IMAGINATION:

A Tool with Potential

by

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CONTENTS

Abstract

This thesis deals with imagination as a tool in light of two academic disciplines: philosophy and education. In the history of philosophy imagination appears as an intentional tool for cognizing, and in education, the child's self-generated, imaginative activity serves as an integrative tool for cognitive processes and for self-awareness.

The use of imagination in the history of philosophy reveals time-sensitive stages of differentiated, imaginative activity and intentionality. A similar time-organism of imaginative activity occurs in the developing child. Both time processes point to an evolving but de-linearized *becoming human* (Karl Koenig), which imply an evolutionary perspective of consciousness. This becoming human establishes itself in times of crisis and windows of opportunity, most obvious in child development. Similar relationships of opportunity and crisis are perceived in scientific research and in quantum physics.

My background for this enquiry is education. In observing how educators face the challenge of declining academic skills in the global competitiveness of "knowledge as wealth" paradigm (Government of Canada), we see in the educational context the relative one-sightedness of causal thinking and information technology. This priority has undermined other modes of cognition. What is important beyond formal, abstract modes are empathy and interpersonal functioning skills that require imaginative activity.

For education to fulfill its role in the midst of present cultural shifts, it must review its broader mission of culturalization. It must replace the present curricular-based school system with a postmodern pedagogy of whole child education. Kieran Egan's imaginative education and Rudolph Steiner's education towards freedom, both observe the child's own time-sensitive cognitive processes in light of human becoming. In detailing their approach, imaginative activity

accounts as an integral learning tool for Egan, and further stabilizes and harmonizes the development of the self in Steiner's Waldorf Education.

Preface

"Imagination is more important than knowledge, for knowledge is limited to all we know and understand*"* (Albert Einstein).

I have chosen to investigate the topic of imagination. However, to define imagination proves as difficult as stopping a river from flowing. When the river's flow is artificially interrupted by a damn, the standing water loses its vitality and all sorts of undesired elements appear.

Therefore, I have mostly observed imagination. First, I have noticed the need, and also the consequences of the lack of imagination in education and in scientific research. Secondly, I have examined how in the thinking process, imagination has been applied throughout the history of philosophy. As the radically different terrains of historical periods reveal imagination's adaptation, I have characterized imagination as a tool. I have observed a changing and evolving intentionality in the use of this tool by different philosophers. In addition, I have studied imagination in educating the young. Here, imagination proved its integrative power when it is naturally most active in children and therefore most conducive for learning and for healthy development of the self.

My motivation for this topic is a long-standing interest and a great passion for children's imagination. As an educator and as a parent, I have seen the rise and the gradual decline of this astounding capacity in the development of most children, between four and nine years of age. I wanted to explore what consequences or fruits would arise from this early disposition, and whether imagination holds an important potential for further cognitive development. My approach

to this topic is based on a literature review in the history of philosophy. In the application of imagination in education, I have often have relied on my own experiences as story-teller and teacher, and have found these experiences confirmed in the educational approaches of Egan and Steiner.

Introduction

If one were to ask what young children are best at, one could think of the richness and intensity of sensory experiences unequalled in later life, or of their uncanny ability to sense the truth (or the absence of it) in the words of adults. Yet foremost it must be the power of imagination, whereby inanimate objects become animated in free play and transformed into a magical world by the child's own imagination. And there is hardly anything more captivating for young children than to listen to a story. This can easily be observed in their focused attention and great satisfaction, and the ever repeated wish to hear yet the same story over and over again.

This innate capacity to enliven everything around them appears as if from nowhere at around four years of age, reaches an individual zenith and transforms into a subordinate cognitive faculty with the onset of logical thinking around nine, when childhood proper closes its gates. In this activity, qualities mostly unrelated to sense-bound logic emerge: the transitory, the transformative, the unpredictable and the fantastic. In the development of human intelligence, the capacities of attention and imagination appear first and call the child into intimate participatory involvement with the world in free play and story, ushering her gradually with grace and freedom into self-conscious existence. Aristotle's dictum that "nature never makes anything without a purpose and never leaves out what is necessary" (Smith 597) may also include imagination as a further

developing ability for cognition of world and self. Together with other experiences of childhood imagination may also play a pivotal role in laying a foundation for the rest of life.

PART ONE: IMAGINATION IN TODAY'S CONTEXT

Indicating the Need for Imagination in Education and Science

Many parents are of the opinion that learning to read and write and acquire basic math skills as early as possible will prepare their child for school better than mere play. Such parental concerns and hopes are supported by educators globally who consider the future's need for economic growth as a primary motivation for education: "as the basis of wealth shifts from natural resources and manufacturing to knowledge, achieving higher levels of education becomes increasingly important" (Government of Canada 2). What prompts such forward looking action is a recent decline in student's cognitive abilities, especially literal and verbal skills, and an alarmingly high percentage of students who drop out of high school and/or are deemed illiterate. Worries exist "that the existing education system is not adequately meeting the challenges of the modern complex world" (Government of Canada 2*).*

What further convinces parents and lawmakers to push academic skills in the early years is the abundant neurological and cognitive data, highlighting the tremendous learning a young child can perform. If knowledge and education equal wealth, such cognitive potential therefore should not remain un-utilized and must be harnessed to its fullest degree. Therefore, all children should attend full-time school as early as two years of age, "for optimum brain development in the early years" (McCain and Mustard 1).

In the concern for cognitive achievement, there is also the voice of developmental psychology, which, however, is equally concerned with functional capacities and psychological

skills, rather than knowledge and computational abilities alone. Paradoxically, recent research recommends free uninterrupted play as most essential in early childhood. It outlines relationships between mere child's play and sophisticated mental performance, "noting that there is a growing body of evidence showing a correlation between cognitive competence and high quality pretend play" (Bergen 1). Accordingly, imaginative play is integral to develop many mental and interpersonal abilities, termed executive functions of self-regulation and problem solving, planning and goal setting, to name few. Most important is "the ability to distinguish thought from action" (1), a skill desirable for psychological health. Between ages three and five, imagination, the key factor in pretend play, only fully develops when children apply it repeatedly and daily.

To meet the needs of future generations, therefore, educators must consider interpersonal/emotional intelligence as much as economic wealth and scientific abilities. To fulfill this requirement, I will argue that the development of imaginative capacities is of central importance and essential to augment didactic methods of learning. Imagination is important to the process of whole human development.

Education

Despite such findings, the educational objectives in our culture are dominated by a learning that emphasizes scientific and technological thinking, requiring early education to enhance the analytical mind and instill competitive attitudes. Imagination, the specific skill of children, has been dismissed as less important and frivolous, the opposite of serious work. What this educational approach ignores is the "relationship between imaginative play and specific academic skills" (2) that include among others, capacities of empathy that are essential to "understand others…to be motivated and to act because of feelings, beliefs and fantasies" (Bergen 2). Such

relational faculties become ever more crucial in this time of globalization, competitive market-economy and cultural inter-dependence. Knowledge alone will remain barren without the cultivation of imaginative capacities.

An important cultural institution, the school system is considered responsible for educating and acculturating students through "an instrument called the curriculum" (Egan, Children's x) and a pedagogy that can make learning meaningful. A very crucial point in this pedagogy is the notion of relevance of the subject matter to the student's life. This notion is based upon the Pollard and Triggs "Expanding Horizon Model" (2000) that considers the learning of skills, and the development of knowledge and self-confidence to be built on previous life experiences (Jeffrey 263). This model suggests that teaching/education begins with the familiarity of family, friends, and neighbors, continually expanding to the larger contexts of community, country and the world. While this approach is reasonable and convincing, it nevertheless undermines the child's individual and unique disposition. Kieran Egan, educator and researcher at Simon Fraser University BC, and other educators have observed a very different learning mode in children.

Egan, from his own experience, describes times when children's active engagement in learning is palpable and visible, when, with a little attentiveness, we witness "that youngsters are interested in things …far away from what they know first-hand: Dinosaurs, Mars and the torture instruments of the middle ages" (xi). He argues that the expanding horizon model, prevalent in our school system, undermines what children can understand and how they learn. For him "it is precisely the capacity of young children to exercise their imagination that should be sustained rather than diminished in school" (xi). What then could be more remote from most parents hopes and concerns than the unknowing support of what is described as a "great tragedy of many

educational systems … (with) their penchant for cultivating a logo-centric conception of the mind that diminishes the imaginative and romantic side of nature" (xi).

Another insidious threat to children's imaginative faculty is extended media exposure, especially during the early formative years when imaginative activity proliferates. Already in 1976, B.F. Skinner in his book *About Behaviorism*, warned about children's declining ability to visualize. "Technology has made it easier to see, reinforcing things in their presence and hence has reduced our ability to see them in their absence" (Skinner 59). With the decline of creative imagination and the capacity for visualization, the child begins to favor pre-conceived, stereotype images from visual media that inhibits his or her individualization process. "The child that used to listen to stories or read from books with few or no illustrations in the past, today watches television or reads books with colored pictures on every page, and is therefore much less likely to acquire a repertoire of seeing under the control of a verbal stimuli" (99). There is abundant scientific evidence of the correlation between media and psychological as well as physiological problems. This includes sensory deprivation of the sense of touch for example, and over stimulation of the sense of sight and hearing. Reduced ability in touch and three-dimensional vision and inner visualization has been directly related to a disturbed sense of self. Harvard psychologist Sheila M. Reindl argues that recovery from eating disorders is "recovering the sense of self, and here the word sense is as important as the word self" (Sensing 9).

Science and Research

While scientific research, confluent in didactic discursive thinking and reductionism, has achieved momentous results in the life-enhancing sciences, new challenges of understanding and questioning of current methodologies are also emerging. Contemporary scientific inquiry, founded

almost exclusively on mathematical reason, is being confronted regarding its own foundations. The requirements of separateness and objectivity, fundamental to the mechanistic approach of current scientific research, are violated by the effects of particular areas of quantum physics (Bohm qtd. in Sloan 97). Arthur Zajonc, Physics Professor at Amherst University in Massachusetts, USA, and author of *A Quantum Challenge,* states "the strange thing about quantum mechanics is that you find again and again that the thoughts you bring are not adequate to the effects you are encountering" (2003 Investigating the Space 20). In particular, the position of the scientist is undergoing re-evaluation regarding the long-standing paradigm of objective detachment as opposed to subjective involvement. "We have to cross out this word of observer and replace it with the new word participant" (Wheeler qtd. in Sloan 98). What this concept entails is a new look at the inherited Cartesian method of analysis viewing the world as independent objects reacting upon one another (Phenomenology 1). In the same way that modern technology has shifted cultural attitudes and values, this new paradigm shift argues for a change in the methods of investigation. "The difference is not merely one of conclusion, but of method itself " (Schaefer, Hensel and Brady 138). The historian John Lukacs describes this participatory element or attitude as "the most important fact of our time, the mental intrusion into the structure of events" (Lukacs 9).

The tensions between methods of research, new discoveries and the economic interest of the industries that support this research reveal further concerns. While ethical conduct is often a subordinate concern, some scientists are asking: "How much complexity is being concealed by doing research ... in a limited context?" (Talbot 2). Industries may well favor an economic relevance. What is further hindering a sustained interest and clear ability to make autonomous judgments are half- consciously encountered paradoxes, informed by the media. For example,

scientists have made a recent breakthrough in reproductive technology to manipulate human DNA in order to produce desired behavioral and health dispositions in the embryo. This was recently branded by the *Globe and Mail* as "our next major leap in evolution…will be one that we control" (qtd. in Abrahams). Likewise, in the immediacy of extreme natural disasters (i.e. floods, hurricanes, droughts) and mass demonstrations and violence, politicians, ecologists, doctors and farmers are asking instead: how are we to control this? In education, such issues must be anticipated and fully considered as the background and catalyst for forming capacities and generative abilities in future generations. This requires an act of imagination as well as empathy for what is yet to happen. In *The Ingenuity Gap,* Thomas Homer-Dixon states that "our modern approach to solving problems tends to be rational and analytical. Instead we must call on our uniquely human capacity to integrate emotion and reason" (Homer-Dixon 399).

Einstein and the Human Hand

What is the cognitive and psychological dimension of imagination? Where does it begin? Where does it lead to? Albert Einstein, at sixteen years old, envisioned an impossible situation: "if one runs after a light wave with the velocity equal to light, the light wave should stop." However, noted Einstein, "something like that does not exist" (Zajonc, *Catching* 254). This example of a mental experiment into problems of physics was to become one of Einstein's trademarks, as he often chose to use his mental capacities rather than laboratory and instrumental experimentation to identify and solve problems. This paradox of "running with light would simply not let go of Einstein's imagination" (254).

Such an extraordinary example harbors many of the different phenomena which imagination is associated with. If one could have asked, before Einstein's genius flourished and

was accepted by the world, what mental disposition lay beneath his questions, one might have arrived at the following: is this visionary thinking, or a fancy idea, a creative thought or psychotic hallucination? All of these belong to the wide spectrum of imagination and show us at once how subjective, open and versatile, as well as prone to error, imaginative pondering can be.

Before we look at the ubiquitous nature of imagination, I would like to make an analogy to the human hand. Aside from the skeletal structure, there is the whole compass of the hand's functionality. The human hand can perform multiple tasks; its adaptability grows with practice, from simple reaching and touching of objects in early childhood to the most complex and sensitive handling of tools and instruments. The hand conveys feelings and thoughts in gestures and dramatic expressions in dance and theater. The hand can kill, express love and heal. In all of these capacities, the hand interacts with the world in service of the whole human being, who is a physical, emotional and cognitive entity. Its performance belongs to this larger context. What the hand has to offer is not obvious from studying its anatomy alone; it must first perform an activity before its capabilities can be witnessed.

