

Unswaddling Pedagogy:
Imagining a new beginning to the practice of
Imaginative Education

by

Annabella I. Cant

M.A., Simon Fraser University, 1999

B.A., Babes-Bolyai University, 1997

B.A., Gheorghe Lazar Teacher Training College, 1993

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Approval

Name: Annabella Ildiko Cant
Degree: Doctor of Philosophy
Title: *Unswaddling Pedagogy:
Imagining a new beginning to the practice of
Imaginative Education*

Examining Committee: **Chair:** Jan MacLean
Senior Lecturer

Lynn Fels
Senior Supervisor
Assistant Professor

Kieran Egan
Supervisor
Professor Emeritus

Michael Ling
Supervisor
Senior Lecturer

Shawn Bullock
Internal/External Examiner
Assistant Professor

David Jardine
External Examiner
Professor
Faculty of Education
University of Calgary

Date Defended/Approved: April 15, 2016

Abstract

My intention in this thesis is to introduce the concepts of swaddling, non-swaddling and unswaddling pedagogies, and to raise awareness and build trust in the somatic capacities of young children. These somatic capacities should be taken into account within any pedagogical setting and relationship in order to enable a smooth pedagogical transition and transformation from the Somatic to the Mythic *Kinds of Understanding* (KsU) as conceptualized and described within the theory of Imaginative Education. By emphasizing the pivotal role of the Somatic KU in a child's learning journey, and by accentuating new and existing *cognitive tools* (CTs), I seek to connect the as yet theoretically disconnected Somatic and Mythic Understandings of Imaginative Education. Future research should attend to continuing to minimize the losses of children's somatic capacities through their pedagogical journey.

Keywords: imaginative education; early childhood education; unswaddling; swaddling; Kieran Egan; cognitive tools; kinds of understanding; somatic understanding; mythic understanding

*This work is fully dedicated to the boys of my life: Joeri,
Santi, and Kian*

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List of Acronyms

CT	Cognitive Tool
CTs	Cognitive Tools
KU	Kind of Understanding
KsU	Kinds of Understanding
IERG	Imaginative Education Research Group
IE	Imaginative Education
SFU	Simon Fraser University

Preface

Swaddles of mine

*Education as fear.
Education as memorization and impersonal adoration.
Education of sit-downs and put-downs.
Education of regurgitation.
Education of distance.
... uniforms and straight, perfect lines.
Education without any play.*

And then... the ten-minute-freedoms!

*A forgotten, forbidden, magical orchard.
A magical place.
A story world of escape.
A liberation.
A never-ending play.*

Pretend became my preferred reality.

It is 2003. A gloomy hospital in Romania. I give birth. My son is given to me by a nurse. Beautiful face. Peace in my heart. He is tightly wrapped. Beautiful face. I want to touch his toes, hold his fingers, and feel his wholeness. I unswaddle him.

And he stretches!

Chapter 1. Swaddles and Pedagogy

Swaddles



Figure 1. My son, Santi, 2003

It is 2003. My first son is brought to me tightly swaddled by the nurses in the hospital; they tell me that swaddling is the best way to keep a newborn warm and straight.

Everything in my heart screams against it. I want him freed of the tight cloth.

They take him away to a ward for babies of incapacitated mothers. I could not control what was happening to him because I am not allowed to be with him until I could stand up and walk 10 meters alone! I am swaddled in my own imperfection: a C-section.

The will to stand up is so acute that I almost faint of pain while trying to walk with an open wound. It takes me a few days and I am one of the lucky ones; a teenage mother beside me has been there for a month, powerless, and she is not allowed to see her baby.

Finally, I have my baby in my arms for good. I unswaddle him and he stretches!

I am all right now.

My baby is all right now.



Figure 2. Santi stretching.

As a teacher training university instructor, I practice a pedagogical philosophy that drives me to first free students (as much as possible) from previous restricting influences (such as focusing on the exorbitant value of grades, considering learning an external duty to others, or disregarding the role of their whole body in making meaning of the world) and, then to open them to new perspectives, experiences, and questions. This unwrapping or, what I call an unswaddling pedagogy, offers students opportunities for genuine dialogues about the role and practice of education in life. Not surprisingly, this kind of pedagogical engagement has provided me with opportunities to reflect on the

history of my own swaddles¹ and why I feel so strongly about unbinding my students before supporting them to become educators. The process of my own freeing has revealed six fundamental pedagogical aspects that characterize who I am today: **openness, movement, relationship, trust, identity, and affect.**

The process of self-unswaddling was quite difficult, at times painful. Some of the wraps felt like ropes burned into my skin. Removal took a lot of patience, resilience, and a certain slowing down. The scars are still there.

A healing reminder.

50-minute class, 10-minute breaks

An early swaddle that sought to stifle my mind and body for a long time was my early education. Growing up in a communist dictatorship meant that schools had to practice a communist curriculum; a curriculum that prepared us for a life of conformity, obedience, and fear. From the uniforms we wore to the memorized communist dogmas, the educational process was far from personal and even farther from any kind of care. I was one of the millions of “eagles” and “pioneers” that were mass-produced in a country shadowed by fear. We were learning things that had nothing to do with being children. We were asked to memorize and repeat word-after-word the truth as projected by the teacher. I lived this kind of education until the age of 16. I should have been brainwashed by then. But I wasn't! And neither were my classmates! How was this possible? What gave us the power to unswaddle ourselves from classroom instruction and keep our wonder alive? What enabled us to become writers, educators, artists? I was once asked this question at a conference: “If you grew up in such a strict environment, how can you be creative today?” I was surprised by the question and, in

¹ According to Dictionary.com, a swaddle is “a long, narrow strip of cloth used for swaddling or bandaging.” The verb “swaddle” is defined in oed.com as: “To wrap round with bandages; to envelop with wrappings; to swathe, bandage.” (<http://www.oed.com.proxy.lib.sfu.ca/view/Entry/195319?>, accessed, November 21, 2015) The swaddle will be the core metaphor of my dissertation. It will signify constrictions, restrictions, and other kinds of binds that affect life, movement, learning, and being. I will start up by reflecting upon my own swaddles and how I managed to release myself from most of them.

the moment, I could not answer it. However, I left the conference reflecting on my childhood and how all the swaddling factors that I had experienced in my education had not affected me in the area of imagination and creativity. I looked for the answer for a long time... and I found it: the ten-minute-breaks! The well-planned political agenda of the school had a small defect: after every lesson, we were allowed to go outside for ten minutes. Outside, on the way to the concrete school yard, we happened to have a hidden, magical garden.

Imagine this: 36 elementary students, escaping the gloomy 300 year old classroom, running outside and into this tiny orchard, full of apple trees and wild plants. Once in this magical space, the children become characters in an ongoing story, one is the prince who sits on his throne in a tree, the others are the army, others are the princesses dressed up in scarfs borrowed from the mothers' closets, and others are just the children of the royal family. I am there with my 35 classmates, feeling a freedom seldom felt in those years. The teacher turned a blind-eye to all this. Inside the garden, we all forgot about the outside world; we forgot the neighbours who disappeared suddenly and never came back; we forgot about the constant whispers of adults around us; we forgot about harsh punishments we received at school if we didn't follow all the rules (I still remember the pain of palm caning). We forgot all that, while creating a magical world in our garden.

We, the 36 children, did this trip every school-day – 10 minutes of bliss, 10 minutes of freedom, 10 minutes of air and breathing, 10 minutes of imagination.

*The ten-minute-breaks unswaddled me; through **movement and emotions**, I managed to sustain my **sense of openness and wonder**.*

My father's jobs

My father is and has been one of the best of fathers in the world. He was never a swaddle. He always taught me to think deeply and trained me to resolve life's problems in a calculated and calm way. I am still learning... He always played with me. My memories of him always involve sitting on the carpet and playing with blocks, yoyos, balls, drawing "The Family"; solving puzzles and logical problems, and so many other "formative" games. I know now that he practiced educational play and not open ended

play. Was my professor father doing research or was he being a father that wanted me to develop my cognitive abilities? I asked him and his response mirrored my second hypothesis: he wanted me to learn through play, but not only cognitively. He believed in the power of learning for the mind, heart and body. This view resonates with one of my first favourite educationalists: J. H. Pestalozzi (1746-1827). His way of being with children, represented in paintings, always warms my heart. His orphan pupils seem free and unswaddled; he believed in the education of the whole child and so did my father.



Figure 3. Konrad Grob. Pestalozzi with Orphans, 1879²

However, what seemed to have affected my self-esteem and trust in my own capabilities in general, were the ripples of self-doubt provoked by my father's professional presence within all the schools I attended. First, it was primary school – a lab school for a reputable Teacher Training College where my father was a professor. Then, when I turned 14, I moved on to be one of the students of the college where my father taught. I even took a course with him because there was no one else teaching that particular course. The last ripple was university. I always wanted to study education and pedagogy; hence,

² Oil on canvas at Offentliche Kunstsammlung, Basel, Switzerland.

Image is licensed under CC BY-NC-SA: http://spinnet.eu/wiki-paintings/index.php/File:Zwit_Pestalozzi_bij_wezen_van_Stans_Konrad_Grob_1879.jpg

I applied to the only faculty of education in the area. By then, my father had been invited to be a part of the faculty of that very same university.

Why do I perceive this proximity with my father's jobs as a swaddle? It has to do with the assumptions of others regarding my own value and academic performance. From grins and direct comments of my primary school classmates about every "A" I received or any other successes I experienced, such as: "Ha! Of course you got an "A", your father knows our teacher very well. They play soccer together!" to subtle looks of disapproval followed by whispers behind my back in college and university. This social attitude of my classmates affected, piece-by-piece, my belief in myself. I became convinced that everyone was right and that I did not deserve any of the good grades I was receiving. Grades were everything then. They defined students and they defined the students' future.

How did I manage to unswaddle myself from this damaging self-perspective? As I will later describe in more detail, I had the wonderful opportunity to travel to Holland alone as an exchange student. I started the trip shaking, not out of fear of being alone in a new world to me, but out of excitement at the thought of proving myself to myself. There was no father working at the new college, there were no classmates underestimating me. I was myself, and I was successful.

*Unswaddled, I grew to **trust** my own abilities and value my own ideas. My future **pedagogical relationships** were my choice and no one else's!*

The final exam

I started university in 1993. I was excited by the new environment, by the new possibilities, by the huge classrooms, and by my new role as an undergraduate student. The excitement did not last very long... The courses were long and uneventful. Professors read their lectures from pieces of paper that had turned yellow over time. Exams were tough and based on a sole memorization of the professor's words. During the four years I spent there, I only had two professors who impacted me in a positive way; none of the rest did. I was swaddled in someone else's perspective and

pedagogical practice. I was made to look at the world of education through misty, old lenses.

And then came the last exam of my last class, just before graduation! I was tired of regurgitating. I was tired of my own silence. I was tired of accumulating all the questions inside me without the possibility of sharing them. I was tired and I had had enough!

Exam room. Exam questions. Dismissed them. Wrote my own questions. Wrote my own answers, my own ideas, my own views, my own realities...

Grades were publicly announced on a door. Three hundred students looking at a door. For marks. I was approaching. Everyone whispers. Everyone looks at me. I hear: Annabella comes, ohhhh. I look at the door.

I failed the exam.

I was thrilled.

*Unswaddled, I was identifying my own **identity**.*

Swaddling pedagogy

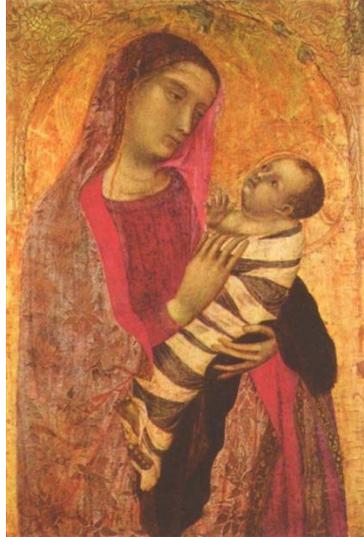


Figure 4. Painting by Ambrogio Lorenzetti: Madonna and Child, 1319.³

What is swaddling and how can it relate to pedagogy?

