprehensive examination of the issue) and as a result there was (and is) the proliferation of the Frankensteinian beast known as "pseudoscience."

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2. In the edited book by Michael North (2001), *The Waste Land: T.S. Eliot*, W.W. Norton & Co.; New York, there is a insightful footnote about the connection of verse in Eliot's "III. The Fire Sermon" and Andrew Marvell's poem, "To His Coy Mistress" first published in 1861, where the following lines by Marvell were adapted by Eliot into his poetry, "But at my back I always hear/Time's winged chariot hurrying near."
3. Speaking of eternal recurrence, I reviewed one blogging site that was titled, "Time Loop" and naturally the blog entry presented how the blogger felt like they were going in circles and where "every day is exactly the same" (see *Nine Inch Nails*/Trent Reznor from the album "With Teeth") and the blogger had their entry in a repeating pattern – over and over again – as the web pages were scrolled downward. Absurdly funny and/or ironically apropos.
4. As creative and insightful examples of capturing the moments of time, I recommend reviewing Thomas Pynchon's (1997) book, *Mason & Dixon*, and what I believe to be one of the finest openings to a book and the setting of the stage and scene not only "back in time" but the flowing of time by using a descriptive sequence of words that unfold much like a visual walk using a camera to capture the context and temporal dimensions of the novel. There is also Katagiri's book (2007), *Each Moment is the Universe: Zen and the Way of Being Time*, where it was stated that Dogen Zenji said that most people are not able to acquire the way-seeking mind of spiritual awareness without deeply understanding that a day consists of 6,400, 099,180 moments. A moment is called

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- ksana* in Sanskrit. “The numbers associated with moments in a day are not so important, but we should have a sense of how quickly time goes” (pp. 3-4).
5. Another movie that grapples with time's arrow and memory is *Eternal Sunshine of the Spotless Mind*, 2004; for a provocative analysis of similar films such as Gaspar Noe's *Irreversible* and Martin Amis's book, *Time's Arrow*, see Goh, R. (2008). Myths of reversal: Backwards narratives, normative schizophrenia and the culture of causal agnosticism. *Social Semiotics*, 18, 61-77.
  6. Wallace also wrote the book (1998): *Big Fish: A novel of mythic proportions* which was used as the basis of the movie by Tim Burton, *Big Fish* released in 2003 which has its own interesting story of time and reflections on the past.

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