Similarly, imagination too is a capacity of the entire cognitive human faculty, with multi-facetted abilities and functions. These skills are subject to growth and expansion that increase with practice and use. Just like the hand, imagination needs to be engaged in activity, and through practice may attain skills that transcend mere utilitarian functionality. Both the hand's and imagination's genius lie in the non-specific and open ended gesture, which give it a unique position in the human being's physical and cognitive capacities.

PART TWO: IMAGINATION AND PHILOSOPHY

Imaginative Activity in the History of Philosophy: Intentionality

Imagination is a complex, ubiquitous and evaluative loaded concept. It often appears to have radically different senses and connotations when used in different contexts. Although it plays only a small role in most contemporary theories, it has played a much more prominent role in the past (Imagination 1). As varying interpretations of the word imagination remain in the sub-strata of consciousness, there is always a "compound of residues of various meanings people had in the past" (Egan *Imagination 9*).

What becomes noticeable in all these *various meanings* of imagination is the concept of an evolving mental tool, running a race with the most forward-looking cognitive notions of a particular cultural time. It is as though imagination has been saying, here I am, and I can be exactly what you must now develop. When mythological understanding lost its soul, or its animated picture-consciousness, cognition gradually transitioned to internalized thought. In this movement, imagination's unique cognitive power was relinquished and reduced to mere adornment, exemplified in Bacon's view that "imagination hardly produces science" only a "poesy of pleasure, play, and wit rather than a science" (qtd. in Lethbridge 41). But, in the later period of enlightenment, imagination was revived by thinkers such as Wordsworth to the stature of "reason in her most exalted form" (Wordsworth, 192).

Philosophical Indicators of Imagination: The Intentionality of *Becoming Human*

In the journey of philosophy, imagination itself gives evidence to this rather unspecific cognitive property possessed by human beings. The application and understanding of this innate mental faculty moves through stages of consciousness and intentionality, from an unintentional,

but energetic functioning faculty in mythological culture, to a sheer presence in Aristotle, to deliberate intentionality in Augustine, to free associative, cognitive necessity in Descartes, and to specific, pre-determined function in Kant. Goethe and Steiner develop a new concept in phenomenological science. In modern thought, Sartre, Ryle and Wittgenstein have cleared the concept of imagination of its linguistic clutter and have arrived at "the death of an image" (White 47). While one could allocate the framework of crisis and opportunity to this above new paradigm there may lurk a promise for a new meaning of imagination behind the veil of death of the image.

This historical account articulates how in the philosophical discourse imagination has been applied in the cognitive process. However, it also informs us of a necessary psychological and spiritual point of reference from which any such understanding precipitates. In the ongoing philosophical conversation, what emerges as cognitive agent is the self or the ego, becoming ever more aware of its own existence and therewith necessitating consecutive steps in the advancement of knowledge and development of self.

This first appears in this debate with Descartes in his famous statement: *I think, therefore I am*. It is a remarkable fact and can underscore a view that sees history and child development as related to a recapitulation theory, which demonstrates the "precise, causal connections between past cultural development and present educational development" (Egan, *Children's* 62). It suggests mirroring or repeating certain stages of development, clearly stated in Piaget's stage theory, but without the association to historical phenomena. In light of a modern evolutionary theory, recapitulation is entailed in Darwin's claim that pre-historic embryonic stages are similar to the same embryonic stages of related species. The recapitulation theory of Herbert Spencer follows this thought. It is based on the principle of the same order, which is fruitful for this observation. He argues: "If there be an order in which the human race has mastered

knowledge…in every child is an aptitude to acquire knowledge in the same order" (qtd. in Egan *Romantic* 185). A later example shall clarify this point.

Foremost and clearly recognizable, there appears the ability of self-directed, intentional imaginative thinking in the child, which only becomes possible at a certain age (usually around 9 years) when the awareness of self as subject begins to arise in the child. Compare this with the following historical account of the philosopher Descartes: "Under Descartes' influence we have come to understand ourselves as subjects … Before Descartes, people did not understand themselves as subjects and objects but rather as God's creatures" (Dreyfus 139). Before age nine it is almost impossible to teach perspective drawing to children, as perspective perception requires an intentional act of seeing, a self-directed seeing. And precisely by teaching geometry at this age to children, a reciprocal movement, contained in the word edu-cere *to bring forth*, takes place. While a new cognitive activity is being introduced to the child (which is also always a crisis), her/his self is awakened and drawn out as cognitive agent, through or with an appropriate cognitive activity. With such an intentional imaginative-cognitive learning process, the child's self as subject is, with other and previous processes in early childhood, further integrated and a new step in self-awareness is taken again. It is the opportune moment for the unfolding of a new capacity: causal thinking/reasoning and intentional imagination. Over time, the notion *I think therefore I am* becomes a real experience for the pubescent youngster.

Before Descartes, Augustine's search for God could be correlated with the younger child's ability for active imagination, in what Egan describes as romantic understanding, (this mental/moral disposition in children has been acknowledged and also misused in many major religions) when affective feeling is more prominent than abstraction, Egan's romantic stage of development underscores the child's preference for sensory imbued images. It is philosophically

exemplified by Augustine's inclination for sense bound reasoning, "notice that what Augustine loves and longs for is not something abstract and eternal, but something that has a delicious fragrance" (Dreyfus 115). In the full development of abstract thinking after puberty, the great challenge for the young person is to recognize his or her potential for independence and for freedom. Becoming aware of this human potential in thought and action denotes his/her own status as self-conscious, autonomous subject. It is reflected in Kant's argument: "if we are self- sufficient subjects, then there can be no law about how we should act other than the law we giving to ourselves" (Dreyfus 141).

This possible correlation of the emergence of self in the context of western thought and in the developing child is the underlying reason for investigating the philosophical framework of imagination. The correlation indicates how and why imagination in a child as well as in history is a time-sensitive and important capacity to the extended process of *becoming* human. Self-consciousness and the possibility for freedom are not given at birth, but are specific human capacities that emerge most prominently in a space of crisis and opportunity. In times of major junctions between old and new, imagination must be there to transition the gap.

Early Oral Culture

The mythical properties of oral cultures generally invite sociological rather than philosophical investigation, as the self-reflective, dualistic stance of the *know thy-self* problem of intellectual discourse seems hidden in these stories, if not altogether absent. However, it is important to look at the huge imaginative capacity of these ancient peoples, who laid the ground for later civilizations, and to acknowledge this imaginative activity in the infancy of civilization. In literary accounts of ancient mythology, we find characteristic experiences describing events

beyond the normal or natural, "expressing themselves in the imagery of shape changing deities, talking animals, descents into the underworld and chariot drawn flights through the sky" (Preminger and Brogan 807). Such descriptions defy logical reason and understanding.

Barfield, in his *Poetic Diction,* argues against the notion that mythological content was a deliberate poetic creation as we understand the poetic process today. He disagrees with the 19th century view that language evolved from the naming of things and objects towards more complex structures in expression, from "mere labels for material objects to magical charms" and eventually to "all that we know today as poetry" (qtd. in Amrine 15). Barfield rejects the interpretation that "names of sensible objects, that what we call insensible objects (today) was deliberately metaphorical … thanks to the efforts of forgotten primitive geniuses" (15). He asks the rhetorical question whether the cognitive sophisticated process of writing poetry was due to a "race of super-poets" (15), deliberately using metaphorical images to craft their messages. Barfield rather agrees with Shelley, that language itself was poetry, as Shelley has argued in his *Defense of Poetry:* "it is in the infancy of society that every author is a poet, because language itself is poetry" (qtd. in Amrine 15).

Such an elevated idea about the beginnings of language throws the evolutionary concept of language into the opposite direction. What until recently has been considered intellectual darkness may conversely have been light, language itself being light, but light which has grown dark for the perception. Plato puts it like this: "The mind (reason) begins to see clearly, when the outer eyes grow dim" (qtd. in Zajon *Catching* 12). This would confirm the view of Fred Amrine that meaning, as we understand it in our present day consciousness, is a relatively recent arrival in the history of human consciousness while pre-historic and certain present-day aboriginal consciousness "experience meaning as integral, inextricably woven into phenomenal experience"

(15). Plato's notion of the eye growing dim when reason begins to see reveals something akin to the etymological sense of phenomenon, suggesting that the eye once saw phenomena as "something filled with light (phaos), luminously radiant with meaning." (15). But Amrine laments that today, this has simply become "another dead metaphor" (15).

In 800 BC, the blind Homer sang verses that contained largely verbal formulae embedded in seemingly endless repetitions in metrical hexameter stance. Those distinct techniques of meter and repetition supposedly had a very special effect on the listener, to lull and subdue critical reflection and instead arouse a dreamlike condition," to realize a kind of alternate reality by enchanting the listeners into the world of the story" (Egan, *Children's* 11). In the absence of literacy the oral story, Egan suggests, served the need to stimulate the human capacity for imagination and memorization. The heightened faculty of memory was utilized to apply governing rules of conduct in social life. Easily remembered images, rather than abstract laws, were the mnemonic means to regulate society. What follows from this observation is to assign intentional, imaginative activity to the ancient authors. Their intended poetic will in epics and poems served educational and practical purposes, to regulate societal life and conduct. This reasoning confirms what we have learned from the sociologist Levi Strauss, that the long held notion of the *savage mind* of the primitive was a mental error.

Even though it can be assumed therewith that the enchanting powers of mythological poems belonged to a consciousness similar to ours, one could nevertheless ask whether Homer's "crystalline fixity and formulaic style, and the mobile spontaneity of a personal vision" (Homer) was indeed truly personal and autonomous as this is understood today? Or did Homer's blindness instead constitute a visionary memory that reached back to ancestral deeds and an heroic age, (Zajonc *Catching* 11) to something that we have entirely lost, and even more can hardly imagine?

The ethnologist Levi Bruhl considers such a different view, stating that "I think there is something that we have lost…and with the kind of scientific thinking we cannot regain… but we can try to become aware of their existence and importance" (qtd. in Egan *Children's* 8). While both Aristotle and modern cognitive science link memory and imagination together, the starkly different interpretations of ancient oral teachings and their sources invite further consideration. Arthur Zajonc subtitled his book *Catching the Light* with a telling phrase: *The Entwined History of Light and Mind*. As a quantum physicist, he came to the following conclusion:

> What is the source of poetic light that illuminates Homer's blindness? It is imagination, which is also important to common sight. The light of imagination will occupy us … because of its significance for the ancient world, poetry, and the present world and science. (12)

Furthermore, considering phaos (light) from the etymological view, the original elusive concept of light radiant with meaning, demands something else from our modern consciousness. Egyptian mythology speaks of the eye of Horus or Ra: "Sunlight itself was an emanation of an eye, of the sun-god Ra, neither a substance nor thing … but the power of seeing" (40). If it is possible to think for a moment that for the ancient person phenomena were a participatory experience, infused with light radiating with meaning, phenomena filled with light, it seems possible then, that flying chariots and speaking animals were perceived experiences, meaningful, light-imbued phenomena speaking a language we indeed do not anymore understand. As little as

we understand the fantastic images in fairytales and other folklore, which again are not metaphorical, but truly magical.

Unlike the Greeks, Arthur Zajonc points out, our world-view has become a scientific one and therefore our participatory role in cognition is seen as unimportant. He refers to a study of adults born blind who received operations to restore their eyes' functionality. There was a surprise in store. After the operation, the surgeon Dr. Senden discovered that these patients experienced unforeseen difficulties and obstacles that needed to be overcome in a long, and for most only partial recovery process. The arduous path of learning to see was not involuntarily given, as it is the case in childhood (13). What Zajonc concluded form this is that we "participate in sight … to see, to hear, to be human requires … our ceaseless participation" (13).

This view is supported by Levi Bruhl, who states that ancient people were neither primitive nor didactic, but "governed by the law of participation" (qtd. in Barfield *Saving the* 31). He further suggests a different mode of perception. "Primitives see with the same eyes as ours, but they do not perceive with the same minds" (30). He explains this law further. "The collective representations and interconnections … are governed by the law of participation" (31), which is indicative of a different mode of making meaning and perceiving. Perhaps participatory here also indicates aspects of imitative, which is discernable in the young child's involuntarily, imitative capacity. With the onset of detached observation at a later age, the imitative capacity is lost. This loss ends a unique, pre-logical disposition in the child, not unlike Bruhl's observation that the ancient "the pre-logical mentality is essentially synthetic … the connecting links are given in the representation themselves" (30). A fact which also implies for Barfield a different consciousness: "it is only the prejudice of assuming that our modern split mentality is the only possible structure of consciousness" - an intellectual sin Barfield terms "logomorphism" (qdt. in Amrine 15).

Such a different consciousness suggests foremost a picture experience rather than a thought consciousness. It implies that imaginative activity must have been innate, spontaneous and participatory, for both the singer and the listener. Steiner's investigations of the philosophical discourse, disclosed in his book *Riddles of Philosophy*, support Barfield's view. "In myth, the picture was experienced in such a way that one felt it to be in the external world as reality" (16). For Steiner, picture and reality were united: "One experienced this reality at the same time and was united with it" (16). Becoming aware of what we have lost may render a tool to look at our subsequent philosophical observations. The light that shone in human perception in distant cultures may have grown inward and now shines as rational thought in the history of philosophy.

Aristotle 384-322 B.C.