The educational practice that I propose in this thesis is what I call an *Unswaddling Pedagogy* - a pedagogy that welcomes and releases the creativity, imagination, and all other meaning making qualities and capacities of children. My intention is not to dichotomize swaddling pedagogies and unswaddling pedagogies, but rather to address pedagogy as a way of being present with the child. Through my work I am hoping to inspire teachers to be with young children in ways that would literally free everyone and everything involved in the relationship (children, teachers, environment, community, etc.) from activities, actions, experiences, and events that would restrict rather than encourage and guide children's imaginative and creative ways of making meaning of the world.

I use the term "unswaddling" as a metaphor of an education that protects, feels, imagines, inspire, loves, cares, and respects the child and his/her qualities of being in the world. "Unswaddling" is not meant to signify a complete, chaotic, and unguided liberation;

³ Licensed under Public Domain via Wikimedia Commons.
http://commons.wikimedia.org/wiki/File:Ambrogio_Lorenzetti_021.jpg#mediaviewer/File:Ambrogio_Lorenzetti_021.jpg

it rather points to an relationship of reciprocal qualitative acknowledgment of capacities and abilities of making knowledge live.

I would like first to introduce the concept of swaddling so that we might understand how and why some pedagogical practices need to be unswaddled. What makes a pedagogical or parental practice one of swaddling?

Swaddling is a 5000-year-old practice that was discovered in the artefacts of Crete and Cyprus (Braund & Most, 2003). Swaddling involves wrapping infants into a tight cloth to limit movement of the limbs. Why this practice offers me simultaneously challenges and inspiration is that the swaddle binds the body, and I consider the body as having a pivotal role in education and learning. The metaphor of swaddling the body “both as lived and expressed” (Nielsen, 2009, p. 81) can transfer into a metaphor of swaddling the learning, growing, and becoming of students. I am aware of the fact that swaddling as a practice is not always detrimental if it is performed for the benefit of the child: warmth, self-safety, or expressed need for the swaddle. What I will mean by the metaphor of pedagogical or parental swaddle will denote only the detrimental effects of swaddling – the ones that children do not need; the ones that restrict development, growth and the freedom to make meaning of the world whole-bodily.

A significant aspect of the millenary practice of swaddling is that it does not allow any input whatsoever from the children themselves. Reasons to swaddle were always created and determined by adults. By restricting movement, the swaddle minimized the somatic expression of needs or wishes of the baby. Along the history of swaddling practices, we find diverse interpretations and arguments emphasizing the pros and cons of its benefits for the baby.

The very first criticism of swaddling came as early as the 16th century and it reads in the words of Swiss surgeon, Felix Würtz (approx. 1500 to approx. 1598):

I also saw right and straight children created by God and born into this world by humans, who became nevertheless bent and lame men, who never got straight and healthy thighs. ... In addition, I have for instance let a child lay again down and tied up, so that I see, in which way he was swaddled. There I then really saw, where it was gone wrong. ... By misunderstanding however, they wanted to bind him straight, but in fact they bind him bent

and tighten the bandages hard, so that the child cannot have peace. (Wurtz, 1612, p. 485)

The practice of swaddling remained controversial for a long time; history offers a long range of thinkers and scientists who openly advocated for the complete abolition of this practice: John Lock in 1693, William Cadogan in 1748, Jean Jacques Rousseau in 1762, and many others. Various reasons were at the core of this practice: transportation benefits, warmth, shaping the body in a desired way, safety (when parents were busy), avoiding deformation of legs, avoiding playfulness, diminishing the difference between the environment inside the womb and the outside world, salting the skin under the swaddles to strengthen it, and many other reasons (Braund & Most, 2003).

During the long history of swaddling, we notice a major shift that concerns the reasons for this practice: from swaddling for the baby's shape, health, warmth, movement, etc. to swaddling for a better and longer sleep that helps parents get some rest. Recent literature on swaddling babies engages more with topics regarding the benefits for parents and less with topics that concern benefits for the babies (Franco, Seret, Van Hees, Scaillet, Groswasser, Kahn, 2005; Gerard, 2002; Neu & Browne, 1997; Richardson, 2009; van Sleuwen, 2006, 2007).

I recently watched an episode of the well-known TV show: Shark Tank. And I was bewildered by the arguments of a mother who came to ask for money for her already successful business. She had "created" a special kind of baby pyjama that was a hybrid between a swaddle and a sleeping bag. The babies wearing it would not be able to stretch their hands or legs, or even feel the air in the room because this modern swaddle would not allow it. She was very successful already and needed to expand her business. She succeeded in getting the investment. The words used in selling this idea stayed with me for a very long time and made me ask:

"Where are the baby's needs being considered here?"

Here are few moments transcribed from the TV show:

Minute 4: 01: “You’ll do anything to get your baby to sleep longer.”

Minute 4:06 “Our product is a sleep and sanity saviour for parents and babies everywhere.”

Minute 4:42 “We were exhausted. We knew that we had to do something.”

Minute 5:14: “He is able to put himself back to sleep without my help.”



Figure 5. The “Zipadee-Zip” or “straight jacket” in the words of one of the “sharks” of the TV show.⁴

A quick reasearch into more types of contemporary swaddling equipment resulted in the following “hot-buys”:

- The “**heart swaddle**” that allows children to keep their hands on their hearts instead of having them straight beside their bodies:
-

⁴ Retrieved from: <https://www.youtube.com/watch?v=ASSJc923rAE>



Figure 6. *Heart Swaddle*⁵.

-
- **“Sleep sack, swaddle, change-pad cover”** meant to keep children “cozy” and their hands clean:



Figure 7. *Sleep sack, swaddle, and change-pad cover*.⁶

⁵ Retrieved from: <https://www.youtube.com/watch?v=NnTOjmZtFHQ>

⁶ Retrieved from: <http://www.sears.ca/product/halo-sleepsack-swaddle-change-change-pad-cover/632-000972893-2962>. Used with permission

These products (that took over the internet and the desperate sleepless parents) would have been harshly criticised by Rousseau.

I am presenting these 21st century examples to show that this conversation is still continuing after 5000 years... and I don't imagine there will be an end to it soon. Adults will make these decisions triggered by their own views, or those of the so-called experts, sometimes failing to consider what their child would choose if he/she could "communicate". The literal meaning of this syntagm is very close to my heart due to my life experience with my first son at the Romanian hospital.

I know that by opposing the so-called science behind the benefits of swaddling I may seem extremely Rousseauian because, as we well know, he advised that children should wear loose clothes or none at all to avoid constriction of any kind, thus supporting natural growth and development. I would like to emphasize that I am not against swaddling if such a practice is proven to benefit an individual baby. However, I am critical of swaddling when done without considering the needs, expressed lack of comfort, and wishes of the baby. A key question is, who benefits?

So, what would a swaddling pedagogy be? Do swaddling pedagogies exist? Why do I use this metaphor? As examples, I will briefly propose two aspects of early education that might remind us of the restrictions of swaddling and will help to clarify the intentions of this work: environment and the sense of wonder.

Swaddling environment

I consider a swaddling learning environment any space that does not allow children to move, think, and/or explore freely. How often are we, as students, allowed to move around freely in a classroom? Research has indicated that "learning requires movement and sensory activity that may be accompanied by actual emotions and feelings" (Block, 2001, p. 92). Sitting, for longer periods of time does not help thinking; "when engaged in schooling, the body should move through an environment, as it does in walking; the bodily activity contributes a content to the brain that is inseparable from the workings of mind" (Block, 2001, p. 93). We have learned so much lately about the direct connection between body-movement-brain activities (Jensen, 2005; Kempermann, 2002; Tong, Shen, Perreau, Balazs, & Cotman, 2001; Dwyer, Sallis, Blizzard, Lazarus & Dean, 2001; Dolcourt, 2000;

Slavin, 1994; Schmahmann, 1997; Desmond, Gabrielli, Wagner, Ginier, & Glover, 1997; Courchesne & Allen, 1997) and, yet, the results of these lessons are not yet visible in all classrooms. A swaddling environment may deny children access to natural light, natural air-flow, and a natural sense of safety. Students may feel, static, “looked-down upon”, lethargic, uncomfortable. These outcomes are not the ones that a genuine educational process requires to engage students and teachers alike, in meaningful pedagogical dialogue.

I remember a few glimpses of my own early childhood experiences. I remember that I had two teachers, a “good” teacher (who became my inspiration for my career) and a “bad” teacher. As Egan (1986, 1997) suggests, as a child, I was making meaning of the world around me using binary opposites: good-bad, loving-hating, light-dark, laughter-sadness, etc. The emotions I experienced in my childhood are still strong today, the reasons for them revealed through long reflections and conversations with my parents. I discovered that the “bad” teacher kept us all sitting on chairs most of the day and made us put one finger on our mouth – signifying a lock – and our other hand had to be placed behind our back. This was the “listening” position. As three and four year olds, we must have been feeling trapped in this position; we must have been daydreaming about the moments when we were allowed to go outside and be ourselves. The classroom was used to swaddle us. The “good” teacher used the same classroom, but in different ways. She succeeded to transform the effects of the same environment from swaddling to freeing. She let us play, explore, build, and be noisy! She let us make meaning of the world unrestricted by a physical position or state.

During the first years (1990s) of my work as an early childhood educator, I was influenced by theories and practices of Pestalozzi, Steiner, Montessori, and later, Malaguzzi, that allowed freedom in the classroom. I made mistakes such as overwhelming the walls with children’s work and other colourful images, or thinking that the more colour, the better for the busy child... I corrected these mistakes through moments of listening, observing, and reflecting upon children’s activities and explorations. These moments taught me that less is, indeed, more in early childhood. Instead of overflowing an activity table with 5 kinds of materials so the children could have a “choice”, I started to prepare open-ended material; the decision for choosing one material or the other was inspired by what I was learning from observing the children. This shift provoked multiple other ripples

in my practice that *unswaddled* me as a teacher and *unswaddled* the flow of exploration, action, and thinking of the children in my care. Later on, while searching for new pedagogical ways of being with children, I discovered Malaguzzi, the initiator of the now prevalent early childhood practice: the Reggio Emilia pedagogy. Malaguzzi's proposals regarding the environment were extremely close to the environment I was learning to create in the first years of my practice:

The environment you construct around you and the children also reflects this image you have about the child. There's a difference between the environment that you are able to build based on a preconceived image of the child and the environment that you can build that is based on the child you see in front of you — the relationship you build with the child, and the games you play. An environment that grows out of your relationship with the child is unique and fluid. (Malaguzzi, 1994, p. 1)

My views on an unswaddling environment are ever shifting and growing. I consider that the kind of knowledge and relationships that a teacher builds with the children and the environment can influence, in a powerful way, the choice of material, activity planning, and free learning in an early childhood classroom. Children are creative and our responsibility as teachers is to guide their creativity through providing experiences and materials that offer multiple possibilities (not only one or two ways of engaging with them). These kinds of open-ended materials are called "loose parts" by the architect Simon Nicholson (1972). He explains that, "In any environment, both the degree of inventiveness and creativity, and the possibility of discovery, are directly proportional to the number and kind of variables in it" (Nicholson, 1971, P. 5).

As van Manen beautifully puts it:

Children have to find their own uniqueness and identity through personal exploration, choice, and commitment. How can we make such alternative available? What worlds are worthy of our efforts of representation? Children cannot just be expected to discover life. They must also be allowed to act, experiment and create. (2002, p. 13)

When we swaddle environments, we swaddle relationships, and thus we swaddle the very meaning of learning: discovering and co-constructing worlds in which meaning making evolves.

Swaddling wonder

Curiosity for learning a certain aspect of the world around us is the first step into the space of acquiring knowledge. Passion comes from delving deep into a possible question and trying to search for possible answers. Curiosity and wonder open the doors of knowing. Children wonder at the world around them and act upon this wonder by exploring, touching, observing, smelling, tasting, moving... The state of wonder could be considered a bridge that connects the unknown to the possible known.