In the philosophical conversation of imagination, the earliest voice is Aristotle's: … "the soul never thinks without a mental image" (Aristotle *De Anima* 594). This is arguably a completely straightforward statement to which one is drawn back again and again. However, thinking's, or the soul's, dual character immediately appears, as "thinking is different from perceiving, and is held to be part imagination, in part judgment, we must therefore first mark the sphere of imagination and then speak of judgment" (567). Indeed, the evaluative loaded aspect, a trademark of imagination, begins immediately when it is involved with judgment, when sense perception is evaluated with the logical mind. "To imagine is therefore identical with the thinking of exactly the same as what one in the strictest sense perceives. But what we imagine is sometimes false though our contemporaneous judgment about it is true" (588). Aristotle uses the example of the "sun to be a foot in diameter, though we are convinced that it is larger than the inhabited part of the earth" (588). The seeming paradox Aristotle relates to opinion, which is "at once true and

false." It becomes evident how every new perception is asking for re-evaluation in an ongoing dialogue, unless perception remains as perception only, as for instance is the case with young children. An evaluative free aspect must be that "imagination is held to be a movement and to be impossible without sensation, i.e. to occur in beings that are percipient and to have for its content what can be perceived" (587). This movement is value free until "that in which it is found may present various phenomena both active and passive … or either true or false" (587). It seems plausible for our present understanding to associate passive or active with sense perception as to levels of awareness. For example, hearing can be passive or active, either solitarily focused on one sound or mingled with other background noises, in which the one sound becomes obscured and therefore both true and false in evaluative opinion.

Nevertheless, Aristotle trusts the senses: "sensations are always true, while imagination is for the most part false" (587). For Aristotle, sight is the most highly developed sense. The name *phantasia* (imagination) has been formed from phaos (light) because it is not possible to see without light. Even today, amongst all senses, imagination is mostly associated with inner picturing, or visualization. There is no mention of audible imagination, but only of musical inspiration. In Greek culture, the human senses as tools of observation were used then as they are today, but in the absence of technology they were the means of inquiry for knowledge and science.

A supporting constituent for Aristotle's emphasis on sensation is the sense-like component of children's imagination. From this point of reference, it is noteworthy that children's imagination is immediate and spontaneous as sensation is. Between three and five years of age, imagination is stimulated through tactile objects such as toys, and audible content in story and rhyme, but is not intentionally available to them at will. Children are guided by these sense-objects in their imaginative play, not through reflection or intention, but through spontaneous, reactive

involvement, “owing to the easy excitability of feelings, the intensity of experience, and uncritical quality of judgment” (Vygotsky 161). Here, the analogy of imagination to the hand finds a common denominator. For Aristotle imagination being conceived as movement in response or simultaneous to sensation occupies the same fundamental position as the hand performing a reactive movement in response to stimuli.

What is valuable for us in Aristotle’s contemplation is imagination’s undeniable, sheer existence, evoking properties of immediacy in movement and sensation: “if then imagination presents no other features than those enumerated and is what we have described, then imagination must be a movement resulting from an actual exercise of a power of sense” (589). Included in this perception are not only humans but some higher animals as well: “because imagination remains in the organs of sense and resembles sensations, animals in their actions are largely guided by them” (589). The activity itself, regardless of how and what is moved, becomes the shared accord, making a strong claim for imagination to be an involuntary capacity at this point in history. Nevertheless, our understanding is challenged by Aristotle’s association of imagination with outer perception, i.e. the senses, and especially by his assertion that animals are guided by them, which is so different from what we now consider imagination to be, namely a distinctly inner faculty. The definition of imagination today, as it appears in the Encyclopedia of American Philosophy, is defined as “The capacity of internal visualization, concept creation and manipulation not directly dependent upon sensation” (Devitt 1). And it is from this view that Aristotle’s imagination is interpreted in contemporary cognitive theory as mental representation. This suggests that the Greeks had a similar relationship to thinking as we have today. However, it is easier to understand Aristotle’s claim that imagination is a movement resulting from the power of a sense if the following is considered: “for the Greek thinkers, thought is experienced as a perception” (Steiner

Riddles 69), as thought perceived in nature. Seen in this light, imagination as a cognitive capacity is involuntary and unintentional during pre-Christian times.

Saint Augustine 354-430 A.D.

Until this point, the capacity of imagination has been observed to be part of the involuntary perceptive-cognitive process. To allow another potentiality of imagination to arise will require an additional attribute to emerge within the thinking mind. In the centuries that follow, "the inner experience of thought is enlivened by a force that enters spiritual evolution as a powerful impulse. The energy of thought as it awakened in Greece is outshone by this power" (Steiner *Riddles* 69). For Aristotle it holds true that if imagination turns towards thinking or opinion, a dilemma is created for the judging mind, to decide "what is white is this or that" (Aristotle 589), and such judgment therefore can be both false and true. Now, another fundamentally human disposition is spoken to. Thinking's position is shifting towards psychic phenomena, which provides the thrust for imagination to occupy a key role in cognition. While the observation of sense phenomena continues, the image building capacity finds a new and intentional position in the inner world. Judgment is not only implicated in what is true or false, but judgment in service of moral reasoning is observant of the predicament of good and evil in human behavior and thought.

In the third century, Augustine's life provides the case in point, as his cognitive search moves towards inner experiences that are judged through the filter of moral reasoning: "But I ought not to allow my mind to be paralyzed by the gratification of my senses, which often leads it away" (Augustine *Confessions* 238). With the advent of Christianity and religious faith, philosophy becomes a question of theosophy and religion, of finding God within. The engaging drama of the lives of gods and heroes in ancient peoples' polytheism, so vividly experienced in

education, art and theater, came to an end and was replaced by the Christian Trinity, taught as a dogma of faith and revelation. The dilemma between the experiences of the sense world and moral reasoning bring about a new dimension of imagination, seen by Augustine as a triadic structure. In his book *Augustine Through the Ages* Fitzgerald clarifies this view: "Corporeal vision (sense) comprises the object seen, the intention to look at it, and the act of seeing it. Spiritual vision (imagination) comprises the memory image, the will to recall it, and the act of holding it before the mind. Intellectual vision (intellect) comprises memory of the intelligible form, the will to attend it and the intelligible considerations to it" (442).

A substantial power is given to the senses by Augustine, "for the senses are not content to take second place … they attempt to take precedence and forge ahead of it, with the result that I sometimes sin in this way but am not aware of it until later" (Augustine *Conf* 238). The inner riches and pleasures derived from sense-experiences are judged, because reflective thinking is aware that "all these sensations are retained in the great storehouse of memory" (215). Contemplating the "immeasurable sanctuary" of memory, where those "vast images are stored" (215), the mind's capacity is overwhelming, its depths and widths inexhaustible. Augustine resigns himself to: "I cannot understand all that I am. This means that the mind is too narrow to contain itself entirely" (216). Yet, Augustine, as everyone after him, puzzles over how outer sense perception appear as images in the mind:

> Men go out and gaze in astonishment at high mountains, the huge wave, and the sea, the ocean that encircles the world or the stars in their courses when I saw them with the sight of my eyes. I did not draw them bodily into

> myself. They are not inside me, but only their images. And I know which of my senses imprinted each image in my mind. (216)

Augustine makes a clear distinction between images obtained by sense perception and the physical "facts which they represent" (217). These facts he describes as "having not reached him through any of his bodily senses" (217), but he deducts these facts from the characteristics of the sense organs: "my nose says 'if they have any smell, it was me that they passed into my mind" (217). But how do they enter the mind? While Aristotle's thoughts shone with brilliant clarity even in the paradoxes, a melancholic longing reverberates in Augustine's tone. The former perceived light, experienced as thought in nature, is clouded by the new subjectivity of sense perception. As he personifies the senses, for example - my nose says- the former light of perception is darkened. And Augustine asks, where do the facts or thoughts about outer perceptions come from? Today, facts about nature are cognized in active and detached thinking, which was not yet possible for Augustine. It would be reasonable to suggest that he intuits the fading memory of mythological consciousness, and he concludes that they (the facts) must have been there, "even before I learned them…it must have been that they were already in my memory, hidden away in its deeper recesses … if the other person had not brought them to the fore" (218). To recognize facts for Augustine is a recall of memory, attained by "simply a process of thought by which we gather things together" (218). This great investigation into memory includes abstract facts such as measurement, but also all the emotions, including memory itself. "Can it be that memory is not present to itself in its own right but only by means of an image of itself" (222).In the simple process of gathering thought he may also have fathomed the loss of a former living presence in memory. Yet he also recognizes in this memory the new inner world of *only images.*

The image character of thinking, rather than the thoughts perceived in nature, places the capacity of imagination into a different relationship to thinking. While for Aristotle imagination pertains to a movement with the power of a sense, Augustine ponders how images appear on the inner horizon, either as images obtained from sense perception or as facts obtained from memory, but he finds no satisfying answer. Because he strongly experiences the sense-world as temptation, over-shadowing the inquiry of sense perceived-knowledge, he retreats to inner affairs of the soul. It is here that he also searches for God. For Augustine, God is neither memory nor image, but a realm unto itself: "where then did I find you …unless it was in yourself, above me" (231).

Therefore, beyond all this, on the other side of sense perception and memory, lies "the truth: for you I sought counsel upon all these things, asking whether they were, what they were and how they were to be valued" (249). Augustine elevates the truth into the realm of pure abstraction: "for in my wounded heart I saw your splendor and it dazzled me. I asked: who can come close to such glory?" (249). In the image building faculty of cognition, recognized by Augustine as the triadic structure of corporeal vision, sprit vision and intellectual vision, we find a volitional approach to the application of imagination in the thinking mind. However, great force is residing in the power of imagination for Augustine, as he aspires to assuage the abyss between sense-world and spirit-world, and as such consciously directs and expands imagination's power into a voluntary tool. Fitzgerald beautifully describes this:

> Augustine's masterful use of images constitutes a sophisticated appeal to the imagination. The associative power of metaphor, etymology and homonymy expands the force of images, words, and sounds as signs that point beyond themselves to intelligible reality. Augustine coaxes the soul

> toward intellectual vision. Imagination produces the image; intellect sees the truth in similarity and so partakes what might be called aesthetic or poetic knowledge, highlighting aspects of reality that are not amenable to univocal articulation. (442).

Descartes 1596-1650

The paradoxical situation whereby sense reality and inner reasoning conflict, and aspects of reality are not amenable to univocal articulation, become an existential problem for Descartes, who rejects as evident what is perceived by the senses. With a deliberately systematic approach, he takes a stand towards sense perceived phenomena and superimposes a self-willed condition on himself:

> Because our senses sometimes deceive us, I wished to suppose that nothing is just as they cause us to imagine it to be … I rejected as false all the reasons formerly accepted by me as demonstrations … I resolved to assume that everything that ever entered into my mind was no more true than the illusions of my dream. (101)

In Descartes' search for knowledge, a new impetus directed thinking's attention away from the sense world, away from the duality of sensation and thought, away from memory, in which he could not find a secure footing. In the exploration of doubt towards all sense perceived

information, he "searched after truth" (101). Thereby he employed imagination for a very specific use, "to reject as absolutely false everything as to which I could imagine the least ground of doubt, in order to see if afterwards there remained anything in my belief that was entirely certain" (101). Imagination for him was an available tool with which he could contemplate himself. "I did not stop to consider what the soul was, or if I did stop, I imagined that it was something extremely rare and subtle like the wind" (151). He also stresses the contraptions of imagination: "And indeed the very term feign in imagination proves to me my error … since to imagine is nothing else than to contemplate the figure or image of a corporal thing" (152).

Descartes' attention is more and more directed towards his own inner thought-activity, where he finds an anchoring point in the high tide of subjective reasoning. Thinking itself becomes an existential experience, not the thought content that could be doubted: "but I already know that I am, and that it may be that all these images … are nothing but dreams" (152). Affirming this new awareness, Descartes, in an exercise, observes himself in the ongoing mental activity of perceiving, imagining and doubting the existence of a piece of wax, for example (155). Thereby he recognizes the limits of his own imagination, which proves deficient in cognizing a simple piece of wax as a complete entity, a total concept. But simultaneously he experiences himself, knowing that I am. This immediate awareness of self, activated by and through mental activity, seems to hold a piece of unshakable existence for Descartes, from which he observes the different cognitive processes. He claims a mental perspective, from which neither the sense of vision nor touch nor imagination itself can bring about understanding, except *by the mind,* which he terms intuition. "But what is this piece of wax which cannot be understood excepting by the mind?" (155). However, the foregoing mental exercise affirms to him that even intuition only qualifies as the result of all the foregoing activities, either "imperfect or confused or clear and

distinct, according as my attention is more or less directed to the elements which are found in it, of which it is composed" (155). Descartes sees an implicit continuity from the experiences of the sense world to what is described as intuitive understanding. As much as imagination or the imagined content can be doubted, it does nevertheless conform to cognition, and to cognition of himself, "so if I judge that the wax exists from the fact that I touch it … that my imagination, or whatever it is, persuades me that the wax exists … to wit that I am" (156).

In Descartes, we witness the great observer of the mental processes, bringing awareness to all that belongs to the mind. The English philosopher of education, morality and existentialism, Mary Warnock confesses that Descartes brought "the content of our consciousness" (*Imagination* 13) into focus. And what appears at once, and beyond all doubt is that the observer of the content of consciousness is at the same time also the agent of consciousness. Descartes ties imagination to the realm where it can be observed as a cognitive performance, prone to error as all other mental performances, but also to be used as a tool for rational thinking. From his own reasoning, anchored in the autonomous self, he deduces the existence of God, "… and thus since I am a thinking thing and possess an idea of God within me … it must be allowed that it is likewise a thinking thing and that it possesses in itself the idea of all the perfections which I attribute to God" (Descartes 109). What plays itself out on the purely mental plane is inner thought-activity, of which imagination is a part, and the self as agent and observer of this activity. For Descartes, imagination is an inner, voluntary, cognitive activity, utilized in what the mind creates as content of consciousness. "Descartes had taught that what I perceive is my own ideas" (Warnock 13). The debate about imagination continues into further centuries. Whether this autonomous self, active in imagination, is a thought, a memory or an intuition becomes the subject of a new generation of thinkers.

Immanuel Kant 1724-1797

With Kant, the power of the individual self arrived in thinking, creating its own mental universe in independent thought and judgment. The empirical realism of Kant's philosophy entails a revolutionary axiom: "the order and regularity in the appearances, we ourselves introduce. We could never find them in appearances, had not we … set them there (Kant A126). This distinct philosophical claim portrays an individualized theory of knowledge in which the conditions for knowledge are superimposed by Kant: "what the mind must be like and what capacities and structures it must have" (Stanford Encyclopedia *Kant's View)*.

However, it is often stated that the complexity of Kant's work is not without contradictory and/or confusing statements. (Kant's View) Since in this very short and philosophically unqualified view I only wish to draw some attention to Kant's contributions on imagination and the self, I will only reference his first work, *The Critique Of Pure Reason,* for both topics. Within the great power of human reasoning, Kant assigns to imagination the purely functional task of a "blind but indispensible function of the soul" (Kant A78-B103). Its wings clipped, imagination no longer soars into metaphysical heights to find God, or plunges into the depth of doubt to find the self. It now spans a horizontal path from the perceptual datum of apprehension in intuition, to reproductive imagination in concept building, and hidden from our self remains (as before) the prevailing force which carries all sense-derived perception into "a priori productive synthesis." But before we venture into Kant's reproductive imagination, I would like to shortly expound the forgoing question about self.

The certainty of the Cartesian ego is negated by Kant's argument that thinking does not infer existence, that thinking simply produces understanding, but not existence. "My existence cannot, therefore, be regarded as an inference from the proposition *I think,* as Descartes thought to

contend" (B423). For Kant, Descartes' existential certainty as a thinking entity is conflicted with dualistic, interpretive properties which escape a firm foothold in his reasoning mind: "How the I that thinks can be distinct from the I that intuits itself … and yet can be identical with the latter" (B158). Descartes never made this distinction between the thinking and the intuiting I. As Kant's reasoning alone cannot grasp the essential nature of the I, it is reduced, by Kant, to an "existence of appearance" (B158). "I, as intelligence and thinking subject, know myself as an object that is thought…and yet know myself, like other phenomena, only as I appear to myself, not as I am to the understanding" (B155). Nevertheless, the dilemma of the individual I proceeds further for Kant, as dualistic notions lead to ever more "questions that raise no greater difficulty than how can I be an object to myself… and an object of intuition (B155).

This questioning mode in Kant's philosophy exhibits the manifold positions he considers and argues from, and from which logical thinking determines the functionality of such positions. However, it is the thinking I that gave rise to Descartes' claim: *I think, therefore I am*. This same property is claimed by Kant as pure *apperception of a priori proposition*. In any context, it means certain knowledge is independent of experience: "He held that some features of the mind and its knowledge had a priori origins, i.e. must be in the mind prior to experience" (Stanford Encyclopedia of Philosophy 3). The *a priori apperception* of the principal awareness of self therefore is perceived unlike any other sense perceived phenomena: the "Man, who knows the rest of nature solely through the senses, knows himself through pure apperception; and this, indeed, in acts of inner determination which he cannot regard as impressions of the sense" (Kant A546-B74).

Nevertheless, are these acts of inner determination, if determined as such, not consequences of reflective thinking, which in itself is appearance rather than existence? Kant seems to accept the limits of his own reasoning and infers descriptors other than just existence to

the self-conscious I: “I require something permanent, which, so far as I think myself, it is quite impossible to determine the manner in which I exist, whether it be as substance or as accident” (B420). His hope for permanence is extinguished in the fatalism of the following argument: “thus, if materialism is disqualified from explaining my existence, spiritualism is equally incapable of doing so” (B420). For Kant, the uniqueness of the I, unable to be penetrated as object of reason, is apparent phenomena, and without the grandeur of the Cartesian ego it is empty appearance: “without noting in it any quality whatsoever - in fact without knowing anything of it either by direct acquaintance or otherwise” (A335).

For Kant, the self-conscious I is neither a thought, nor an imagination, nor a memory, but an appearance like other phenomena, which nevertheless denotes a property distinct from other appearances. This reference to self will become a discussion in imagination and education and I would like to further note Kant’s treatment of the properties of self: “it must always be taken as merely subjective condition of knowledge. We have no right to transform it into a condition of the possibility of knowledge of objects, which is a concept of thinking being in general. For we are not in the position to represent such a being to ourselves” (A355). His assertion of not being in a position to represent such a being to ourselves does not negate the possibility of it being attainable at all, rather that the position- we have no rights- itself negates the presentation. However, what is suggestive of existentialism in Descartes’ view is the “subjective unity of the I that can never be divided or distributed” (A354). It foregoes the duality of appearance and thinking, and as a priori statement no one else can ever claim except the subject himself.

Kant's view on imagination

The ongoing question of how outer perception makes the transition to appear as inner thought content is also a problem for Kant. He leaves nature's working and nature's laws to itself. For him, in the framework of reason, "nature should direct itself according to our subjective ground of apperception" (A114). What makes the understanding of nature is conceivable as a purely mental exercise, since … "Nature is merely an aggregate of appearances, we can discover only in the radical faculty of all our knowledge" (A119). In this mental isolation, nature is seen as merely aggregate. He claims, "We should not know of any source which could obtain a unity of nature" (A114). Yet nature continues to claim attention from human beings, in her persistent urge to be understood. It is notable how Kant constructs the above-mentioned transition to take place. He chooses to ascertain that representations or perceptions "in accordance with a fixed rule, bring about a transition of the mind to another" (A101). He calls this transition a law of reproduction, taking place in conformity to certain rules "for otherwise they would yield no knowledge" (A101). It is therefore a faculty of the mind, *a priory ground,* that is lawfully assigned to perform this transitional task he calls imagination. "Otherwise, our empirical imagination would never find opportunity for exercise appropriate to its powers and so would remain concealed within the mind, to us as a dead and unknown faculty" (A100). He explains how this power of imagination is placed in the acquisition of knowledge:

In *The Deduction Of the Pure Concepts Of Understanding* (section 2)*,* Kant proposes that subjective forces form the basis for experience to unfold. Amongst several of such forces for example are "receptivity combined with spontaneity" (Kant B130). They provide a corresponding pair to lay the ground for experience. He further contends that knowledge is given in an ascending triad, (note Augustine's triadic vision of imagination versus Kant's triadic structure of knowledge)

whereby *reproductive imagination* lies in the middle between the first step of *apprehension of representations* and the third step of forming a *concept in recognition*. In this well organized structure imagination is limited and reduced to a reproductive function: It is the ground of a threefold synthesis which must necessarily be found in all knowledge, namely the apprehension of representations as modifications of the mind in intuition, their reproduction in imagination and their recognition in a concept. These point to three subjective sources of knowledge that make possible the understanding itself, and consequently all experience as its empirical product (Kant A97).

In the sequence of the above steps, for knowledge to occur, imagination becomes the "active faculty" (A120) to take hold of appearances for the "synthesis of the manifold" which he terms "reproductive imagination" (A121). Kant describes in great detail and compositional tenure the different layers and pre-conditions of this active faculty, but this is beyond the aim of this paper. What becomes more important is his epistemology, containing a unity of schematized properties, but without a door to exit: "That the appearances … and in turn their reproduction according to laws … should be possible by means of this transcendental function of the imagination, is indeed strange, but it is nonetheless an obvious consequence of the argument itself" (A123).

In the framework of Kant's philosophy, so dedicated to the rule-governed mind and to consequential argumentation, imagination enters a new dictum, a purely functional activity, within a self-inscribed system, as a dutiful performer. Perhaps the sense of strangeness Kant ascribes to his epistemology on imagination is indicative of the yet unrecognized power in imagination that will only surface in later thinkers.

Johann Wolfgang von Goethe 1749- 1832

In the introduction to this paper, the faculty of imagination was compared to the manifold capacities of the human hand. Endowed with complex neurological and joint-mobility properties, the hand is a remarkable tool. For example, the acquisition of precise, fast movements such as those required for violin playing demands years of repetitive practice and complex hand/finger functioning. The result is a constantly developing dexterity, but also an immediate responsiveness of the entire hand/finger organism to the player's intentions, of the same kind as an organ of perception is to a stimulus response process. What the hand perceives, however, is not sense-appearance, but the player's mental signals, acquired through practice. In this execution, the hand's potential is enhanced beyond its normal functions. The tactile/perceptive activity of the hand unites with the player's imagination of the music. An intense collaboration unfolds between two polarities, head and hand, and the creative process unfolds in the heart of the listeners.

But such capacity is only latent in the human hand, to unfold and sustain this faculty necessitates constant practice; it is neither permanent nor retrievable as other, simpler movements are. In Goethe, we find such a tireless practitioner, who trained his powers of observation and imagination until he could read in the book of nature. In 1786, in a letter to Charlotte von Stein on his Italian journey, he describes his progress: "How readable the book of nature has become to me. My long efforts at deciphering letter by letter have helped me, now it is having its effect and my quiet joy is inexpressible" (Miller *The Metamorphoses*). Goethe's world-view is diametrically opposed to Kant. His epistemology rests on contemplation that requires imagination, disciplined and rational, but extended to a higher seeing, a higher understanding: "properly speaking, we do not merely believe in divine freedom, god, virtue, but we really see them … in the processes of

manifestation, this very seeing is knowing, and a higher form of knowing" (Steiner *Riddles of Philosophy* 144).

This very seeing he obtained through tireless study of botany in Italy, not in a laboratory or classroom, but in nature herself. His methodical approach included detailed observation of the entire cycle of life and decay of a plant. This would allow him to envision each step in successive order, extended in both directions, from seed to seed and vica-versa. Therewith, he gained a kind of inner participation with the plants growth, which is not observable in the visible, formed appearances of leaves, blossom or seeds, in a single look. He further imagined the invisible steps between the appearances. "To experience this transformation …we can replay it in our minds eye" (Ebach 259). However, seeing this transformation or metamorphosis of the plant in the minds eye is limited to perception.

A further step for Goethe is an intuited perception, in German an *Anschaung*. He ascended to an understanding of the formative forces, active in the invisible relationships between successive steps by experiencing the phenomena intimately and repeatedly. Amrine points out how Goethe seeks the otherwise hidden creative force of nature's workings, beginning with unity of the whole. "Goethe seeks to transcend empirical facts by ascending from *natura-naturata* to their creative source in *natura-naturans*. The latter can not be grasped discursively; rather it must be intuited, perceived through the minds eye, in a kind of *inner empiricism*" (Amrine 5). Knowledge for Goethe was intimately related to experience. To him "knowledge *is* our experience, an activity of our sensing mind" (qtd.in Ebach 254). Imagining played a most decisive part in the first steps of seeing the lifecycle of a plant in the minds eye, but it evolved so to say to a higher seeing, whereby "the conception on which Goethe based his contemplations on plant and animal formations were sensual – supersensible pictures, created by spontaneous imagination"

(Steiner *Riddles* 143). Goethe, in a conversation with the poet Schiller, claimed to see the *archetype*, the entire idea of the plant, in his imagination. To Schiller's reply that this was only an idea, Goethe answered: *I see ideas in my mind.* What he supposedly saw were "the powers that weave creatively through the world … and in order to render this imperceptible thought - life inwardly visible, it nevertheless must be filled with imagination" (140). It is here that imagination is not only reproductive, but productive, creating a visible idea. In Goethe's delicate empiricism, imagination shows a new face, a new capacity, making visible an entire supra sensible idea.

Sartre, Ryle, and Wittgenstein

After Goethe's inner empiricism and Steiner's philosophical work *Thinking as Spiritual Activity* (discussed under Waldorf Education) come the discussions of the three most prominent twentieth century thinkers: Jean Paul Sartre, Gilbert Ryle and Ludwig Wittgenstein. In his book *The Language of Imagination*, Alan R. White conspicuously titles his discussions of their claims as "The Death of the Image" (White B47). They are earmarked for their "negative attack on the image as a mental entity" (47), but also by its replacement by a "positive new theory of what it is to have an image of something" (47). Their observations focus on the understanding of what it means to see a mental image. This implies how our habitual interpretation of imagining something relates linguistically, but not only linguistically, to sensory phenomena. For example: we use seeing, smelling or hearing in our head as belonging to imagining something, which is idiomatically transferred as "picturing or having an image of something, and is a mental activity which can be seen with the mind's eye" (48). While they are not denying the existence of imagery and/or visualizing or pictorial activity, they do disagree that the mental activity of having a picture

or imagining something can be seen in the same manner as a sense-perceptible object is seen or heard:

> This view however is stigmatized by Sartre as the illusion of immanence Caricatured by Ryle as part of the myth of the ghost in the machine, and dismissed by Wittgenstein in German: *Eine Vorstellung ist kein Bild*, which may be roughly translated as imagination is not a picture. (48)

Furthermore, what psychologists call the "ambiguous figures" of seeing an animal in the clouds for example, is generally claimed as "seeing in imagination" (50). But Ryle, Wittgenstein, and Sartre all argue that this is a "form of thinking, in none of these cases can we see something without knowing what we see" (50). It seems to be a question of equalizing inner and outer seeing, of transferring a sensory derived activity to an inner mental sphere, where no such sensory organs exist. The difference between sensory sounds and sights and imagined sounds and sights is not a matter "of degree. They cannot compete with each other and do not occupy the same space" (48). All three agree on the discussed variance of inner and outer seeing, but they differ in their replacement theory of what imagining or seeing in imagination really is. To enter a full discussion would extend the aim of this short overview, but an indication of the main points shall suffice.

Wittgenstein is mostly concerned with how a concept is determined by language and not with constructing his own understanding of a concept. "Imagination is not to be decided by a description of any process but by an examination of how the word imagination is used" (51). He further elaborates this point by distinguishing between observing the concept situational in the

present, or rather circumstantially, which would include the past and the future in which the word is used either as *antecedent and subsequent* (50). He argues that imagining something is an intentional act and supports his claim with an instance of drawing a picture of someone: "stressing that such images are normally subject to our will, their coming and going does not surprise us" (70). He draws the conclusion that "what we imagine is what we intended to imagine. Hence, imagining does not give us any knowledge of the external world" (70).