An autumn day. 2001. We are taking our usual horse-chestnut-picking walk in the central park of the city. Children are excited and filling their plastic bags with heavy horse-chestnuts. They are shinny. They feel good. They are full of possibilities. The chestnuts are carried back to school, washed and dried by children, then placed in baskets all around the classrooms. Children forget the plastic toys ... for weeks. They love the magic of the chestnut becomings.

One three-year-old little boy takes one chestnut and lays it on the ground. He lays on his belly. Head toward window. It's 11 AM. Multiple activities happening in the class. Fun activities. Games. Laughter. It is 12.00PM – lunch time. The little boy with the one chestnut is still on the ground. Still looking, feeling, experimenting with the one chestnut. He is absorbed. He is absorbed by his own wonder, by his experience, and experiments. He is absorbed by the one chestnut. He laughs, he talks, and he rolls around.

The room is embraced by the smell of fresh soup. Chestnut in the pocket. Hand on the spoon.

The wonder in this child's eyes made me reconsider many of my teaching methods and strategies. The wonder and exploration that I witnessed taught me to slow down the pace of the day and allow those moments to happen, those moments without a clear "pedagogical intent", and those moments of genuine learning about the world. By doing so, my wonder as an educator came alive again, as it was alive during the 10-minute-breaks of my childhood. I was better able to be present, to listen and learn together with my children. I allowed myself to be more and more surprised by children and not stuck into my well-planned sketch of the day. As a teacher, I consider that being **by children** is one

of the most rewarding feelings an educator could experience. The shift was not sudden; it took time. It awakened me slowly from the well-drilled lessons I have been learning from the age of 14 when I started to study at the Teacher Training College. By slowing down, I was able to reflect; and, by reflecting, I was able to ask questions similar to the ones of Ann Hill (1994) who went through the same kind of awakening:

What does this mean to me about waiting for children, for listening in silence to the embodied language of their laughter and gaze? Have I missed other moments like this, moments when I could have learned something about the way a child was making sense of his/her learning? (p. 345)

Questions I asked myself did not require answers; they required actions. I needed to unswaddle my own self from the bondages of theoretical lessons that disconnected me from the reality of teaching, and I needed to unswaddle my own wonder in order to prevent silencing the natural wonder of children.

Pedagogies that swaddle the environment and the sense of wonder become pedagogies that shape the children in certain ways, without having the input of the needs, wishes, dreams, and imaginations of children. I will present two types of swaddling pedagogies: one I call the moulding one, a pedagogy that seeks to shape children into a particular mould of being, and the other, the “not-yet” pedagogy, that sees children as incomplete and/or not-yet ready to be engaged in their own learning. These are, I recognize, broad brushes, and as will become evident later in the thesis, I am not unaware of the work of curriculum theorists and educators that reflect pedagogical understandings and practices that are child-focused, responsive, and sensitive.

A swaddling pedagogy that moulds

A pedagogy or a pedagogical practice that can be considered swaddling is one that tries to teach children by shaping or moulding them into desired future beings as imagined by educators, curriculum developers, and others in charge of the future of society.

The metaphor of moulding children into desired shapes has its roots in multiple age-old practices that intended to support the child in the process of fitting into society

and becoming a successful citizen of the community. Examples of the practice of artificially modifying the children's body (specifically cranial deformations) into the right shape have been found as far back in history as the ninth millennium, BC (Meiklejohn, 1992). The practice has been performed in all parts of the world. Some examples include: Iraq (45000 BC), Peking (30 000 BC), Australia (12 000 BC), Middle East, Andean regions, Peru and Chile (Neolithic), the Nile valley (1350 BC), Crimea, North Caucasus (115 CE), Pre-Columbian America, etc. (Obladen, 2012). These practices can also be found in the history of some North American Native cultures and South American Inca and Mayan communities. Some Mayan methods consisted of reshaping children's heads into long-sloped foreheads:

Like the Sun God, the Maize God is associated with life and death. He follows the path across the sky, descends into the Underworld, is reborn, and returns to the Sky World. The flattened and elongated forehead of this deity is often accentuated by a partly shaven head and eyebrows, leaving patches of hair on the top of his head, which resembles a ripened ear of corn. The Maya elite practised changing the shape of their offsprings' skulls to resemble the Maize God's elongated head by tying two boards, front and back, against the infant's head. (<http://www.historymuseum.ca>⁷)

All the reasons for this practice are not known, but the ones that are known seem to have one aspect in common: "Head shaping seems to be a human cultural achievement rooting in the belief in an **'unfinished self'** - the belief that something can and must be improved in the newborn baby. ..." (Obladen, 2014).

What we should ask ourselves today is whether our pedagogical practices are still trying to "mould" children into shapes that adults consider to be "the right" ones? Is curricula designed to mould children's thinking toward the "right" directions and targets? Are we trying to focus children's open perspective of the world toward one single perspective? Are we still practicing rituals that hide similar roots?

⁷ <http://www.historymuseum.ca/cmhc/exhibitions/civil/maya/mmc10eng.shtml#maizegod>

The “Not yet” swaddling pedagogy

What a poor sort of foresight, to make a child miserable in the present with the more or less doubtful hope of making him happy at some future day!

(Rousseau, 1762, p. 215)

An educational practice that considers the child incomplete, incapable, unequipped, unskilled, and insufficiently developed, I consider a “Not-yet” pedagogy and practice. This kind of education starts with the premise that the child needs to learn for the future and by focusing too much on the future tends to ignore children’s present. The child is considered an incipient being that is not yet able to think, feel, or act with appropriate manners. Such an image of the child as an incomplete being has deep roots in history. For example, long before developmental psychology (that started to exist as a discipline after the industrial revolution), ancient Mexicans portrayed the stages of human development in the following way:

“small child” (makes mud balls and cries out), “child” (does not yet understand), “youth” (cuts wood) or “maiden” (spins and weaves), “grown youth” (master of youths) or “grown maiden” (spins but does not grind maize), and “grown youth of marriageable age” (cultivates the soil) or “young marriageable maiden” (grinds corn and prepares food), indicating that while older children were productive members of society, they were not immediately considered to be of marriageable age. (p. 252 in de Lucia, 2010)

I found interesting the fact that young children were described by deficits or faults, while older children were described by their abilities. The image of Early Childhood Education, in general, seems to be influenced by such a view.

Assuming that children are too young to learn because they won’t be able to understand anyway, reminds me of a story I heard recently from my friend in Romania whom I was supporting in her preparation for a licensing inspection at her preschool. She shared with me that she had to talk to her three-year-old group of children and ask them not to write their name on their art work during the inspection, because the early education system forbids teaching three-year-olds to write their name until a certain age, or grade level. If the inspectors were to see this rule broken, and children being able to

write, my friend would possibly fail her inspection. The outrage of this situation is indescribable. Children are asked to hold back their ability because some adult decided that they should not be able to do certain thing until a clearly defined moment!

I consider the “Not yet” pedagogy as being extremely damaging to both the child and the teacher. Once the child is assumed as not-yet-ready, the view upon his/her education will take the deficit perspective. This perspective allows teachers to see only gaps and deficiencies instead of the present capacities of the young child. This pedagogy can remind us of the “deficit discourses” that consider the individual students as lacking, or missing capacities that would make them fit in into the “typical” group (Collins, 1988; Pearl, 1997; Valencia, 1997; Brandon, 2003; Ford & Grantham, 2003; Sleeter, 2004; Yosso, 2005; Dudley-Marling, 2007; Gorski, 2008). If pedagogy is practiced through a deficit lens, it undermines the multitude of gifts and abilities that each child brings to the pedagogical relationship (Gorski, 2010-2011). The most devastating error within such a deficit pedagogy is considered by Gorski (2010) to be “when we mistake difference—particularly difference from ourselves— for deficit” (p. 2). The differences between very young children and adults may indeed be considered as deficits instead of simple differences when we practice the “Not-Yet” pedagogy. Such pedagogy can exist at any level of education or social relationships.

My husband and I had to go to a meeting with a bank manager. She is tall, elegant, inviting, and smiling. We enter her office and sit down on two chairs in front of her desk. Once we settle in, she notes with an expression of surprise: “Oh, you have an accent, what kind is it?” We look at each other, derailed a little by the question that was supposed to be a conversation starter, a personal take just before the professional one.

We explain to her that she is hearing three different accents in our English. The next question was one of the most typical questions we get from strangers: “How long have you been here in Canada?” Our answer comes fast: “Five years!” At this point she is manifesting a visible puzzlement and, unfortunately, she chooses to share it with us: “Oh, and you still have such strong accents? I guess, sometimes, it can take a while, eh?”

The encounter stayed with us for a long time. This woman, once she heard us speak, looked at us through a deficit lens. She wished to “fix” us; she needed to see us integrated until we would be invisible through complete linguistic assimilation. We

reflected often on the encounter, trying to better understand her perspective. Our subjective conclusion was: ignorance – a lack of knowledge regarding multilingualism. But, ignorance doesn't excuse her lack of tact in suggesting that an "accent-less" language is the only acceptable one after a few years of living in a new country. Such social attitudes are often transferred into pedagogical situations, mainly when encountering visible and invisible differences like race, social background, poverty, and disability. Sleeter (2004, in Gorski, 2010) writes that "the long-standing deficit ideology still runs rampant in many schools...despite the abstraction that 'all children can learn'" (in Gorski, 2010, p. 3).

In my practice, I follow Bruner's advice: 'We begin with the hypothesis that any subject can be taught effectively in some intellectually honest form to any child at any stage of development' (1960, p. 33). This way, the child is never seen incapable or not-yet ready. I have never stopped or postponed a question coming from children because I knew that they needed a response right then and there:

It was summer. The previous day, children asked me how the stars got so high up in the sky. I had a lengthy conversation with them about stars and their journey. One little girl asked: "What is your favourite star in the whole universe?" I responded: "The middle star of Orion's belt. The questioning continued...and the new activity plan was taking shape in my head: The Orion Constellation. But... they are four-year-olds! So what? In one week, we all knew the history of the hunter Orion and his very place in the sky! The Monday after... A few parents came to me and asked me: "How did you do this?" "What do you mean?" – I asked "Make them know the stars" – they responded. Children, during the weekend, had shown their parents Orion in the night sky. I smiled and told them that children are extremely capable of understanding anything, if we know in what language to speak to them. The parents were left puzzled, questioning their own beliefs and trust in their children's abilities.

The "not yet" view on children reminds me of Merleau-Ponty's (2007, p. 165) insight regarding childhood as "pre-maturation". He states that if an infant is defined only by his/her future self—a fully formed adult—the present of childhood does not exist. The child will always be a "future-adult", "future-social being", "future person", "future capable person", etc. Once we add the prefix "pre" to any concept, the present loses value. The focus is on

the next steps toward a goal, and not on the steps we stand on. The meanings of the present experience of childhood are not fully or considered at all. We should consider Fujita's (1987) perspective of the lived meanings of children and how pivotal they should be in education:

Childhood is not an underdeveloped adulthood, perhaps like summer is not an underdeveloped autumn. . . . It seems far more important to foster lived meaning of ourselves and others even in a seemingly "primitive" stage than trying to run up the steps of developmental stages. (Fujita, 1987, p. 18, in Pinar, 1996)

A pedagogy that considers children "unfinished products" and focuses only on the "missing elements" is fated to practice an education that risks being exclusively committed to an imagined future and thus ignores the realities and values of the present child. Such a limiting pedagogy swaddles the myriad of present capacities and abilities of the child to discover and make meaning of the world. A non-swaddling pedagogy needs to consider, in a balanced way, both present and future qualities of children.

Swaddling pedagogies still exist today. What I would like to accomplish is a new way of preventing absolute foci on one aspect or the other (e.g. future versus present, finished versus unfinished) and create a healthy pedagogical balance that encompasses all the possibilities that a child offers here now in the present, and in anticipation of the future.