Sartre looks at imagination in the studies of phenomenological psychology (Sartre, *The Psychology of Imagination*) and gains his insights from considering imagination to be "a consciousness capable of imagining" (250). Most significant in his discussion is the aspect of freedom, but it is "the whole consciousness realizing its freedom," and imagination is the helping hand in this process, acting as a "psychological and empirical function" (250)**.** In an awareness of nothingness, but where something, namely imagination, is in the position of positing the "human reality" (270), imagination is staged in between the "nothingness of the world and in relation to which the world is nothing" (270). For Sartre, imagination is instrumental in the awareness of belonging to the real and denying the real, aware of an inner space in which imagination unfolds. "For the centaur to emerge as unreal the world must be grasped as a world, where the centaur is not" (268). White calls this a double negative act: "of denying that the object of imagination belongs to the real and of denying the real in relation to the object." Sartre's theory is less concerned with seeing' or not *seeing* with the mind's eye, but he ties imagination as evaluative and integral phenomena to the whole consciousness: "to be an essential and transcendental condition of consciousness" (273).

Gilbert Ryle's contribution on imagination is mainly concerned with rejecting sense bound attributions, i.e. seeing or hearing something in one's mind to define imagining or picturing an

inner activity. His positive view includes an *analysis of visualizing*, of which imagination or imagining is a part of a "larger variety of make believe or pretending" (White 62). The discoveries of the above philosophers point to a junction in human experience. The former vividness of inner picturing intensified by palpable sense-derived feelings seems to disappear from inner experiences. How the world in their mind is now perceived assumes a sense of loss, but also of new freedom. The light of reason and love for truth of which Plato spoke, in the modern approach seems more a mechanical dissection of individually refracted light beams, lacking the human warmth of the former philosophers' pursuit. If the death of the mental image is related to the death of sensory derived qualities in imagination, between perception and thinking, is at the same time the open and empty space for new developments to come about. It seems here that Goethe's practice of participatory observation of nature's processes would re-enliven sensory derived images and therefore redirect imagination. Or the death of the image may be a place where a mechanized concept of imagination awaits new meaning.

Evolutionary Concepts in Modern Thought

To apply the evolutionary perspective of imagination to the account of modern philosophy poses some need for investigation. The sociologist Claude Levi Strauss, in his book *The Savage Mind* (1966) speaks about the paradox that exists in understanding how Neolithic culture gained the skills and "mastery of the great arts of civilization" (13). He rejects the still-existing paradigm that "magical thought is a stuttering form of science" (15) that would evolve, but was inspired by the "same spirit as that of our own time" (15). But neither, he claims, could any advances of the civilizing activities in the domestication of animals, husbandry and crafts have been made as the result of a "fortuitous accumulation of a series of chance discoveries … revealed by passive

perception of natural phenomena" (13). He overcomes the dialectic divide by seeing mythological thought and contemporary science as not linked to evolution, but as 'two parallel modes of acquiring knowledge" (13). However, even as he warns against contrasting magic and science because "results differ in value," he claims that both science and magical thought still have a commonality. Both are cognitive processes, employed in the scientific mode of observation and reduction and fueled by the desire to gain knowledge. To transform nature's raw material into cultivated, useful products "required a genuinely scientific attitude, centuries of active methodical observation and bold hypotheses" (14), albeit pre-determined by outer circumstances and influences. The needs of a particular culture will therefore "require the same sort of mental operations and they differ not so much in kind as in the different types of phenomena to which they are applied" (13). Levi Strauss rejects any association with "stages of development to the human mind but rather of two strategic levels at which nature is accessible to scientific inquiry" (15).

John Macmurray, in his book *The Self as Agent,* takes a slightly different view. He objects to the "dominant influence of science to conceive the world as a single process" (Macmurray 218). In this context, the notion of single process can be evolutionary as "biological process" or "mathematically as material processes of events obeying physical laws" (218). What is missing in this single process conception, Macmurray argues, is the inclusion of human action, for "if the world is a unitary process, it must be a world in which nothing is ever done" (219). It would be a world of predetermined processes, in which the human being would gain knowledge, but in which "everything simply happens and nothing is ever intended" (219). For Macmurray and Levi Strauss, evolutionary views of the evolving human, for human potential *becoming* more human, are problematic. Both point to changing circumstances, either as scientific inquiry or as the self in

action, as the modus agenda for changes in history, rather than observing developments in the human himself integral to outer changes.

PART THREE

Imagination in Education

The acculturation process of education is predisposed and aided by two major dispositions in young children: brain plasticity and imagination. While educational law-makers are preoccupied with harnessing the tremendous early learning capacity in children, they are less inclined to appreciate and foster the other, equally impressive disposition of their imagination. In the acquisition of knowledge, linked to brain plasticity, one cornerstone is facts and information, which can be easily tested and accounted for. In themselves however, they are emptied of active pictorial content and feeling intelligence, which are a child's natural capacities. As pure facts, they are isolated abstractions of the whole phenomena, and they have a tendency to remain static and un-inspiring, since a relational basis to such facts is absent. The other cornerstone, linked to imaginative activity, is the developing child as a slowly awakening, self-conscious, individual person. The child's consciousness undergoes stages of awareness: from mythical one-ness to participatory imaginative consciousness, to abstract dualistic intellectual consciousness after puberty. In this differentiated time organism, teaching and learning must be reflected in an educational environment that allows information to be embedded within the child's inner capacities of each particular stage.

Particularly important in this context is the story as educational tool for early childhood and grade school, with its rich imaginative content and a beginning, middle and an end. While all knowledge is the achievement of the human spirit, a relational component to knowledge is established by putting a particular human being in the center of the story. A story requires imaginative capacities to follow the course of action, the plot and the failure and success of a particular character.

Another relational tool is the whole range of moral qualities, or binary concepts, which address the child's innate sense of fairness. These moral qualities appear as enlivened figures in fairytales and fables, and fill the child's imagination with awe and wonder. Such imaginations remain alive as a kind of moral compass, of navigating their way into the strengths and weaknesses of human behavior. They give the child a sense of security and trust in the world. This at ones clarifies why it is especially beneficial if these figures are not seen in picture books, but enlivened by the child's own capacity of picture making and feeling intelligence. What the child produces in her own imagination is far less frightening and oppressive than the often rather excessive illustrations in picture books. As imagination will grow into the faculty of abstract thinking, its enlivening feeling intelligence and ever transforming capacity will remain in the human consciousness as habits of thinking. Such thinking can grow into a metamorphosing understanding of knowledge and of ethical human behavior, and as such can adjust to the demands of a particular time and its needs. Two educators have taken up imagination as an educational tool. While Egan is mostly concerned with successful learning, Steiner is more adamant about a cultural shift and its new demands for an enlivened, spiritualized thinking. Their methods and underlying reasons will be outlined in a comparative investigation of the literature and practical approaches.

An Educational Model: Kieran Egan

Behind any educational treatise stands a history of human values, human strivings and human thinking that have shaped and influenced educational goals. Take for example the values of goodness, beauty and truth of ancient Greek education or Rousseau's guidance of nature's developmental principal. These ideals came to the fore at a particular time in history, yet they still act as guiding principles in the educational process today. An educator's imagination may be interested in the still unrealized potential of such ideas and reflect how they fit into the daily practice of education. As education is more an art than a science, *edu-cere*, from the Greek *to lead out*, teaching necessarily must bring forth or awaken the individual self to generate what already lives in the unrealized potential in the young. For this to happen, educational ideals are important to fire enthusiasm for the ever-present challenge of teaching.

Kieran Egan's imaginative teaching concept inspires for many reasons. But first of all, he points to the incompatibility of the three basics of our educational heritage: mythical socialization, Plato's reasoning skills of *The Republic* and Rousseau's 18th century internal developmental processes, which incidentally also follow a historical sequence. But for Egan, Plato's idea of what to teach and Rousseau's idea of how to teach are strongly incompatible, as they conflict and undermine each other by virtue of each requiring a different educational approach. An investigation of Rousseau's methodological approach and Plato's curriculum orientation reveal an overlooked, persistently lingering problem: "In the platonic idea learning particular forms of knowledge carries the educational process forwards; knowledge drives development" (Egan *The Educated Mind* 20). This allows the learning process to be cumulative and unfold in time. Seemingly supportive to this stands Rousseau's idea for educators to consider psychological-developmental stages, which happen at certain ages. "Education results from an internal,

developmental process unfolding within a supportive environment: development drives knowledge" (20). At first sight they appear perfectly compatible.

In practice, however, Rousseau's argument means a prohibition of teaching young children abstract concepts of history or geography for example, because children are not developmentally ready or equipped to comprehend them. This interferes with the need for early solid academic learning, which today is confirmed by our experience of children's enormous learning capacities and the conviction that children can learn anything. Thus we see the conflict between *traditionalists* who favor solid academic basics and *progressivists* concern for "relevance for students' own discoveries and space for exploration" (20). Seen in this context, this means either jeopardizing the development of a psychologically confident student body, or relinquishing the hope of academic excellence. As schools tend to implement both concepts because both are educationally important, the result is an eroding validation of either one and a weakening of the entire education system.

Added to this conflict between academics and developmental relevance is the need for socialization, for children to become integrated and responsible members of adult society's values and strivings. But what if a society does not always carry the best interests of children? Today's consumer exploitation of early learning capacities on the one side and the need for imaginative content of children themselves is confusingly manipulated by anti-educational, aggressive commercial forces. Here Egan strongly points to the attraction of Rousseau's idea of a development that is cautious to observe what happens in a society, and asks that educators "honor something within each individual, something uninfected by the compromises, corruptions and constrictions that social life brings" (21). There seems no real solution to this dilemma as "we can't sensibly aim to shape a child's development half from nature and half from society" (21).

Egan does not accept any compromises that would soothe concerns about this dilemma. He negates that this is just a disagreement experienced in a pluralistic society one must accept, or that children are *indeterminately plastic* and must become socialized, as it is part of our human nature to be a social animal (20). Egan draws a harsh conclusion:

> The traditional social efficiency, liberal academic and progressive proposals have been tried again and again, continuing to wobble from one to another will only exacerbate the confusion about school's roles and perpetuate the blaming and the now futile and stale arguments about how to make things better. (24)

Egan augments a brilliant methodical way by reconceiving what education in post-modern societies must shed of old, inherited goods, and what it must adopt and integrate of new cultural values, new scientific methods and new requirements. Today, multiculturalism and technology are the most pressing issues. Instead of trying to fit children into the ensuing changes and ask: "what does the child need to learn in order to share the norms, values and conventions of adult life today?" (24), he recommends a different kind of understanding. "What does the child need to learn to develop most fully each kind of understanding?" (24). The difference is clear: the former is adaptive and normative, the latter is individually focused, participatory and imaginative, and a kind of understanding that requires rational analytical as well as empathetic human skills.

Egan outlines his new educational model. His critique of the present school system is at the same time the foundation for his new model, as the three basic ideas of *socialization, curriculum*

and *methodology* underlie education at any time, past and present. It seems important to have a short overview of these ideas presented below. They will also make the link to his further idea of cultural recapitulation, which was influenced by the Russian psychologist Voygotsky.

Socialization: **Mythical cultures**

The fact that socialization is always a mandate of education can be traced back to mythical cultures. They initiated their young to the skills, values and knowledge of the adult community so that they could become able members of their tribe. The individual found a sense of tribal belonging in which the application of learned techniques and rites would reinforce the tribe's continuity and homogeneity. The foremost means of teaching socialization was the story, potent with emotional luster and engagement and easily memorized somatic structures. In the imagination of the story, tribal codes of behavior, rights and medical knowledge were inscribed treasures of lived life (Egan *The Educated Mind* 10-12).

But why do cultures change? Knowledge, the forbidden tree, once the possession of the priest gods or deserved elders, has been held as power in a long history of privilege and birthright. The shift from common to individualized knowledge also marks a shift in education, and the great educational heritage of the story will be rediscovered in the new imaginative education.

Curriculum: Plato's Influence about Truth and Reality

Plato's most elusive educational principle is to equip students to seek the truth and find reality in terms of truth. But how do we understand Plato's reference to "the unchanging reality that is the object of knowledge" (12). Plato's condition for knowledge is love of truth, and is described by the English Fellow and Tutor of Philosophy, R.L. Nettleship in *Theory of Education*

in Plato's Republic: "What the sun is in the world of visible objects, he (Plato) conceived *the good* to be in the sphere of intelligence" (150). It must be then that the unchanging reality is love for the truth, being the object for knowledge, and is not for the ever changing reality of sense perceived phenomena of the physical world.

Plato, like Egan, began by pointing to the "inadequacies of the education offered by his competitors" (Egan *The Edu* 13). Seeking to go beyond conventional thinking and stereotypes, Egan describes Plato's contempt of the *worldly wise* and well-equipped citizens who were unoriginal and slaves to conventional thinking. A desired educational purpose was to "give students a privileged, rational view of realty" (13). A relevant form to achieve this was a curriculum of "increasingly abstract forms of knowledge, guided by a spiritual commitment" (13) that would enable students to go beyond cultural norms, traditional beliefs, preconceived ideas and fads.

What is left of this today is the academic curriculum, designed to drive development of the mind. In learning about the *great cultural conversation*, enlightened students will gain lasting insights into the great cultural epochs and their achievements. Such knowledge is of *persisting value* and would transcend content that is solely oriented by the social and practical demands any present culture. But Egan also considers future generations and asks himself: "what knowledge is of most worth?" (25). He finds that Plato's goal to "reaching a transcendent truth … is no longer credible (24). The Anglo-Saxon criterion to be an "educated person with a lot of answers" (24) at one's disposal is neither attractive nor practical in a multi-cultural society, and the fast track answers available in the technological culture also put the question of truth and reality in a new context. Egan suggests that truth and reality need to be reconceived, in the same vein as his own educational criteria are reconceived.