The theoretical lens I use in this thesis is the one of Imaginative Education a non-swaddling pedagogy that recognizes the capacities of children, and builds on these capacities as they unfold over time. As this theory was born from the need of acknowledging the role of culture in the educational system and directly speaks to the pedagogical relationship between children and educator, I would like to briefly explore how children are perceived and perceive themselves. This relationship has always been a little capricious, if not unsettling. Children's perspectives, ideas, opinions, and desires are critical in issues concerning their learning environment and pedagogical well-being.

Unswaddling children's voices

Some of the difficulties encountered by childhood studies (psychological, anthropological, pedagogical, etc.) were triggered by the dual quality of the voice of children: voice and presence of agency and voice and presence of vulnerability: 'while we increasingly look at children as having agency, they nevertheless are among the most vulnerable members of society and have particular needs for nurturance'. (Bluebond-Langner & Korbin, 2007, p. 242)

Because one of the factors that appears absent from theoretical depictions of childhood is the degree of participation of children in the research and pedagogical decisions that concern them, it seems only fair here to give voice to the protagonists of this journey. There have been a multitude of depictions and concepts of childhood offered by researchers, theorists, and educators. **What has been missing, however, is the very voice of the child in this conversation.** Adults, even if having the best of intentions, seem to have forgotten that the object of their attention can communicate both verbally and non-verbally.

There is a resulting feeling of unease and although it is acknowledged that this is influenced by personally held beliefs and values of childhood, each position reflects an adult perspective. (Lowe, 2012, p. 270)

Researching children's views or perspectives of childhood is a recent and complex approach. Because children are immersed in society and community, it is extremely difficult to gather information in regards to their views on childhood. It is almost impossible to assume that the adults in their lives will not influence children's answers (Lowe, 2012). Another challenge for research on children is that researchers cannot just walk in, do their "research" and walk out. In order to collect genuine and real information, the researcher needs to build a trusting relationship with the children, she/he needs to immerse into the life of the children, and move and play along with them. Building relationships and getting accustomed to the environment also helps the researcher in the process of designing the research in such way that merges with the natural flow of things within a child's everyday experience.

In the case of Rosemarie Lowe's (2012) research, published in her article: *Children Deconstructing Childhood (2012)*, the pre-research period lasted eight weeks. During the next eight weeks of the actual research, carefully selected themes emerged. These

themes, named and identified by the researchers, were children's understanding of being a child: the playful child, the needful child, the unknowing child, and the unauthorized child (Lowe, 2012, p. 273). I will briefly describe these images of the child, as identified and conceptualized by Lowe through her research with children and their perspectives of childhood and how the emergent themes or images of children that she and her researchers arrived at, speak to concepts critical to an unswaddled practice of research and pedagogy.

The image of the *Playful Child* was one of the strongest representations of a child's role as perceived by children. They had a very clear theory of play being the occupation of children and not adults. Play was "taken" and children would not allow it to be adopted by adults. The situation where adults were perceived as playing was described as help and not actual play. When the researcher tried to join a game outside, one child responded:

'No, cos the playing bit is not for grown-ups, you ... you ... you could help us, you wanna do that?' (said seriously, whilst affectionately rubbing the researcher's arm). (Lowe, 2012, p. 274)

This image of the *Playful Child* is powerful in the children's eyes and has very clear rules that appear to have been accepted by most children in the study. The *Playful Child* knows exactly who he/she is and also understands, acknowledges and imposes a social differentiation between children and adults. The children are the ones who know and adults are the ones who wish to know and wish to join in on the play. The image of the *Playful Child* connect with the unswaddling aspects of children being aware of their boundaries and abilities, movement, verbal and non-verbal expressivity, relationship (by children establishing the roles of adults in play), and openness to new possibilities (like the one of adults participating in child play).

The second image identified by Lowe is the *Unknowing Child*. Children were aware and open about their lack of knowledge in certain areas. Knowledge was represented by both skills and information. The most acknowledged skills were: dressing, tying shoes, fastening coats, opening doors, using scissors, etc. Concerning the information part, children described what they meant by dividing the roles of adults and children in work and play. Parents could not possibly come to daycare because they work, and they are too big

for the furniture. The children interviewed also agreed that adults do not really need to come to daycare because they already possess the information that is learned at the centre:

'They don't come nursery cos they go work [sic] ... anyway they know the words already ... when we are singing ... they know the words'. There is agreement: 'Yeah and know the jigsaws ... how to do it' Finally, 'Yeah and they know all the colours in all [sic]' (Lowe, 2012, p. 275).

This image is self-contradictory. Being aware of your lack of knowledge is a sign of wisdom, and not a sign of an “unknowing” child. The children in Lowe’s study were clearly aware of what they lack, and what their parents don’t lack. This reflective thinking does not communicate a lack of knowledge; on the contrary, it shows an awareness of the process of learning and of the differences and connections between these two worlds (adulthood and childhood). This theme calls attention to the unswaddling aspect of trust required in the educational institution’s and adult’s responsibilities in terms of understanding the unfolding of children’s awareness of their learning and in the development of an unswaddled child-orientated pedagogy.

The next theme identified was the *Unauthorised Child*, and defines children’s struggle and frustration with the difference in rights and rules between themselves and the adults. The children in the study communicated through behaviour, conversations and body language:

Frustration and dissatisfaction when they demonstrated an ability to solve problems, complete tasks or know what to do next, and this was quashed by the social rules of the situation. Children appeared to accept unwillingly that rules are different for them they are children, and consequently, they are not given permission by the adults and, in some circumstances, by their peers, to see things through. (Lowe, 2012, p. 276)

The children acknowledge the fact that adults have the power and the control and will use them regardless of the feelings of the child. Recognition of the controlling power of adults was observed during role-play:

'My baby crying, she don't wanna go [sic] nursery today but she has to. I'm going working. She's gonna [sic] do sticking and playing and everything. M (practitioner) will look after her' (Lowe, 2012, p. 276).

The study presents other examples of children's ability to reflect on, and generalize about, their role as being the ones who have to listen, conform, and act against their own wishes. Children in the study realized that, most of the time, they were not allowed to make choices. The following example is extremely relevant and shows that even during role-playing while trying to assume a decision-making role, the adult is perceived as the winner:

'I'm in charge, I'm in charge it's my den... you've got to do it my way cos [sic] it's my den'. Another child challenges his authority: 'You're not in charge, L's (Practitioner) in charge'. As the bickering increases, a practitioner intervenes. The second child somewhat gleefully comments: 'See you're not in charge... L's in charge now'. To which the first child admits defeat saying: 'You do it L,... you make a den for us, you do it please' (spoken calmly and quietly) (Lowe, 2012, pp. 276-277).

This theme connects with the unswaddling aspects of relational reciprocity and responsibility between children and adults as children entrust difficult decisions onto the adults they know and trust.

The final image in Lowe's research was *The Needful Child*. The author admits that this label may sound as a deficit and that it might remind us of the image of the Innocent Child present in Romantic views, "however, what was interpreted from the data gathered, and cross-referenced, is that this reliance and trust in the adult is not seen as a deficit, but, rather, a genuine reflection of the intensity of effective emotional relationships between adults and children" (Lowe, 2012, p. 276). This theme shows a child who is aware of his/her needs and trusts in the adult's capacity to fulfill those needs. This awareness can remind us of the unswaddling aspects of relationship, trust, identity and affect. This child understands the genuine meaning of caring. His/her awareness of the physical and emotional needs demonstrates acuity in identifying elements that swaddle his/her lived experiences.

On reading this research, I could not stop wondering, why do we rely on an adult's perspective to identify and select themes in a research project designed to explore children's perspectives and experiences? Could such research be realized exclusively with tools that belong to children? One suggestion and challenge for me would be to work with a collaborative team of researchers of all ages to set up a participatory action research project, and leave the data analysis, theme extraction and knowledge representation to children. I was glad to see that my concerns are similar to those felt and shared by the author of the study:

On reflection, the case study sets the challenge of developing an improved and extended methodology in order to increase the reliability, validity and trustworthiness of children's perspectives of childhood. This may be achievable with a larger study of children at different ages and even *the possibility of children researching children themselves might reduce adult bias further*. (Lowe, 2012, p. 277, italics added)

As seen above, children's perspectives on their own lives are quite elaborate and complex. Once we acknowledge that children are indeed "experts in their own lives" (Clark, 2007, Langsted, 1994), active participants in their own life, meaning-makers, researchers, explorers (Clark, 2007), and scientists (Gopnik, 2009), we may become better able and more willing to listen fully to what children communicate through their words and ideas, emotions, body-language, and actions. As researchers and educators, we need to avoid the inherent dangers of neglecting children's voices and/or being influenced by falsely perceived deficits such as incompetence, inarticulate language, lack of self-knowledge, immaturity, and all the other labels that we give children who we perceive as less-than anticipated.

All these aspects of research necessary for researching with children circle back to the concepts that I identified earlier during my self-unswaddling process:

- **Openness** to sharing and exploring,
- Understanding of the need for **movement**,
- Building a **trusting relationship** between researchers and children,

- Sharing aspects that belong to the **identity** of children, and
- Documenting children's life with words and **emotions**.

When engaging in research with children, we need to pay attention to whether we are researching *on* or *with* children.

Chapter 2. The Unswaddling Trip

My dissertation engages deeply with the theory and practice of Imaginative Education, because it is my present way of thinking and teaching both in Early Childhood and Post-Secondary education. Imaginative Education is a pedagogical theory that opened up the avenues toward practicing an unswaddling pedagogy. This theory of education has given me the tools to unswaddle my own assumptions and to live and educate with hope. My personal history with Imaginative Education begins in 1995 when, while studying in Holland, something happened that changed my whole life.

I was in my last year of undergraduate studies at Babes-Bolyai University in Romania. I had the wonderful opportunity of getting a study bursary for a few months at a teacher training college in Holland. This college had absolutely no English books in its library. I did not speak Dutch then, so I needed to find a place where I could read literature and study in a language that I understood (mind you, my English wasn't great either – I learned it from a book, by myself, after the failed outcomes of my English classes in school). After asking around, I found out that the city of Enschede – a train ride from the place where I was living – had a private Curriculum Development Institution (SLO⁸) with a great library of books in English. I started to visit this institution on one of my days off school. Every Thursday, I would take the train and travel to Enschede, where I would bury myself in books. At this institution, I met one of my best friends in the world- Juliette van Campen. She was working at this institution as a curriculum developer, and focused on the role of narratives and the storyline approach. I had numerous conversations with her because I was extremely interested in teaching through stories.

One Thursday, during my usual routine (that involved getting addicted to coffee), I found A BOOK. This book kept me reading the whole afternoon until I finished it. I FELL IN LOVE. This book expressed accurately, in a very articulate and documented way, ideas that were formed in my mind but were in the state of seeds and seedlings. This book seemed as a finite product of all my raw, chaotic pedagogical thoughts. Somebody, somewhere was able to make sense of all the ideas and feelings I was experiencing;

⁸ <http://www.slo.nl/>

someone, somewhere, was able to see what I was looking for; someone, somewhere, was able to build a pedagogical theory that made sense. After reading the book, I realized that I could not depart without it. I ran to Juliette and asked her permission to photocopy the book as I could not afford to order it or buy it. Juliette, looked at the book and I suddenly saw a twinkle of wonder in her eyes! She looked at me and said: *Annabella, this author is coming to give a talk to our institution next Thursday!*

I could not believe my ears! Was it a coincidence? Was it magic?

The following Thursday, I was in the meeting room equipped with all recording technology that was available at that time. I listened to his talk without breathing, along with many officials, researchers, and professors in curriculum development. When he finished his talk, who was the first to run to this famous, well-known Canadian? ME! The Annabella who barely spoke English, the Annabella who needed to meet the writer of the magical pedagogical book: ***Primary Understanding (Egan, 1988)***.

The Canadian I met that day was Professor Kieran Egan. This Canadian changed my life and helped it to become what it is today. This Canadian met the stuttering Romanian Annabella and invited her, after only a five minute conversation, to go to Canada and complete a Master's degree under his supervision.⁹

Even before I completed my bursary in Holland, an application package arrived at my home in Romania and was waiting for me on my desk.