Methodology: Rousseau's Nature Guidance

In contrast to an intellectually driven academic curriculum stands Rousseau's methodological approach. Principally, this means understanding the child's changing psychological/developmental stages, in which optimum learning can unfold. His methodology further includes providing a nurturing, child-appropriate environment in which teachers are more the guides than the initiators and executors of certain subject matter.

Rousseau conceived of nature's guidance as the most appropriate *methodology* of children's development. In a natural and sense-rich environment, a young person's interest would be stimulated by "discovery procedures (that) disclose nature and in doing so stimulate the pure and uninfected reason" (19). Here, the children could remain protected from society's corrupting influence, and nature's guidance would at the same time "determine what knowledge is learnable, meaningful and relevant" (20).

Such ideas have been taken up by people favoring a natural development but also adapted by the educator Dewey who argued that discovery methods would stimulate scientific discovery, an important learning tool for our time (19). Egan points to the validity of this approach; however he rejects Rousseau's contempt of society and the protective stance against societal values, since there is no such thing as culturally neutral education. Growing up is unthinkable without the backdrop of a particular cultures habits and values. Yet the need for a sound individuation process in the developing youth, amidst cultural changes and technological break-troughs', is ever more vital.

Incompatibility in Education

Egan further argues that Rousseau's educational paradigm incorporates a psychologically based learning process, and Plato's an epistemological process, which have in mind not only different means but also different ends. While there are conceptually based theoretical conflicts between the two incompatible educational processes, there are also value differences that still linger even in our postwar, post-modern society. The classic European upper class gymnasium education, which in reality sharply favored students of social and economic privilege, rather than a love of truth as Plato would have hoped his students to strive for, still exists, as expensive private colleges testify. The other alternative is the more contemporary developmental curriculum, open to individual exploration, individual learning styles and flexible lessons. When schools attempt to employ both methods, one will be ignored, or both will be watered down, or even worse, the students will be driven to mental and physical exhaustion. Egan concluded that "we allow each component inadequate scope for proper implementation and adequate scope only to undermine each other" (11). In his new model, Egan builds on the past, not by mindless repetition of accepted norms, but by harnessing the fruits of past labor, and he integrates these achievements into the modern context.

The Reconceived Educational Model: *Romantic Understanding*

Arguing that the present education system is contentious and the prevailing structures are incompatible, Egan is drawn to restate the fundamental question of the goal of education. He once more looks back into history, and compares the present mode of the industrial school system with

its cumulative knowledge, technological skills and attitudes and also considers the future life's of students with the goals of the "greatest educational thinkers" (Egan *Romantic Understanding* 46). In this context he refers to Plato, Rousseau and Dewey. As much as acquiring knowledge is basic to all children's learning, their main concern is to *draw out* or to awaken the students' own autonomous thinking. However, Egan values not the transcendental truth, as Plato demanded for his time, but the ability to transcend conventional thinking, and to "imagine conditions other than those that exist or have existed" (47). He considers it important to think beyond norms and to realize the "imprisonment of conventional ideas, in contrast to the flexibility, the freedom and richness of the ability to think of things as possibly being so" (47). This is a needed and desirable goal, more than high IQ and encyclopedic knowledge of facts. In this scheme, Egan's emphasis rests on the development of imagination, to see things as *possibly being so.* This presents a kind of backbone, a principle outcome of imaginative education. Imagination, for him, much as it is for Dewey, is the fiber for unconventional thinking, for going beyond given data, for invention, novelty and generative ideas (Egan *Imagination* 43). Imagination is not the opposite or enemy of rationality, but is the "capacity that greatly enriches rational thinking" (43).

Egan arrives at the conclusion that children throughout their whole development go through phases of differentiated learning, which he calls *kinds of understanding.* Referring this terminology to historical ages, he relates romantic understanding to the grade school child, since there is clearly a correlation or strong similarity between the characteristics of the romantic period in history and the cognitive inclinations a child presents roughly around 7-12 years old.

Recapitulation Theory

The need to explore Egan's own recapitulation theory puts into focus what underlies his concept of romantic understanding, which is the important topic of imaginative education, one of the themes of this paper. The recapitulation theory is not claimed as Egan's invention, but it suits and deepens his main theme in imaginative education: that children move through intellectually differentiated "kinds of understanding" and that both educational processes, curricular content and methodology, can make good use of this. Egan cites two examples, a logical and an evolutionary recapitulation theory. In the logical one, he refers to Spencer, who reasons that the acquisition of the child's knowledge abilities simply follows history's footsteps. In the evolutionary example, he quotes John Dewey's support of the developmental principle, that the child first exhibits "primitive psychological conditions" (Egan *The Educated Mind* 28) to later become the intelligent thinker of adulthood.

None of these recapitulation theories, however, made it into the educational stream, even though children's early behavior certainly imitates oral societies' imaginative faculties and social structures in their play. But besides the above example, Egan also recognizes that mathematical conceptualization does not follow history's guide in the same way as humanities curriculum, rich in historical values and story content (28). But Egan does not relinquish recapitulation's obvious similarities between history and the stages of child development and asks a very important question: why children acquire knowledge in the same order that it was discovered in cultural history, instead of beginning with the immediate world around them (Egan 29), with the expanding horizon model.

The fallacy of the expanding horizon model, to teach children from the immediate world around them, can be seen in an example of misleading, oversimplified thinking. It fails to see the whole reality. Egan points out that the *progressivist's* argument appeared in the US at a culturally

sensitive time when new educational demands were urgent. Immigrant children and the developing industrial world had changed societal needs and values (29). Surprisingly, even the evolutionist Dewey had began to argue differently, that education is to "emancipate the young from the need of dwelling in an outgrown past" (29). However, the new social needs necessitated educational reforms, but the real problem was not solved by absorbing changed social conditions with easy remedies, but to re-envision how children learn.

Egan adamantly sets himself apart from the examples of recapitulation theories, and proposes a reasonable argument. The fact that children's development strikingly mirrors history's changing cultures is hard to deny. Therefore, a rational reason must exist. Egan took up the Russian psychologist Voygotsky and his working scheme of the intimate interaction between a particular cultural learning tool and what is actually learned in using such tools. Accordingly, our intellectual accomplishments are strongly influenced by the cultural tools available, for example, oral tools produce a different understanding from literary tools. "Our intellectual development requires understanding of the role played by the intellectual tools available in the society into which a person grows" (29).

Egan refers to this as *kinds of understanding* and argues that different intellectual tools shape the mind and in turn the psyche of a child; they become internalized and act as sense-making, psychological and cognitive functions. "It is through this interiorization of historically determined and culturally organized ways of operating on information" (Luria qtd. in Egan *Educ.* 29), that specific learning tools become the *mediating* and *restructuring* catalyst for aptitudes. What is recapitulated is not in terms of knowledge or psychological processes, but of the mediating tools and the kinds of understanding they generate (30). For early childhood therefore, the spoken language as the mediating tool requires oral rhymes, verses, songs and stories which

evoke the mythic understanding appropriate for this age, while the mediating tool for the grade-school child is literacy, and cognitive content in story form will evoke romantic understanding.

In Egan's mind, Spencer posed the wrong question by focusing only on similar aptitudes in children's learning. Egan states: "it is not that something occurred in history (that) causes an aptitude … to acquire knowledge in the same order" (30). What generates the historically similar aptitudes for "similar kinds of understanding as existed for people using the same tools," is the mediating intellectual tool that a modern child uses. By focusing on particular mediating, intellectual tools at particular ages, as orality and mythic understanding, Egan re-conceives his new educational idea. He follows the stages of language development in the child and proposes that the oral tradition for example will develop a kind of mythic understanding.

Following this example of the relationship between mythic understanding and an oral tradition, Egan consequently pairs romantic understanding with literacy, philosophic understanding with theoretic abstractions, and ironic understanding with extreme linguistic reflexive-ness (4). The mediating tools that relate engender these modes of understanding are, in the chronological order: orality and early childhood, literacy and grade school, reflective thinking and high-school, self-critical irony and adulthood (4).

Egan concludes with the recommendation that: "we may be able to devise a curriculum by analyzing how the historic process occurred" (73). This new theory suggests that the educational process must relate the mediating tool with the same aptitude that occurred in history. For the purpose of this paper, our focus will be on romantic understanding and literacy that engages the child between 7-and 14 years old.

Literacy: The Mediating Tool of Romantic Understanding

In the western world, literacy was born between the 6th and 5th century B.C. with the advent of the Greek alphabet. Having influenced nearly all of human experience since then, this great achievement is "touted as the transformer of thought, the golden road to the accumulated treasure store of indirect experience and the great enhancer of understanding our selves and our world" (Egan *The educated Mind* 73). However, with this transformation also came the loss of previous abilities. In this historical moment of crisis and opportunity, new cognitive opportunities paved the way into human consciousness. Humanity developed a new kind of thinking which transformed the basic mode of human consciousness, from a participatory, relational, and mythic consciousness, to our present dualistic, rational, and individual modern consciousness.

Similarly, for every child today the effort to learn to read and write requires an identical transformation and induces life changing accomplishments, one that is of particular importance in Egan's conception of romantic understanding. Further more, Egan points to research on present day illiterate adults (Luria qtd. in Egan *The Edu* 75) who simply cannot succeed in language abstraction. To name a black cat *Snowy*, for example, is just an impossible idea for them. They are not able to *decontextualize* the visible reality into an abstracted one, as they cannot separate names from their experience. "Literate individuals, however, are unlikely to be thrown off by the black cat's name, *Snowy,* because we follow the logic of syllogism rather than refer exclusively to our experience" (76). This change from oral to literate functionality recapitulates the historic transformation of consciousness in humanity, from mythological consciousness to rational thinking.

During this advent of the alphabet in ancient Greece, language, as an oral and pictorial form of communication, began to separate into its phonetic-alphabetic elements. Through this new

writing system, a re-organization occurred in which humans became "conscious of our speech" (Olson tad. in Egan 75). Besides, a more dramatic happening also took place with this transition in that "writing became part of the process of thinking" (76). Such thinking cannot develop by itself since it is not "an external copy of a kind of thinking that goes on in the head; it presents a kind of literate thinking" (76). The developmental consequences of literate thinking are so enormous that historically it is referred to as the *Greek miracle*. All the developments of logic, philosophy, drama and other disciplines that ensued from this are not a result of genetic wiring, but of a technological advantage stemming from alphabetic literacy (77). Similarly, in a child's life through the mediating tool of literacy a new thinking begins to develop, recapitulating a *kind of understanding* prevalent in Greek culture. It is here that Egan's romantic imaginative understanding finds its place.

While the goal of literacy is to develop a consciousness beyond mythical thinking, the process is a slow one and does not "emerge full blown, like Athena from the head of Zeus" (80). Indeed, to transcend space and time (both signifying mythological thinking) is as much the loss of abilities as the achievement of gains. From a slow acquisition of skills that promise a new and unfamiliar reality, transitional stages occur, in which old faculties stand beside new ones. In this process, the intimate unity and participation with all that lives and moves is lost, in the same way that magical powers, deities and talking animals, that stood next to humans as conceivable experiences in ancient mythology, slowly disappeared, leaving a rather naked and cold world. It is far more a death than a momentary loss, as the magic of the former world submerges into the mere naming of things. This change "spells the death of word-magic … when the word is thought of as representing a thing rather than an intrinsic property of the thing" (Olson qtd. in Egan 80).

Consequently, this slow death is as much an historical loss for humanity, as it is a struggle for every child. It is at this decisive moment that education can truly make a difference.

Here Egan once again asks a decisive question: "What must happen as a result of developing literacy, and what can happen?" (78) What can happen is a loss of joy and pleasure when learning, as often has been seen, becomes a kind of memory or "literacy storage" (78) for later retrieval. The damaging aspect of this educational principle has not been adequately explored, considering that "human learning is distinctive from computer storage and that human memories are distinctively unlike computer memories" (50). The much praised photographic memory may not include such human elements as emotional content, previous experiences and affective meaning structures that contribute to humanize the learning process, rather than industrialize learning into statistical columns of facts and data banks.

What must happen is a continued transformation of literary content, as all images and thoughts go through a continuous process of *mixing and eliminating*, which Steiner refers to as digesting, in which the activity of imagination is involved. "The more energetic and lively the imagination, the more facts constantly find themselves in new combinations … as we use them to think of possibilities, possible worlds" (50). In the earlier years, it is observed in he pleasure principal of children's delight in little word-games, in their love for made up story-telling, and in the figures of Santa Claus, King Winter, the Tooth Fairy and the Easter Bunny, all witness to the intimate joy children derive from the affective, relational aspect of imaginative oral stories. At least for a time in their life, it gives meaning and security in matters that adults cannot explain satisfactorily.

In the transition from oral to literacy, knowledge is not stripped from relational and affective properties, but is enthusiastically encountered by children and appropriately integrated

through the mediating tool of literacy and romantic understanding, presented to them as whole stories and other whole literary elements. Such teaching most adequately addresses the child's natural curiosity and integrates the learning process. It will resonate with the child's longing to grow into a world of human knowledge, human achievements and humane actions.

Rudolf Steiner: Philosophical View

Rudolf Steiner was born in 1861 in Austria, and died in 1925, leaving behind him a vast body of lectures, books and artistic work.

In the context of the previous chapters on philosophy, Steiner's philosophical contribution is of relevance, as he brings a new question into the philosophical discourse. Chronologically, he follows Kant who arrived at the idea that the conscious human mind has an inherent structure that follows certain laws. For Kant, knowledge is limited to an understanding of how the content of thinking is placed and operates in organized schemata in the mind. Steiner rejects Kant's notion of the limits to knowledge and develops an epistemology of scientific spiritual investigation, arguing against Kant's self-imposed boundaries. At the same time, Steiner clarifies the field of Goethe's *object related thinking* that can lead to raising imaginative thinking to the level of phenomenological science. For Kant, what is outside the mind, *the thing itself,* is not attainable for human understanding. Nature cannot reveal its true life. The mind has to resign before living nature even if a "Newton could arise who could explain … the production of a blade of grass … such knowledge must be altogether denied to man" (Kant qtd. in Steiner *Riddles of Philosophy* 108). The highest principle for Kant is the human being's moral superiority. Independent and free of the senses, a morally high stance is obtained through devotion to duty and a self-chosen moral

obligation to do what is good which Kant calls the *categorical imperative*. Kant's Adherence to moral duty is only possible through free will, which at the same time raises the human being to his true destination. Steiner relates how in Kant's view, to become worthy of happiness, a "being exists who secures this happiness as an effect of virtue. This can only be an intelligent being determining the highest value of things, God" (103).

It is here that Steiner's concept of freedom strikes a different note, dismissing any obligation of moral duty, and the need for any verification of happiness to be dependent on God. He begins with a hypothesis, which for him is an inner certainty that knowledge is not limited to human reason. Michael Wilson, in his introduction to Steiner's *Philosophy of Spiritual Activity* argues that "the scope of science must be widened to take into account the ego that experiences itself as spirit, which it does in the act of thinking" (Wilson qtd in Steiner ix) Steiner goes beyond Kant's observations of the structured mind according to laws, by taking into account the process of thinking itself. He makes the activity of thinking an object of perception. What at first may appear like a split consciousness is a deliberate step in full control of one's mental powers (this would necessitate more mental effort than is experienced in the usual flow of thoughts). Steiner presupposes physical/chemical processes in the brain, such as those shown by modern MRI screenings of brain activity, but suggests that behind these physical manifestations is a spiritual force. From his own experience of this inner activity, he asks the question: "How far is it possible to prove that in human thinking real spirit is the agent?" (Steiner *Philosophy* vii)

Steiner's *Philosophy of Spiritual Activity*, published in 1884, can be considered a new approach to philosophy. To think about thinking, neither the content nor its structures, but observing thinking as a spiritual activity, requires disciplined practice, based on the methods of modern science. Steiner was well versed in Kant's dictum concerning the boundaries of

knowledge, but he rejected those boundaries and was interested in "finding a way of thinking that could be carried as far as perception of the spiritual world" (Steiner vii), beyond the experiences of normal thought consciousness.

Steiner developed a spiritual/scientific method for investigating the thinking process itself, described in his above-mentioned book, as a secure foundation for knowing. Here, all the elements of thinking become transparent, and at the same time they are extended to a perception of the spiritual in the activity of thinking, rather than a fear of *unknown processes and unknown worlds*. However, he also claims that it is the effort put into following the method that develops new perceptive faculties, not just an understanding of the method. This emphasis on effort-related mental activity can be seen in the context of the new knowledge of brain plasticity, and the activity-dependent forming of new neural pathways. Like Kant, Steiner extends his philosophy into human action. The attainment of full consciousness of an action, i.e. knowledge of the motives behind an action, he terms intuition. But intuition must be constantly achieved anew, and therefore any sense of moral duty would not qualify, since it relies on past experiences and past motives. Since he regards the human being as a *work in progress*, he calls his philosophy monism:

> Monism, in the sphere of true moral action, is a philosophy of freedom. It rejects the metaphysical, unreal restrictions of the free spirit … since it does not consider man as a finished product, disclosing his full nature in every moment of his life. It regards the dispute as to whether man as such is free or not, to be of no consequence. It sees in man a developing being, and

> asks whether in the course of this development, the stage of the free spirit can be reached. (151)

What is revealed in Steiner's philosophical monism is the notion that the human (spirit) being is in the process of *becoming* human, rather than just *being* fully human. In this becoming human, the ego as the spiritual agent is drawn forth in the act of knowing and becomes entwined with it in the human consciousness. Cognizing then yields not only knowledge, but simultaneously consciousness of self that may lead to knowledge of self. One can assume that it is from self-knowledge that the human being asks whether the stage of free spirit can be reached, making way for philosophical understanding and cultural values.

Whether such steps can be achieved by means of technology or technological thinking is an open question. One could assume that there are specific, purely human capacities, such as developed and intensified thinking, a purified feeling and devoted, selfless will that enable new steps in human development to be taken. In Steiner's terms, self-knowledge is dependent on man's mode of thinking. It is a consciously developed intuitive thinking, intensified as it where through appropriate practices. Steiner "characterizes his (my) philosophy as a thinking that lifts" (Steiner qtd in Palmer 101), beyond ordinary thought consciousness. A thinking in which reason alone operates can only see what is and not what can become in the future. Imagination, in the language of Wordsworth, being *reason in her most exalted form*, holds the promise of seeing further, to *what can possibly be*. To imagine whether man can lift himself to a different consciousness may be part of what can possibly be. Whether a human being imagines himself as an image of God, a machine, or an animal, will most likely be more and more decided by each human being himself.

In this approach, Steiner argues that neither nature nor the human are independent of each other. In the act of knowing, because of the present human mental constitution, which he claims is different from the mythological mental condition, a cognitive element, thought, is added to nature, which previously, in the act of perception, had been taken away: "it is due to the nature of the soul that, at first contact, it extinguishes something that belongs to them" (Steiner *Riddles* 448). This is a huge claim and would explain his argument that the Greeks perceived thought in nature, as modern consciousness perceives thought outside nature. He further suggests that "it is for this reason that things appear … modified by the soul" (448). The act of cognition is therefore not an indifferent happening, but a reestablishing of formerly divided reality. "Sense perception does not present finished self-contained reality but an unfinished, incomplete reality, as it were" (447). He argues that the act of cognition establishes again what sense perception had refused to see (448).

Behind such a conception is a picture of de-liniarized human development. The death of mythological vision-consciousness was followed by abstract reasoning, through which we gained the capacity for intellectual thinking and its greatest gift, the possibility for freedom. Cut off from religious beliefs, from intuited fate, or faith, and from mythological phenomena, the human being is "doomed for freedom" (Sartre qtd in Lukacs), and must claim his/her own fate, a price of freedom.

With this understanding, what oral cultures perceived in the phenomena with their senses, as light of meaning in the perceived phenomena, disappeared from human perception. Steiner argues that in the modern conception the human being feels "estranged from nature, stands in contrast to nature, but nevertheless searches for nature" in order that in "the process of knowledge he unveils what was first concealed" (Steiner *Riddles* 138). This unveiling, however, involves

different cognitive modes and approaches and belongs as much to philosophy as to science and the arts.

In Goethe we find a person who felt this unveiling process to be one of *object-related thinking.* This is participatory thinking, "which does not detach itself from objects, but that the objects of observation are intimately permeated with thinking", a thinking that participates in nature's process (142). Thus thinking which appears in the cognitive act and according to Kant is limited to the mind's own thought content, was and is for Steiner already present in nature, but veiled from our perception. Goethe's dedicated practice of disciplined, objective/subjective participatory thinking into nature's own activity, produced in him a further faculty of imagination. Steiner said that in Goethe, the *idea experience* forced its way into his mind, in contrast to the Greeks who "perceived the idea" (141).

Waldorf Education in the Historical Context

The curious name Waldorf education originates in a prosaic fact. In 1919, the manager of the thriving Waldorf Astoria cigarette company in Stuttgart, Germany, had witnessed the genius of Steiner in public lectures, and he was sufficiently convinced by the man's intellectual and personal integrity to suggest that he implement his new pedagogical views in a school for the children of his workers. Within a year, the school had one thousand children, and today there are over thousand Waldorf schools in the world. Steiner's methodology and curriculum are coming of age, and educational concepts such as imaginative teaching, the recapitulation of cultural epochs in the curriculum, the different stages of consciousness in child development, and the need for integration of head, hand and heart, are a few of the reforming principles that have been adopted by other educators.

This was a time of social upheaval in Europe, with industrialization in the workplace, and the fall of the Austrian-Hungarian Empire giving rise to the Weimar Republic in 1922. Steiner envisioned the cultural life, including education, as being financed by free economic industrial enterprise, without the input of government policies or political agendas. It was revolutionary, as it was based on "universal human principles instead of upon the basis of social rank, philosophical or other specialized line of thought" (Steiner *Education* 3). The pedagogy was to be developed by teachers, rather than by lawmakers or any other interests. From the beginning, Steiner demanded that the "educational goals and the curriculum are founded upon each teacher's living insight into the nature of the whole human being" (Steiner *An Introduction to Waldorf Education* 3). It is neither a child-centered nor teacher-centered approach, but considers as vital what transpires between the children and the teacher.

***Becoming Human*: Waldorf Education**

Waldorf education is intimately related to the human becoming. Its foremost concern is to appropriately support and awaken the ego, or the human-self, or his or her individuality, for harmonious development of the whole human being. While still asleep or unconscious in the young child, the ego is dependent on human interaction. This is why human children need education, which animals do not need, Steiner once remarked. In the process of education, the self, having its own time organism, is penetrating and at the same time awakening in the different aspects of the physical, emotional and cognitive organisms. This is assisted by learning processes and acts of cognition that offer challenges and resistances, and thereby strengthen the incarnation process of the self. In the words of Piaget, the pre and formal operational stages of cognition are

helped by outer stimuli. There is nothing new in these schemata. The difference is only the very long and broad view of Steiner, extending far beyond the achievement of cognition

Literacy, as Egan clearly remarked, plays a significant role in the child's development. Steiner, too, repeatedly points to this important transition in a child's life. But he stresses the need to bring beauty to the learning process of writing, by using the opportunity of crisis, which Egan so clearly developed, in the most artistic way. He encouraged the teachers to awaken their own artistic skills, to develop teaching the letter *M* for example, by telling the class a self invented story of a landscape with Mountains. As the children draw images of mountains in their textbooks, the letter M appears, and so this formerly abstract symbol appears as if from nature. Aided by imagination, both the teacher and the child participate with interest and inner engagement in the learning/teaching process. By engendering a more lively relationship to skills and knowledge, a healthy development is likely to happen. Here we can see how imagination runs as a red thread through Waldorf education, and becomes an integrating tool for learning.

Steiner himself experienced and practiced this art of education when as a young man he became a private tutor to a hydrocephalic child. His methodology consisted of acute physiological and psychological observations of the boy's disposition, how subjects and the delivery of subjects influenced his physical and psychological well-being. He describes in his Autobiography how he had to prepare the lessons in such a way, in quite a disproportionate length of time to what he then spent with the boy, that he could then teach him in the shortest time and so avoid his physical and mental exhaustion. Steiner observed how the highest mental abilities resulted from this artistic/pedagogical approach, and that the boy's medical condition improved. His latent intellectual and interpersonal capacities developed to such an extent that he later entered university and became a medical doctor (Steiner *Mein Lebensgang*). This experience convinced Steiner that

the *becoming human*, implicit in child development, can be assisted in a way that promotes either health or illness, and he demanded that teachers always consider beforehand and then observe what effects their teaching has on the children. Here too, imagining is a most needed faculty in the teacher's preparations. Steiner projected that education has a profound influence on the child's entire lifespan, not only vocationally, but also and especially on their psychological and physical health. He regarded this as an educational imperative. His methodology and curriculum have been subtitled a *healing education.*

Steiner's Four-Fold Human Being

When educating becomes an art, knowledge of child development can measure the human becoming. Steiner developed a four-fold picture of the human being that addresses this human becoming. In the extensive research document: *The Educational Task and Content of the Steiner Waldorf Curriculum,* editors Rawson and Richter describe Steiner's understanding of an educational principle. It is an *archetype of human development,* rather than a statistical means, in assessing how the ego is integrating the different phases of development (Rawson 7). With the knowledge of such an *archetype*, rather than a checklist of performance, the relationship between teacher and child becomes intimate and caring.

In education, what is most vital for establishing a healthy self is self-activity (i.e. activity that is self-motivated). Steiner's picture of the fourfold human being underlies his claim that education needs to bring about the right relationship of thinking and willing, important for the phase of imaginative thinking and for engendering self-activity:

> Between the children's seventh to fourteenth years we have to bring about the right relationship between thinking and the will. Otherwise, it is possible that this might go wrong … the whole character of the human being – insofar as it arises from within – rests on the proper harmony being established between thinking and will as a result of he individual's own efforts. (Steiner qtd in Rawson 9)

Steiner's picture of the human being is traditionally threefold, consisting of physical, emotional and intellectual properties, and to it is added the fourth entity, the self, or the ego, as an individualized spiritual entity. In particular, he outlined the functional physical organism in terms of "primary functional areas, each supporting a particular psychological activity" (Anthrop 2) which develop in a time-sensitive and heightened-activity process. The following is a very simplified picture of the main points.

In early childhood, the preponderance of the metabolic system supports the activity of the will; hence education and learning is primarily, but not only, focused on physical accomplishments, on physical activities supporting health, on doing. In elementary school, the maturing of the rhythmic system, i.e. breathing and heart-beat is supported by educating with a focus on the feeling life and imagination. In high school, the matured sense-nerve system is challenged by rigorous intellectual activity. In this way, the child's physical maturation maximizes and integrates the learning process, psychological readiness is supported by the physical readiness, and learning is in harmony with child development. This is significant for making appropriate pedagogical choices, i.e. how to teach in such a way that the reciprocal relational processes

enhance each other, so that the teaching supports "the direction taken by its own developing powers , one then gives such added vigor to the growth of the whole person that it remains a source of strength throughout life" (Rudolf Steiner Archives *Intr*.5).