Professor Egan's travelling blog shares a few "close-ones" about this very trip to The Netherlands:

What made the Enschede visit even more problematic was that the phone number I had for my contact, Jos, was wrong--or at least I assume he didn't work for the agricultural machinery factory that responded, and swore it was their number. What to do? Should I go to Enschede and hope I could find him? I tried phoning colleges and the university in Enschede, but no-one had heard of him. Jos was to have sent me maps and material about his institution before I left, but Canada Post made its usual contribution to efficient communication, and I left before it arrived. Still, I had my overheads, and the two days were clear, so why not try it? I did vaguely

⁹ At Simon Fraser University, Burnaby, Canada.

remember from an earlier e-mail message that he mentioned something about booking me into a hotel near the station. With a shoulder bag containing my overalls, a clean shirt, pyjamas and toiletries, I took the fast train south and changed at Amersfoort to a more leisurely and older train east to its terminus at Enschede. At each station, the long racks of commuters' bicycles supported Guinness Book of Records claims. At Enschede I walked in the light rain out of the station and looked around. What now? I'm not sure what I expected, but standing in the middle of a substantial city didn't offer immediate clues as where to go next. There were some large buildings to the left, that looked as though they could be hotels. I wish I'd thought to bring an umbrella, and couldn't see anything that looked like an umbrella shop. The tall buildings turned out to be apartment blocks, so I headed back towards the railway station. As the rain began to trickle down my neck I considered simply getting the train back to Groningen. But then saw a sign to a tourist information office. (Egan, not dated: <https://www.sfu.ca/~egan/HOWT-Neth.html>)

Professor Egan made it to the right hotel, with the help of a carpenter who started calling different hotels to inquire about the reservation, and he was successful.

What if the carpenter hadn't been willing to help? What if the weather had driven Egan back to Groningen? What if he had turned to the officials and disregarded me after his talk? What if I had not stumbled upon the book at the library? What if I had not found that library?

What if?

What if?

Why not?

I had prepared two different introductions to the talk, and as the audience seemed so engaged and responsive, I gave them both. I spoke in a wonderful high-tech room, with shutters and lights and projector and screen all controlled by switches on the desk at the front. Hard not to keep playing with them. The generous audience seemed quite pleased at the end, and there was an extended period of questions and sort-of answers. (Egan, n.d.¹⁰)

I left Holland, graduated from university in June 1996, and was on the plane to Vancouver in August 1996 to start my Master's in September at Simon Fraser University.

I had always dreamed of opening my own school (dedicated to very young children coming from underprivileged backgrounds: orphanages, foster homes, very poor families; an impossible dream because of my precarious financial situation and because of the population that I wished to support by this institution. The most significant impediment to realizing this dream was my own self. I did not feel ready intellectually and pedagogically.

Unfortunately, my university studies in Romania had not helped me to extend my knowledge about the best teaching practices and the history of pedagogy. The degrees in the field of education were just re-birthing in Romania, after a long period of sleep. The communist regime in Romania had forbidden most psychology and education faculties for a few decades. In 1990, after the Revolution, these departments started to reopen slowly. Hence, most of my professors were very old and, unfortunately, their material was the same. I remember trying to trust texts written on paper that had changed colour due to time. The problem was not only the quality of the material, but also the quality of their teaching: dictating their lectures and asking us to reiterate word by word what they had "taught" us. I felt limited, I felt locked into a far-gone time. I needed to know more, and be in touch with what was happening in the world. The opportunity that Professor Egan offered me was exactly that: unlimited access to books, old and new, articles, professors with different views, and so on. I escaped! This is how it all started: growth, inspiration, pedagogy, and a renewed belief in dreams coming true.

¹⁰ <https://www.sfu.ca/~egan/HOWT-Neth.html>

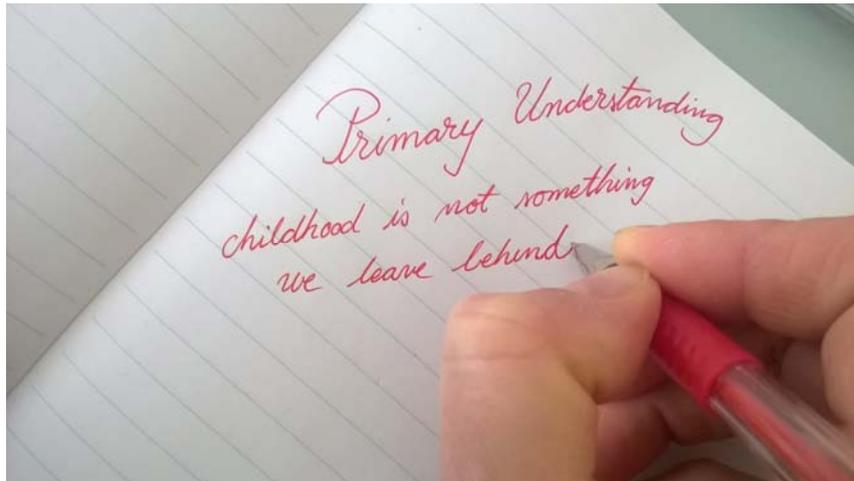


Figure 8. My notes from *Primary Understanding*

So what had grabbed my attention and made me catch my breath when reading Egan's book in Enschede? What excited me? Why have I never abandoned the book I so fortuitously discovered in the library of SLO? Below, I share some of the notes I took during my first read of *Primary Understanding*. Interestingly and almost magically, those notes contain five of the six previously discussed major themes of an unswaddling pedagogy: openness, relationship, trust, identity, and affect. One theme is missing - the theme of movement that belongs to the body:

TRUST

Childhood and adolescence are not merely imperfect forms of adulthood, they have their own perfections, and a proper education must attend to their cultivation.
(Egan, 1988, p. 1)

IDENTITY

Childhood is not something we leave behind. The achievements and experiences of childhood are constituents of our later selves ... (Egan, 1988, p. 2)

RELATIONSHIP

An ideal education will not be happy to allow our buried selves [referring to Matthew Arnold's poem 'The Buried Life'] to remain lost, providing no guidance as we negotiate our ways through life. We will want to conserve and secure our sense of self, and cultivate ways of being true to it. (Egan, 1988, pp. 89-90)

OPENNESS

That unique consciousness of reality, which is the birthright of each of us, can seem hopelessly lost if language becomes a purely conventionalizing instrument which persuades the child that its uniqueness was merely an illusion and that one is simply a socialized unit among others the same. (Egan, 1988, p. 93)

We begin as poets. (Egan, 1988, p. 94)

The sermonizing here has been to stress that, in early childhood, we are concerned with the foundations of education. To build them properly, we need to be clear about the top floors, of course, but we also need to build proper foundations out of foundational material. (Egan, 1988, p. 95)

AFFECT

In early childhood, thinking and feeling have not yet been schooled down divergent paths. (Egan, 1988, p. 103)

[T]he story is of crucial importance as a foundation of all sense-making. (Egan, 1988, p. 129)

Why did these words strike me? Why did I have such a strong reaction to them when I first read them in 1995? Furthermore, what has changed in Egan's theory since

he wrote this book in 1988? And how might I contribute to the scholarship and concepts of pedagogy that have tugged at my heart all these years?

These are obvious questions today because I am living the answers. As I read the book for the 100th time, my reactions are still very emotional: sometimes smiling, sometimes gesturing “of course”, and other times shouting aloud, “Why?” and “Why not?” *Primary Understanding* supported most of my ideas about early childhood education and the amazing capacities of children **at ages 3 and up!** Since reading the book, I have taken years and years to apply its principles into practice, some worked at first try, and others needed more effort and sweat.

Upon my return to Romania after completing my Master’s, I founded a charity (April 1999) and initiated the first project of the charity: the “Annabella Kindergarten” – in September 1999. The term “kindergarten” meant daycare, preschool and kindergarten in one. I registered 17 children (ages 1 to 7) from socially diverse backgrounds. These children marked their existence into my professional core. They taught me, supported me, and hugged me exactly at the right moments, when I was most lost or in need of encouragement. The numbers grew from year to year until we reached 100 children per school in 2008. I developed full planning frameworks adapted from the Imaginative Education Theory for all levels: Tiny (ages 1-3), Midi (ages 3-5), Magic (ages 5-7). My frameworks were different than the ones created later on by the researchers of IERG (The Imaginative Education Research Group). I created frameworks for younger children, and I also aligned the theory and practice of Imaginative Education (IE) with narrative curriculum integration aspects (Cant, 2007, 2010).

Theoretically framing my teaching and mentoring of new teachers in regard to the theory and practice of Imaginative Education taught me numerous lessons and helped me to reflect on my own assumptions about teaching and pedagogy. I have learned to phrase IE in a practical and more accessible “teacher-like” language; I have also learned to explain, describe, and model my pedagogical intentions; I learned to talk to adults. These moments of pedagogical encounters have prepared me for what I have become: a university professor—the early childhood educator who needed to learn the languages of the adults. Egan’s book added fertilizer to my seed-ideas, **children taught me how to practice, and adults taught me how to talk about practice.**

The theory of Imaginative Education continues to be not only the fertilizer, but also my pedagogical resource of my everyday growth as an educator. Those very first ideas in that very first book I read still drive me:

Childhood as a complex layer of our lives and not a springboard toward adulthood;

Childhood as something that should never leave us;

Education as the tool for cultivating the self to not lose itself and to flourish;

Childhood as the foundation of all being, learning, and growing;

Imagination as the core of learning;

Childhood as the place where thinking and feeling are one;

Story as the foundation of all sense making, of all learning.

During my Masters at SFU, I vividly remember the multiple conversations with Professor Egan in which we occasionally disagreed. These conversations made me stronger and stronger every day. The tensions were born from the two different perspectives on education: the theoretical one of Egan and my practical perspective. Our endless conversations concerned ways of applying the Imaginative Education theory designed by Egan. I was constantly considering the children's perspectives, and Egan was constantly emphasizing the teachers' perspective. Also in the *Primary Understanding*, I noticed more and more something that was not brought into presence: **the period of life before the age of 3**. I remember asking Professor Egan about this period of life, several times, and that question always developed into a long conversation about the possibilities of learning before the age of language acquisition and the lack of/or need for a pedagogy that will mostly take place at home and not in an educational institution.

The Missing Beginning

Before we internalize language we are conscious. There is, one might say, a pre-Mythic understanding, whose characteristics – perceptual and cognitive – are the subject of intense research at present. ... The common danger is that this pre-Mythic understanding is suppressed and replaced by conventional language and forms of thought, by socialization without education. This replacement is the first, and irreparable, large-scale loss we can suffer in our education. That we must lose the early vividness of this participation is inevitable, but our educational task is to reduce the amount lost as much as possible. (Egan, 1988, pp. 162-163)

In *Primary Understanding*, Egan prepares his readers for “an educational program ... made up from four somewhat distinct layers, in each of which we develop a somewhat distinct form of understanding” (Egan, 1988, p. 7). This educational program, he continues, “prescribes how these forms of understanding can be acquired sequentially during an individual’s formative years, yielding in their coalescence a modern educated consciousness” (p. 7). The forms (later called “kinds”) of understanding were *Mythic* (consisting of thinking tools that are connected with **oral language**), *Romantic* (features of cognition that arrive together with **written language**), *Philosophic* (features of a **theoretical ability to use language**), and *Ironic* (ability to use **language** in a complex, **reflexive way**). Egan’s intention with this book was to engage primarily with the “first” (presently, this kind of understanding is second) form of understanding – the *Mythic* – and prove that children possess this mature kind of understanding early in life. He also suggests that Mythic understanding comes with some cognitive abilities that have been culturally programmed into humans.

Studying and then applying the theory of IE helped me to experiment and analyze aspects of it in “real-life situations”. When I started to work with infants and toddlers, I realized how complex these little beings actually were. I started to create activity plans following my templates. While planning, the following questions arose: how could I teach through story when the children have no language yet? How could I teach through my/their imagination when I can’t be sure if they understand or even possess such a tool?