The table shows Steiner's conception of the three-fold-ness of the human being, without the fourth entity, the ego, which as a non-physical entity incarnates into the three systems. This incarnation process is visibly marked by times of crisis/separation and opportunity/independence, first appearing at around three years of age when the child refers to him/herself as I, I want, rather then Johnny wants this or that. "The individuation process, in which education plays a very significant role, shifts the activity of the I" (Rawson 15) into the respective systems described below, and articulates the preponderance of the entire methodology:

1 <u>nerve /sense system</u>

primarily centered in the nervous system, supporting thinking and perception

2 <u>rhythmic systems</u>

including the breathing and the circulation system, supporting feeling

3 <u>motor metabolic system</u>

including the organs below the diaphragm and the limbs, supporting willing

(*Anthroposophical View 2*)

In this context, it is important to point out that these systems are not to be seen as separate entities, to think "that they are confined only to the head, the chest and the metabolic system… would be completely inaccurate" (Steiner *The Child's* 168). But considering that these systems mature in a respective time organism, early intellectual teaching therefore can not be truly maximized, but instead will lead to mental and physical exhaustion in young children, often seen by teachers as boredom and fidgety behavior.

Imaginative Teaching in Grade School

At the beginning of grade-school, the forces of growth active in the metabolic system have reached a first completion or maturation of the physical organism, specifically the brain, and are now emancipated or released from the physical organism "to form mental pictures, establishing memory, learning and focus attention" (Rawson 16). The second maturation, the rhythmic system begins at the entry of school, and is "mainly organized in the chest organs of breathing and blood circulation" (Steiner *The Child's* 168) and is the physical foundation for the whole range of emotions and feelings. (The physiological changes of heartbeat and breathing in times of stress are well documented). This fact is considered in the Waldorf methodology and supported by an artistic, imaginative approach to teaching, whereby "all learning at this stage seeks to engage the feelings… so that a strong personal identification with the subject matter can occur" (Rawson 17).

Oral presentations, rather then technology, are an important methodological tool in Waldorf schools during this time. In the immediacy of a well spoken language, full of pictorial elements and strong sensory images, the child's feelings are addressed, and this stimulates her own picture-forming activity. To imagine what has been heard, but not seen, brings the will into

focus, needs concentration, and the whole child is engaged in the learning process. A rich vocabulary and an animated presentation by the teacher sustain the children's interest and inner participation. Such an artistic, imaginative teaching style integrates the affective feeling to which the child is predisposed at this age. Learning becomes an inner experience. In contrast, abstract terminology and barren concepts leave the child's inner life cold and without self-engendered activity, and the concepts remain static and fixed. Such dead concepts are like shoes that the child will outgrow, Steiner argues; they become too small and confining, for the child's mind too needs to grow in understanding. What allows concepts to grow is when subject matter and concepts are permeated through the medium of what is artistic and imaginative. "What is necessary is … to give the child in picture form perception, ideas and feelings, which can grow together with the soul, or the mind, simply because the mind itself is growing" (Steiner *Essentials of Education* 43). The witch in a fairytale, arousing a whole range of feelings in early childhood, will outgrow the child's notion of an evil being. The concept of evil will remain, but in adulthood, when evil can be understood and conquered, who now will conquer evil is not a prince with a sword, but the sword of the rational intellect.

The child's inner disposition of engaging with his entire feeling life also stimulates the education-process towards true culturalization. When all the fine and subtle nuances of feeling experiences can become a source for a rich and sophisticated vocabulary, an animated use of language skills may lead to more intimate perception of nature and of people, as we see things which we can name. When interest grows beyond the self, human culture begins. The reduction of descriptive language amongst some young people and the increase of three word sentences are reversed with such an approach. To address the feeling further, children should laugh and cry every day, Steiner once remarked, and so learning becomes a felt experience. Then a process of

identification with the subject matter can occur. This identification process could be seen as problematic, but here imaginative, artistic teaching does make the difference. One can think of how great works of art inspire generations of people and refresh the viewer or reader again and again, as new interpretations appear. Teaching, Steiner argues, requires such an attitude of continuing inspiration, because some children in the classroom may indeed become much smarter than the teacher.

Another aspect of identification with subject matter is related to what underlies a healthy education. A long time Waldorf teacher, Rene Querido, has observed that it is "the question of identity, relationship and the question of meaning" (30). All three issues are addressed in the methodology and the curriculum. As human understanding changes and evolves, observing different historical times helps to comprehend changes. Through a curriculum inspired by the cultural epochs of history, integrated through dramatic renderings from mythology, the Trojan War, the life of the Caesars in Roman history, sports such as the Greek Olympic Games, music and folklore and many other important historical/cultural events, the young person can feel her own coming of age. In identifying with important characters in human history through an artistic, imaginative medium, the awakening self is stretching its wings into the greatest and the lowest manifestations of human behavior, thoughts and feelings. In the dramatic arts, the young person can experience the strength of empathy or revulsion towards the diversity of human character and this experience will support the self in testing and measuring its own striving, against the backdrop of human and cultural diversity.

The relationship to subject matter is a healthy on if the one-sided intellect, rather than being forced in from the outside against the child's disposition, awakens of its own accord when the imaginative capacities recede around pre-puberty. Then it can blossom into a whole new force,

rigorous and deeply satisfying, since the earlier affective understanding has permeated the child's inner conceptualization. The problem "is not that people instill too many concepts into the young mind, but that the concepts they cultivate are devoid of all driving life force" (Rudolf *Introduction* 2) and therefore remain as superficial explanations.

The child's ability to understand meaning has been debated by Egan as teaching from the model of *unfamiliarity* in Romantic understanding. Steiner's approach to teaching meaning supports this approach, but he has further extended and embedded meaning in the larger context of learning and forgetting. In the earlier grades, until grade three, the dynamic experience of artistically presented content through narrative, poetry and the visual arts, through "rhythm, beat, melody and harmony of color … any kind of activity not calling for meaning" (Steiner *Practical Advise* 89), will most prominently engage the child. However, in deliberate learning such content by heart, the contextualized subject matter calls not only the feeling, but also the will actively into play. Through repetition and the medium of rhyme, melody etc., content is memorized rather than understood, while the child engages both the will and the feeling. Later, when she has matured through other processes, the person remembers what she has learned and now understands what she took into herself earlier (89). Much of the world's wisdom can be taught to children in an artistic manner, and affirms Egan's concept of teaching from the *unfamiliar*, which will become meaningful when the person is mature enough to understand these earlier teachings.

A healthy psychological life cannot be achieved without the mediating factor of feeling. The relationship between thinking and the will can go wrong, if one faculty overtakes the other and disturbs a healthy balance. The classic example is Hamlet, who thinks but cannot act as he thinks he should or would like to. Other examples are the fanatic and the compulsive person, who act despite or because of a narrowed thinking-scheme, because she fails to think within a fuller

context about her actions. The individual appears to be stuck in a fixed position, sometimes knowingly, more often unknowingly. Steiner's approach looks at the effects of teaching not only for better and easier learning, but also towards the whole of later life, thereby strongly hoping for the individual to go beyond her or his inherent possibilities.

For the growing young person, the challenge to later rise beyond the limitations of context and normative thinking will be ever present. The educator Thomas Nielsen, at an international conference on imagination, repeatedly referred to Harold Rugg, author of *Imagination,* who insists that young people must learn the difference between two modes of thinking, the *verbal analytical thought* of scientific thinking, *beneficial for verification* and that "mode of thinking that can lead to discovery and insight" (qtd. in Nielson 20). In making a new discovery, one is engaging in what Rugg calls *felt thought*, which also "involves feeling and intuitive realms" (20). Thus, imagination as felt thought serves as a bridge between scientific inquiry and new insights. Its affective component brings into balance what otherwise can lead to extremes. It potentially harmonizes the opposite ends of the spectrum of human behavior; thinking alone has a detaching, distancing element, and in its opposite, the immediacy of doing, and one can lose sight of the inner mental compass that needs to direct it. "Imagination is the ability to connect various dimensions of human existence, as it is both process and continuum" (Nielsen 22).

In the larger context of education, the search for the human identity to *become human* belongs to conscious life. Whether consciousness changes within a single human life or in history, as has been addressed in this paper, may also include the question, what is consciousness? Both inquiries, alone or together, are likely to need long periods of observation, as logical analysis will not suffice for the understanding. Imagination, testing as it were all that can *possibly be,* will hold the inner space an open space. And this is important. The capacity of imagination, standing in the

middle between past and future, between rational and creativity, between duty and freedom, is a foremost human capacity. It is the ongoing activity of the human spirit: energizing, creating and building an authentic understanding of life. Imaginative activity is integral to the path of becoming human.

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Discussion

Imagination was the topic of my academic effort, but even with the best of my intentions and some considerable effort, Imagination, true to her own character, did not reveal herself and soothe my longings. The light I had hoped to shine on her showed in the end only her shadow, and yet at the very beginning she smiled on me most invitingly. She encouraged my questions, and more often than I had anticipated we entered into a dialogue. Even though she was just the listener, yet it seemed that she had talked, and I had listened.

She knew my mind's desire and always gave me hope. When I was weary of chasing her to all the four winds, where she loved to hide, she would invite me into a little game. I never learned the rules by heart, and yet the game restored me and intrigued me, and the best prize was her promise to reveal herself, once I came to know the game.

Children do not see her shadow. They play with her and let her shine her light right into them. At first they see her all the time in her full glory, she plays with them and all of nature's shining, and nature and her self are one.

What I am left with from our conversations is her shadow slightly changing into colored light; it does not blind, but it invites a smile now on my own face.

Never again can human adults have the same relationship with imagination as children do, but to protect and cherish this time of grace in every child's life is my own chosen task and passion.

Recommendation

One finding of my thinking is, for the purpose of clarity, to impose a triadic, hierarchical structure on imagination's *performance*, that is indicative of the levels of its dynamic functioning: first as a tool, second as an instrument, and last, but not least, as a means of insight.

The difference between a tool and an instrument is in the one who takes the tool and makes it, by his own effort and his art, into an instrument. Most people can use a tool, with a few instructions. Think of the hammer, how, following the upswing, the downward heavy blow uses the arm's own weight, using the body's own dynamic forces of levity and gravity. Tools are excellent extensions of our own physicality, and for this very reason we can invent what nature has left undone. Without tools we would be able to make very little, as our hands are best employed in holding and using our invented tools. With this good use of tools, we can do the greatest things.

Imagination, as we apply it in the common way, is such a tool of our own mind's innate disposition. We use it when we need it, most often as we think backwards or forwards, when we remember the first flowers in the garden or plan for the coming day's demands. Imagination lives in our desires, our fears and our intentions, as we encourage ourselves to do what we can at first only imagine. There is an ever-present readiness in our human mind, molding imagination into the tool it must become, so that it can serve the manifold desires of the mind, because "Imagination is an ongoing activity" (Nishizaka, Abstract). It is the uncompleted half of the wholeness of any activity, and therefore "imagination must have such diverse shapes depending on all the particulars of the actual situation". 201. Just as the hammer and the nail need to be used, imagination shows her many faces in the doing.

Imagination as a tool is a genetically wired capacity, habitually replacing with a mental image what the senses have perceived or what memory can retrieve. Yet it seems predisposed,

with practice, to develop further, into a greater capacity. When human's general sense perception can forego a quick judgment, and retain its freshness in the art of contemplation, there is an added human dimension, a kind of interested, participatory viewing of the phenomena. In this case, imagination could be seen as an instrument. In the pursuit of science and of art when the perception of phenomena, well contemplated, reaches new levels of affective experience, new faculties arise. As Goethe contended, that every phenomenon well contemplated, develops new organs of perception.

In making art, imagination is enhanced into an instrument. And on this path, it must endure a long and selfless road. It must refrain from falling back into what is familiar, into memory, or habitual thought, or favorite feelings and ideas. Think of the painter, William Turner: in his constant contemplation of the manifold appearances of light, imagination was no longer only a tool; it became an instrument he practiced ceaselessly. This contact practicing is the key for the emergence of new capacities of imagination. For Turner, the manifold appearances of light, one may imagine, became like an inner melody, painted in a plethora of colors in the ever-new imaginations of his art. If further contemplated by the onlooker of his paintings, these man-made images may even lead to new perceptions in the viewer himself. Seen in this way, art is not a product of nature; it would confirm Goethe's view that art is the continuation of nature's own laws.

A further consideration is imagination in the practice of scientific thinking. Are there new possibilities for imagination to emerge again with a new face? In constructing thoughts from reason alone, from logic or abstraction, imagination as ongoing activity seems hidden, without a face, an invisible activity. Not made from wood or steel her mode as scientific tool may be just plain activity that any computer soon will do. Without the self being engaged in active image-

making and a reciprocal feeling relationship, imagination seems to amount merely to a force that renders clear, but fragmented knowledge. In this pursuit, imagination lacks a face, which seems quite out of character for imagination. But at every major junction when new and old ways of perception and thinking call for new understanding, imagination becomes the vanguard.

Today's scientific view also has come to a junction. Following on from the brilliance of reductionism, some scientists also consider of what constitutes the whole as a living entity: that "various parts of knowledge are really abstractions from a total living process" (Sloan 142). This echoes the need in scientific inquiry: "The scientist must begin to bring to birth commensurable energies within him self, to enable him to grasp adequately the energies which he is encountering in his theoretical work" (Sloan 181).

For such research there emerges a new plea for imagination. The creative aspect of imagination, to imagine what forces hold and make a *living process,* and further, that such inquiry must bring to birth … energies, necessitates tremendous inner activity. Here I want to relate this creative imagination to the capacity of light, but light as insight. This light of insight seems to be imagination's most remarkable capacity: it is a coming to wholeness. An experience of wholeness, of a complete idea, is a common denominator in all major discoveries and new insights. "Insight announces itself as a whole that includes new forms of imaginations, new images and new orders of reason" (Sloan 143).

Therefore, that short time when imagination is so vividly alive in children, when they create whole worlds from a piece of wood, is the fore-runner, the vanguard of the capacity of wholeness in imagination from which new worlds are made again.

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