Slowly, following my instinct more than my knowledge, I realized that there is so much more to these little beings than language. I began to tell them stories with my whole body and not only with articulate sounds; I began to understand the children and their

stories by reading their embodied engagement, exploration, and emotional expressions; I began to realize that Egan's IE theory was missing a pivotal layer in human learning and being: the bodily layer, and the articulate **language of children's embodied understanding of the world.**

Over the years, while in Romania, reading and re-reading *Primary Understanding*, I noticed what I had already noticed at the beginning of my practice as I started enrolling infants and toddlers in my schools; I kept noticing *the missing beginning*: the mysterious absence of a kind of understanding that precedes language acquisition. This find is quite a paradox because the very birth of Egan's IE theory was due to the intention of avoiding the "losses involved in becoming educated" (1988, p. 161).

How can a theory that is meant to identify and prevent losses be missing something?

Shortly before my return to Romania, Egan (1997) revised his first version of the four kinds of understandings and added a fifth kind of Understanding called the Somatic Understanding which speaks to the early years of a child's life prior to Mythic Understanding. He realized, since writing *Primary Understanding*, that his special kind of recapitulation theory needed a deeper analysis and exploration of the embodied learning capacities of children under the age of three. The missing beginning, which Egan calls Somatic Understanding, remains less adequately formulated than the other kinds of understanding and it is still a topic of tension in my conversations with my mentor.

Today, I am back at SFU for my Ph.D. I returned after many years of practicing in the field of early childhood; I returned because I needed to be able to reconnect with the world of theory; I returned because I wished to work with Professor Egan again; I returned because I felt ready to undertake his challenge and invitation: to write a dissertation that shares the complexities of *Somatic Understanding* by presenting a clear image of the pivotal role of this first understanding, to try to reconnect it with the *Mythic Understanding* (the one that requires oral language) assuring a natural flow from one to the other.

Before I came back to Canada, I wrote two books dedicated to all early childhood educators and future educators in Romania, where I shared all the lessons I learned from children and from my experiences in and out of the classroom: *A New Outlook on*

Preschool Education. The Annabella Method - an alternative teaching method meant to bring back the pleasure of being a kindergarten teacher and to help implement the curriculum; and *Dear Kindergarten Teacher. Thematic Teaching Projects with Narrative Integration of Curricular Content* (both published in 2010).

The books represented the end of a chapter of my life and the beginning of a new chapter. Recently, I found out with joy that my first book is being used as a textbook in some of the most important faculties of education in my country.

I left Romania with an easy heart.

My intention in this dissertation is to describe, analyze, elaborate, and interpret the majority of aspects related to the first two layers of understanding – Somatic and Mythic within the theory of Imaginative Education (IE) and to propose a different genus of flow between them. I hope to illustrate the complexity of the *Somatic Kind of Understanding* (from here on I will use the short – “KU” to signify both “Understanding” and “Kind of Understanding” within the theory of Imaginative Education) and, in this way, connect the first two KsU (*Somatic* and *Mythic*) in a continuous flow. I hope to contribute towards facilitating the implementation of IE theory into practice and I hope to contribute to the “accord” between the two first kinds of understanding, by building a stronger picture of *Somatic Understanding* and by describing the role of *the Mythic Understanding* in connection to *Somatic Understanding*. Instead of filling a gap, I will try to identify and elaborate on the cognitive capacities within *Somatic Understanding*, that need further elaboration; and, by doing so, augment the current disconnects between the two KsU.

Instead of “helping” young children better adapt to the future layers of understanding, as is currently the case in Imaginative Education, I will try to suggest a theoretical positioning that will not require children to adapt; I offer a theoretical positioning that will not provoke ruptures. My intention is similar to the one of denying a so-called *deficit ideology* (Sleeter, 2004, Gorsky, 2010), and this situation is the surest sign of deficit ideology: the suggestion that we fix inequalities by fixing disenfranchised communities rather than that which disenfranchises them (Gorski, 2010, p. 6).

I will write this dissertation with a language that I have learned from children: the language of imagination, possibilities, questions, tensions, perspectives, and hope. I will hope that the disconnects that provoke schisms within the educational system will reconnect and find a way for children to grow and learn in a way that is closest to their hearts, minds, and bodies. I will hope that even if critiques of the present approach to education make great points and prove salient misconceptions, there are ways of revisiting our relationship with children by employing new kinds of pedagogies. These *pedagogies of hope and trust* will embrace the value of students at the very moments in time when they are in our classrooms, thirsty for learning, in a way that makes sense to them. This hope is pivotal in any pedagogical relationship:

Pedagogical hope animates the way a parent or teacher lives with a child: it gives meaning to the way an adult stands in the world, represents the world to the child, takes responsibility for the world, and embodies or stylizes the forms of knowledge through which the world is known, shown and explained to children. (van Manen, 2002, p. 80)

History and present times continue to offer examples of such *pedagogies of hope and trust*. To avoid confusion with the terminology of Freire (1994), I will describe what these pedagogies mean to me and for my argument. My stance is that a pedagogy (or even an educational theory) that considers learning as a continuous interflowing process of change and becoming, a pedagogy that requires a deep relationship based on reciprocal trust between all involved, and a pedagogy that believes in the values of transformation, uncertainty, emergence, and wonder, is a pedagogy of hope and trust: hope because of the peaceful human relationship that values differences instead of considering them deficits, and trust because of the reliance and safety felt by everyone involved. I will share a few such pedagogies that are very close to my heart and practice. All these views are continuously shaping my thinking and, somehow, they all tend to relate back to the core theory of IE. Even if the connections are not immediately visible, my years of practicing experience taught me how to make them visible and attainable. I will succinctly introduce them here, together with their designers, pointing out some of their main educational proposals. These pedagogies helped me see the practice of education in a holistic way and to always consider the value of children's abilities from the very first moment of life. All these pedagogies focused their attention and care on the first years of human life. In my view, they are not missing "the beginning".

Heinrich Pestalozzi's life and pedagogy

As pointed out in the section of my own swaddles, one of the first educationalists who caught my attention and heart was H.F. Pestalozzi (1746-1827). He had the most difficult life due to his will and optimism regarding helping others. He took many street children into his home, educating them and offering them possibilities to develop skills that would help them in life. The villagers of Neuhof (where he lived with his wife and sick son) always viewed him with reluctance; people made fun of him and made sure that none of his idealistic plans would see the light (farming, schooling, helping others, making money to support the school, etc.). When he was at the end of his powers, having to close his dear school in 1777, having his wife sick and needing recuperation, and having lost most of his farm lands, Pestalozzi was given a brilliant idea by the two people who still stood by him: a maid, Elisabeth, and the council secretary of the city of Basel, Isaak Iselin. He was asked to write about his life and his good ideas of education. In 1780 he finished his manuscript and published his first book, *Leonard and Gertrude*, in 1781. The book had instant success and Pestalozzi's luck changed for a while. However, he became disillusioned again when he realised that his books did not change the realities. He tried to write pieces that explained why social and educational changes were necessary, but those had no success. It took until 1799 when his dreams to do good for humanity became true "officially": he founded an orphanage in Nidwalden for the children who lost their parents in the French Revolution. He helped more than 80 children get healthy, educated, and acquire life skills. As everything beautiful in his life, this dream did not last long either. After six months of existence, the military needed the building of the orphanage and asked Pestalozzi to move out and release the children. Even after so many defeats, Pestalozzi did not give up. In 1799, he was 53 years old and acted upon his realisation that schools are not what they should be. In *How Gertrude teaches her children* (1799) he reflects on the state of the schools while looking out the window over the Swiss midlands:

These schools are essentially nothing else but artificial machines that suffocate all the power and experience which nature has brought to them [the children]. ... But just for a short moment imagine again the horror of this murder. One allows the children the complete pleasure of nature until the fifth year; one lets them absorb every aspect of it, they feel its power, they have already developed a feeling for its character and its charms. Nature is being internalised, already taking them in a certain direction in life.

And after five whole years when they are used to relishing in the bliss of the more sensual side of life, suddenly this is gone and nature disappears in front of their eyes, tyrannically obstructing this gentle and charming freedom. They are thrown together like sheep, loads of them crowded in a smelly room; for hours, days, weeks, months and years. Here they are chained to the misery of boring and monotonous work and to a way of life that differs so greatly from their former one it drives them mad. (Brühlmeier, 2013)

Pestalozzi became a teacher, then a teacher trainer at the Castle of Burgdorf, in Switzerland. His dream came true; he was teaching and helping children. He made sure that the castle took in his 26 young and poor pupils. This new dream lasted until 1804 when a new one had to be established: the famous school of Yverdon (Rubi, n.d.).

I shared a little from his complex life-story because I consider that all educational ideas spring from emotions, experiences, and people we meet during our lives. Here are Pestalozzi's main educational ideas:

- ☉ All children are born with **natural powers**; the goal of education should not be to gain knowledge, but to support the unfolding and growth of natural, and latent capacities in children.

- ☉ Learning through **sensations and through the whole body**. Friedrich Froebel (1782-1852), an educationalist hugely inspired by the writing and practice of Pestalozzi, wrote a letter following a visit to Pestalozzi's Yverdon school, defending his views against the critics. In that letter, he shared some of the pivotal lessons that he learned during the tours of the school. Here is a short snippet that talks about the early education of the body:
 - But how can it be a crime; how can it be against nature to respect the body early, to learn early to know the body and its use, the use to which we owe everything, by which alone we learn to know the world without, which helps us sustain and battle for our life. (Froebel in Letter to Princess-Regent of Schwartzburg-Rudolstadt', 1862, pp. 49- 68)

- ☉ **Learning and the natural environment should be one**. Pestalozzi believed in the pedagogical power of nature and in the necessity of teachers' self-restraint of their educational control in moments when nature is "at work". Here, is the wonderful journal entry of Pestalozzi that bluntly describes this idea:
 - Let him completely realize that it is nature that teaches, and that you, with your art, do nothing more than walk quietly at her side. When he hears a bird warble or an insect hum on a leaf, then cease your talk;

the bird and the insect are teaching; your business is then to be silent.
(Diary entry: Feb. 15, 1774, in Holman, 1908)

- ② The role of **educational instinct** is deeper than the role of knowledge (in Busse, 1879). Pestalozzi believed in the role and responsibility for being spontaneous and self-practicing.
- ② **Education and social justice** are closely connected and should not be differentiated.
- ② Education is for the **whole child heart, hand, and head**. He could not understand why humanity is not following the education of these three pivotal segments of the child:
 - It is incomprehensible that mankind does not begin to bring out a perfect gradation of methods for developing the mind and feelings, the essential purpose of which should be, to use the advantages of instruction and its mechanism for the preservation of moral perfection, to prevent the selfishness of the reason by preserving the purity of the heart. (Pestalozzi, 2013, pp. 188-189, original work written in 1781)
- ② The **environment of the school should resemble home**. Pestalozzi considered that “There can be no doubt that within the living room of every household are united the basic elements of all true human education in its whole range” (in Smith, 2005). He also believed that the relationships within an educational institution should be similar to the ones in a family, characterised by love, respect, guidance, and trust. “Without love, neither the physical nor the intellectual powers will develop naturally” (Smith 2005).

Rudolf Steiner’s life and pedagogy (Waldorf Education)

Thirty-four years after the death of Pestalozzi, another brilliant thinker was born – Rudolf Steiner (1861-1925). Unlike Pestalozzi, Steiner seemed to be expert in everything: philosophy, agriculture, medicinal plants, dramaturgy, theology, education, spirituality, and many other fields. He not only showed interest in all these areas, but he contributed enormously to most of them through 6000 lectures and dozens of books. His research and writing career began when he was chosen to edit Goethe’s work, which influenced him deeply and helped him jumpstart his own spiritual approach. His childhood education began in a village school, but was interrupted early by a disagreement between Steiner’s father and the schoolmaster. Steiner was shortly homeschooled until his family moved to another village, where he joined the school. In

1879, Steiner started to attend the Vienna Institute of Technology. After four years of study, Steiner left the institute, without graduating. He started working at the archives in Weimar where he stayed until 1896. In 1891, he received a doctorate in philosophy with an unconventional dissertation. Meanwhile, he collaborated with multiple thinkers and published a few works. In 1896, he left the archives and became part owner of a literature magazine. Due to some controversial work, the magazine lost its subscribers, thus Steiner had to leave it. He taught history, art, and literature at the Berlin Workers Training School in Berlin between 1899-1904. After 1900, his fame grew and reached over the borders and helped him become a prominent scholar. Together with his second wife, Mary von Sievers, Steiner thrived in multiple fields including architecture (he designed 17 buildings), eurythmy (a type of movement-dance that involves gestures that correspond with elements of speech) and education.

In 1919, Steiner opened the very first Free Waldorf School in Stuttgart, with the help of Emily Molt. The school was housed in the Waldorf-Astoria Cigarette factory and became the template of hundreds of schools all over the world (1063 schools in 62 countries). Here are some of the main ideas of Steiner's educational philosophy:

- ☉ Children learn by example and opportunities for **imaginative play**. Steiner considered **imaginative teaching and learning as the main ingredients of a holistic education** (Nielsen, 20013).
- ☉ Teaching needs to **engage with a multitude of facets of human experience**. Steiner considered that children need much more than intellectual education. They need **education of the body, soul and spirit** (Ron, 1995).
- ☉ Education goes hand-in-hand with **art**. Student at the Waldorf schools learn by painting, sculpting, weaving, knitting, carving, book-binding, playing instruments, etc.
- ☉ Children should be encouraged to develop their own **individual talents**.
- ☉ **Education is for all**, not only for the privileged.
- ☉ **Sounds can be made visible** by the body's movements (principle of eutythmy).
- ☉ Steiner considered that each child goes through three stages of development (Uhrmacher, 1995):

- ◇ The first stage, named - The stage of imitation (0 to 7) is when children learn through empathy and doing; children learn through their entire physical being.
- ◇ The second stage begins with the age of 7, around the time when children change their teeth and lasts until the age of 14. Until this time, Steiner considered that children are still deep into using their bodies to understand the world. This stage is also called the *age of feeling* and requires education through stories, imagination, legends, and other forms that provoke emotions. During this second stage children learn primarily through image and rhythm.
- ◇ The third stage – from puberty to age 21 - is defined by learning through thinking and judgment. Children are able to construct and better understand abstractions and are encouraged to form their own opinions.

Montessori's life and pedagogy (Montessori Method)

Nine years after Steiner's birth, Maria Montessori (1870 – 1952) was born in Chiaravalle, Italy. When she was five, her family moved to Rome, where she studied at the local school. In 1886, she started studying to become an engineer – a very unexpected choice for a woman in those times. In 1890, with the help of the Pope (Brendtro, 1999), Montessori was accepted into the University of Rome where she hoped to study to become a doctor. After two years of preparatory courses, Montessori became the first woman in the history of Italy to enter medical school (Brendtro, 1999). After six years of hardships, in a university where all her male colleagues made fun of her, Montessori became the first woman to earn a medical degree in Italy. In 1897, she started volunteering at a psychiatric clinic in Rome. After a visit to recruit children patients for the clinic, the caretaker of the asylum told Montessori that children were picking up bread crumbs after their meal. She realized that the children were locked in bare rooms and that they were hungry for any sensorial experience and that due to that important input, their health was deteriorating. She became interested in studies about young children with mental identifications. She read and translated the works of Jean-Marc Itard and his student, Edouard Séguin. The latter had developed a technique for sensorial education and created a set of materials for its implementation. Some of the works she preferred to study belonged to no one other than Rousseau, Pestalozzi, and Froebel. The 28 year old became a vocal advocate for better care and education toward the

young mentally disturbed. She started working at a new institution called the Orthophrenic School, where children with multiple mental disabilities were treated and educated using special didactic materials. She recorded her work and kept reflective journals about her findings and experiences. In 1904, she took on a position as professor at the Pedagogic School of the University of Rome (<https://montessori.org.au/montessori/biography.htm>).

In 1907, Montessori saw the need to support poor children who were left home alone by working parents. On the 6th of January, 1907, she opened her first “Casa dei Bambini” (Children’s House). She provided children materials that engaged them and she believed that if the environment was thoughtfully prepared and love was present, children could educate themselves. In 1914, she stated that she did not invent a new method of teaching children, but that she only offered them a chance to live (Montessori, 1965/1914). Rapidly, after her first school, she became world famous and dedicated her time to teaching the method and training teachers. She had big plans, but the war obliged her to change her projects. She, together with her son, Mario, spent 7 years in India where they trained more than 1000 teachers. In 1946, they returned to the Netherlands where her grandchildren lived.

(<https://montessori.org.au/montessori/biography.htm>). In the USA, her fame was temporary. Even if she was very well regarded all over the world, the Americans did not accept her method fully, partly due to a tough critical article written by William Kilpatrick in 1914 entitled, *The Montessori System Examined*.

An interesting fact is that Anna Freud and Montessori collaborated for a while, but they ultimately parted due to Montessori’s refusal to use therapeutic strategies with children. At the beginning of the second World War, Hitler burned Montessori’s books because he considered her method antifascist.

Here are some of the main educational ideas of the Montessori pedagogy:

- 🕒 Children should be **free to experience** and direct their own learning;
- 🕒 **Materials** and the environment should carefully and **thoughtfully** be **prepared** by teachers;

- Ⓢ The educational environment and the teachers should support the children's **natural abilities, interests and talents**.
- Ⓢ **Education should start at a very early age**; Montessori believed in the power of children to engage with the surroundings in an effective and educational way;
- Ⓢ The **physical position** during exploration and learning should be the **choice of the children**; children in Montessori schools use carpets, chairs, tables and pillows and have the freedom to do so indoors or outdoors.
- Ⓢ **The role of the teacher is to observe, guide, facilitate, and adapt the environment** to the children; teachers should not interfere directly with the process of learning.
- Ⓢ Montessori required **teachers to develop self-awareness** and practice a reflective education in order to not let feelings of power or anger interfere with their pedagogical practice and to succeed in staying positive and open at all times.

According to Morgan (in Gonzalez-DeHass, 2013), Montessori's philosophy can be synthesized into four main principles:

- ◇ Freedom of experience (this freedom was only limited by the specific ways a material should be used, ways that recall their "real-life" use);
- ◇ Observation and sensorial experience - the environment and the materials are created to develop children's sensory capacities and their potential for observation;
- ◇ Independence and self-education – children chose the direction of their learning and they also chose the materials to help that direction;
- ◇ Discipline – Montessori also believed in children's power to know right from wrong, thus discipline was created through this trust.

Loris Malaguzzi's life and pedagogy (The Reggio Emilia Approach)

The school we are talking about is not the school you are familiar with in the past,
but it is something that you can hope for.

(Malaguzzi, 1993)

Fifty years after the birth of Maria Montessori, and only 265 km away from her birth place, Loris Malaguzzi (1920 – 1994) was born in Corregio, Italy). There is not a lot of information about Malaguzzi's life. It is known that he was married to Nilde Bonaccini who died six weeks before him, in 1993. They had one son, Antonio Malaguzzi, an architect. After researching through Italian documents to find his contact information, I found out that, unfortunately, Antonio had passed away of lung cancer in 2013. He was involved in the planning and building of the schools in Reggio Emilia.

From Sara Smidt (2013), we learn that Loris Malaguzzi grew up in the times of Benito Mussolini that “gobbled up” (Brunson, 2001, p. 46) his youth from the age of two. In 1939, his father encouraged him to become a teacher and he enrolled in and graduated from a teacher-training institute, qualifying as a primary teacher. After the end of the war, Malaguzzi was part of the first post-war psychology class at the national Centre for Research in Rome. After this course, he worked as an elementary school teacher for seven years. He was known then as a polymath due to his interests and talent in multiple fields: sports, theatre, film, journalism, etc. A year after the second WW, Italy became a republic. It was still in ruins when protests began for the rights of early childhood education to be given back to mothers; villagers started to put their powers together by selling tanks, horses and military machinery to fund the building of schools for young children. Here are the words of Malaguzzi from personal notes taken by Sandra Smidt during a visit with Malaguzzi:

The villagers were fierce in their determination to provide some education for young children that was not under the control of the Catholic Church, which had been supportive of fascism during the war. They wanted a new form of education which would ensure that they would never again bring up generations of children who would be subject to injustice and inequality. A local farmer donated some land and people from all around - workers and peasants - some of them the parents of young children and some not - worked at night and weekends to build the school. A local building

cooperative also offered its services as well as the use of some machinery. (Smidt, 2013, p.11)

After that time, as most of the other mentioned thinkers that initiated *pedagogies of home and trust*, Malaguzzi started to work with children who required extra support – children with disabilities. In 1950, he founded Reggio Emilia’s Psycho-Pedagogical Medical centre. In 1958, he became director of the Reggio Emilia preschools and worked there until the end of his life. So, what is it about this pedagogy that is warming up the hearts of so many educators? I will share some of the main pedagogical ideas and suggestions of the approach by paraphrasing from Malaguzzi’s last public presentation in Reggio Emilia (June, 1993, retrieved from:

<https://reggioalliance.org/downloads/malaguzzi:ccie:1994.pdf>):

- ☉ All **adults need to pose reflective questions** before acting pedagogically with children;
- ☉ Never think of a child in the abstract; **children are deeply connected to the world** they live in; they have relationships and experiences that make them into the children of the moment.
- ☉ Teachers need to become **comfortable with the unpredictable** and the unknown; education should never be predictable:
 - School can never be always predictable. We need to be open to what takes place and able to change our plans and go with what might grow at that very moment both inside the child and inside ourselves. (Malaguzzi, 1993, p. 2)
- ☉ **Doing too much and planning too much provoke the unwanted result:** passivity of children in their own process of discovery and learning;
- ☉ The **school needs to resemble the world**; children should feel at home and safe; the environment is considered to be the third teacher (Carter, 2007);
- ☉ Teachers need to do more than “just look(ing) at the child” (p. 2); **teachers need to learn to wait, observe, and be ready** when the child is ready.
 - We need to know how to recognize a new presence, how to wait for the child. This is something that is learned, it’s not automatic. We often have to do it against our own rush to work in our own way. We’ll discover that our presence, which has to be visible and warm, makes it possible for us to try to get inside the child and what that child is doing. And this may seem to be passive, but it is really a very strong activity on our part. (Malaguzzi, 1993, p. 3)

They tell the child:
that work and play
reality and fantasy
science and imagination
sky and earth
reason and dream
are things
that do not belong together.
And thus they tell the child
that the hundred is not there.
The child says:
No way. The hundred is there.

-Loris Malaguzzi (translated by Lella Gandini)

- 🌀 **Observation and documentation** are pivotal for the Reggio Emilia practice; teachers are researchers;
- 🌀 The **relationships built among children, parents, schools, communities, teachers**, etc. are pivotal to the pedagogy of Reggio Emilia. Everyone involved should build a strong, powerful image of the child who is intelligent, beautiful, ambitious, protagonist of his/her growth and education, and able to: imagine, construct meanings, have desires and requests, collaborate, communicate.

This journey through the history of the educators above was designed to reveal the influences that drove, and still drive, my practice as an educator today. I consider the pedagogy of IE part of the pedagogies of hope and trust; IE connects almost organically with elements of all four pedagogies described earlier. Some examples are: Pestalozzi's trust in children's innate capacities and his view on the role of teachers; Steiner's belief in the power of imagination and the view of education as being much more than intellectual development; Montessori's views on learning through experience and the importance of teachers' passion; and Malaguzzi's emphasis on the creative powers of teachers and the compulsory connection between educational content and real life.

Before analyzing in depth the "missing beginning" of the theory of IE, and proposing ways of bringing that beginning to life within an IE practice, it is necessary to introduce the theory, as a whole, with the purpose of painting a comprehensive and lived image of Egan's pedagogy.

Chapter 3. The Imaginative Education Lens

So, who is responsible for our modern social puzzle, the educational ineffectiveness of our schools?

The question above belongs to the initiator and creator of the Imaginative Education Theory; the Canadian professor who made it in time to lecture in Enschede, Holland in 1996: Kieran Egan. In the following pages, I will engage with the venture of his theory and an introduction of it that will lead the reader into the pedagogical world of Imaginative Education. But first let me introduce him to you.

Kieran Egan's life and pedagogy

Kieran Egan was born in 1942 in Cornmel, Ireland. In 1947 his family returned to England where he went to primary school in Manchester and secondary grammar school in Nottingham. He had a Catholic upbringing driven by his father and grandmother who both wanted him to become a priest. All his childhood and youth unrolled with this future in his mind, so much that he started to believe it and accept it as his only path. When he turned 18, sure enough, he was on the way to become a Franciscan novice in Chilworth, Surrey, England. Here is his own recollection of the moment of separation from his family:

My parents, sister, and Father Bernard stood on the platform, hands above them, waving. I leaned from the window, mouth open in anguish. It seemed bitterly unfair that the harmless boast I had made in boyhood, that I intended to become a priest, which had so pleased everyone, should have brought me to that wrenching separation. There I was, leaning far out as the rear carriages curved between me and my family, leaving home for ever. I was eighteen and brimming with the working-class young man's usual fears in leaving his familiar world. Added to that, was the unusual fear of what I was going towards. I was to become a Franciscan novice. I was dressed in a new black suit, traveling to London, where I would change trains, and continue to Guildford, then take a bus to the village of Chilworth, get off at The Percy Arms, and from there walk up the hill to the Franciscan novitiate. The instructions were in the often-read letter I had in my pocket from Father Romuald, the Novice Master. The novitiate experience had been described often enough by the Franciscan friars who had sat expansively in front of our fire helping my father to drink his whiskey. They began by saying it was a wonderful time in which one's old self, or just one's pride, in some versions, was broken and a new and better self-built in its place. But they

mostly talked about the alien punishments and humiliations, like sweeping leaves against the wind that were a part of the process. I was far from sure what constituted my self, but the idea of having it broken was unappealing, and the sense of some new self, some superior semi-stranger, taking over my mind was also cheerless (<https://www.sfu.ca/~egan/Novice.html>)

After a peculiar six months, he stopped his noviciate and went onto teaching high-school in Warwick from 1961 to 1963 and then completing a BA at the University of London in 1966. In 1967, he received a post-graduate Teaching Certificate. After working a year at the Institute for Comparative Studies in Kingston-upon-Thames, he moved to the USA to start a Ph.D. at Stanford University (1968-1969). During that time, he worked as a consultant for I.B.M. Corporation in a project that involved the implementation of a new programming method. Egan completed his Ph.D. at Cornell in 1972 and went on to accept a teaching position at Simon Fraser University where he has worked ever since (I just recently attended Professor Egan's retirement celebration).

Every new pedagogy is born out of the need to overcome a tension; the theory of IE had the same incentive. The history of pedagogical critique is quite long and complex. A myriad of problems have been identified and solutions have been proposed over and over again (Block, 1997, 2014; Hanushek, 2013; Tough, 2012; Zwaagstra, Clifton & Long 2010; Cuban, 2003; Kohn, 1999; Comer, 1997; Sarason, 1990, 1996; Tyack, 1995; Gatto, 1992). In Egan's (1997) view the "cacophony" of solutions and prescriptions has failed over and over again, due to the lack of identification of the real cause of the failing school education. It all seems to start at a "fundamentally incoherent conception of education" (p. 2). Thus, all the solutions given to the problems could be seen as Tylenol pills that ease the pain temporarily but don't eliminate the cause.

Egan's (1997) ambitious plan was to identify the misconceptions underlying current theoretical presumptions and propose yet another educational theory "that lays a foundation for a greater understanding and practical control of educational matters" (p. 2). Egan considers that education, as practiced today, lacks a basic understanding of some of the fundamental matters involved; and that going back to the roots of this particular understanding could help the "out-of-control" educational practices. According to Egan (1997), most problems in education are provoked by the conflict between three main educational ideals:

[T]hat we must shape the young to the current norms and conventions of adult society, that we must teach them the knowledge that will ensure their thinking conforms with what is real and true about the world, and that we must encourage the development of each student's individual potential. (p.3)

Thus, according to Egan (1997), the problems in today's and in the past's educational settings and practices stem from the incompatibility of three main educational ideals:

1. **Socialization**: shaping the child according to the current norms and requirements of society, ensuring that children receive an understanding of their society and their own place and role within it;
2. **The truth about reality**: teaching forms of knowledge that support children in their search for truth about the world (Platonic views); knowledge is valued for its benefits to the mind and not for the benefits of society.
3. **Nature's guidance**: Encouraging children to develop their own individual and unique potentials (Rousseau's views); schools focus on learning how to learn and not on academic knowledge.

The conflict, as Egan (1997) identifies it, arises from the misunderstandings between traditionalists that seem to follow the Platonic views that argue for a powerful academic curriculum and the "progressivists" that argue for the relevance of curriculum to children's inclination and need for exploration and discovery (p. 20). But, "if we want to let the nature of the child develop as fully as possible, we will constantly defend her or him against the shaping pressures of society" (p. 20). So, trying to satisfy the requirements for both perspectives would only provoke mutual cancelation in Egan's opinion. The incompatibility between the nature of the child and the nature and the social mechanisms is real and it fuels a fight against pedagogical harmony because of the fundamental difference between socializing and supporting the child's potential. As Egan (1997) informs us, "socializing has a distinct end in view" (p. 22) and this end, being the light at the end of adult society's tunnel, can only be reached by narrowing, sculpting, and homogenizing children. The concept of the controlling aspect of socialization has been present in psychology and pedagogy for a long time. Even Dewey (1916), the educational reformer, described the controlling aspect of the process of socialization as a "must" due to the fact that children are born with natural impulses that do not integrate well with society's expectations, "consequently, they have to be directed or guided" (p. 39):

In social situations the young have to refer their way of acting to what others are doing and make it fit in. This directs their action to a common result and given an understanding common to the participants. For all mean the same thing, even when performing different acts. (Dewey, 1916, p. 39)

If it is assumed, as Dewey has, that the nature children are born with does not fit today's society and thus needs to be guided and educated toward a "common result" (p. 39), how and where can children develop their own potential?

As Egan discovered, yes, there seems to be a deep historical conflict among the three main educational ideas in our world today. So, what can we do to reform the educational views and to institute harmony in education?

The theory of Imaginative Education (IE) tries to mediate the conflict between the three fundamental educational ideas, in a fluid and organic way. By framing human life by the lessons we have learned during our phylogeny, Egan proposes an education defined by one main idea and not a conflicting confluence of three main ideas. This new frame assumes the rhythm of language in the life of humans (before language, oral, language, written language, theoretical language, and reflexive language,) and distinguishes five kinds of understandings:

Somatic Understanding – proto- lingual period (Egan's wording: "prelingual")

Mythic Understanding – oral language period

Romantic Understanding – written language period

Philosophic Understanding – period of theoretical use of language

Ironic Understanding – period of reflexive use of language

While Egan (1997) describes these kinds of understanding, he fortifies his claims with historical examples:

I characterize one kind of understanding, showing its emergence in Western cultural history, giving examples of its occurrence in various historical periods, and indicating perhaps surprising parallels between these historical occurrences and the lives and activities of students today. (p. 6)

Egan's theory seems to bring **trust back into the pedagogical relationship (as do the proponents of the four pedagogies described earlier in the previous chapter)**. He suggests a way that allows teachers to enjoy and value unplanned teachable moments, which might not fit the conventional interpretations of the educational process.

For instance, as part of a science curriculum lesson, children

would observe silently for sustained periods of time with no other aim than to feel their way into the nature of what they are observing. They will feel how the tree stretches its leaves out to the sun, how the rain trickles down it, and how the branches move in the various winds. (Egan, 1990, p.214)

The role of the teacher here is indeed to trust that these “white-space” moments, as Arnold (2001) likes to call them, are indeed helping the child develop a good understanding of the world.

Just as books require whitespace, so do children. That is, they need room to grow. The ancient Chinese philosopher Lao-Tzu reminds us that [it is not the clay the potter throws that gives the jar its usefulness, but the space within.] Our tendency to overbook children, emotionally and time-wise, robs them of the space and flexibility they need to develop.... (Arnold, 2001, p. 36)

Allowing these pedagogical moments to happen, as Egan (1997) suggests in the science lesson above, may surprise some teachers because children, instead of requiring clear indications of how to take those observational moments, do not need tutoring to immerse themselves into this “dreamlike absorption into the object being observed or rather being participated in” (p. 214).

Genuine surprises as results of the teaching suggested by Egan only come if teachers learn to “unplug” from the ever-rushing school days and just pause in the “in-between” of the pedagogical relationship. Letting go of the reins of forceful and almost obsessive planning of experiences and learning moments is not an easy job, particularly in situations in which educators have been trained to hold onto those reins tightly. At this point, teacher education comes into play.

One of the main ways of avoiding/preventing disconnects that shake the educational system in irremediable, deteriorating ways, is by educating teachers differently

– showing them how not to **swaddle themselves** with overwhelming plans, activities, schedules, worries, etc. and how not to swaddle children with the lack of trust in their present value as capable human beings.

During my administrative work at early childhood centres, the main lesson I learnt in regard to employing “the right” teacher, was to hire the ones with the least experience or those without any experience at all. I know how this sounds to people who work in the area and appreciate experience. For me, as a trainer of new teachers, it became clear that before starting to teach the Imaginative Education teaching strategies, I had to somehow help teachers “forget” about the traditional way of teaching that they had practiced elsewhere – I had to unswaddle all the tight pedagogical wraps they were used to wearing. This process was far more time-demanding and difficult than the one of introducing new teachers to IE. Training teachers, who had worked in a traditional way before, proved to be more difficult than training the ones who had never worked before.

Some of the unswaddling steps I had to follow with the experienced educators were:

- *Modeling how to **slow down** (instead of spending the whole 8-hour-day running from one moment to another, from one activity to another, and from one place to another in a speed that was impossible to follow by children);*
- *Showing **how to listen more and talk less** or not at all (teaching seemed to be confused with speaking);*
- *Sharing that **children** are indeed **able to communicate their needs** in various ways (this strategy requires teachers to stop and listen, feel, and understand children’s non-verbal cues);*
- *Showing **how to simply BE** with children (rushing too quickly takes us away from the child, distances teachers instead of bringing us closer);*
- *Explaining that **children are extremely complex beings** that can teach us memorable lessons (teaching being a two-way stream).*

Unfortunately, some teachers could never change; they felt safe in their swaddles, practicing what they had learnt in school and in their previous experience. The

ingrained principles of traditional teacher education were, sometimes, unshakable. After gaining experience with my teachers, I started to organize my thoughts and strategies for the purpose of having them ready for any teacher that would need my help. In 2008, I started holding workshops for early childhood teachers in all the counties of my home country - from remote villages in the Carpathian Mountains, to the over-populated capital city. The success of these workshops made me smile because the struggles were paying off: I was supporting the unswaddling of teachers who thought they were meant to stay swaddled. I can clearly remember hundreds of questions that sounded like: "Are we really allowed to do this?" or "How come nobody told us about these issues before?"

Today, I have the wonderful opportunity to engage with hundreds of future educators and share with them the futility of any pedagogical swaddle. Through the lens and praxis of Imaginative Education, I practice an unswaddling pedagogy.

So, what is Imaginative Education?

When I first started planning my "IE activities" for young children, it felt like a return home. I was educated in a very traditional way, and my teacher education took place in a "normal" school that was completely focused on a Piagetian developmental view of all children. During my college studies and my university years, I felt the need to silence my own ideas in order to succeed and graduate. I was secretly forming and shaping a new way of looking at education, that I could only manifest while with children during practica. For me, IE lesson planning was, and still is today, a pleasurable and exciting process of the pedagogical encounter with young children then, and future teachers today. An imaginative lesson/activity planning allows a lot of emotion and passion. Once the passion is triggered, imagination flows naturally into the sequences that will form that day.

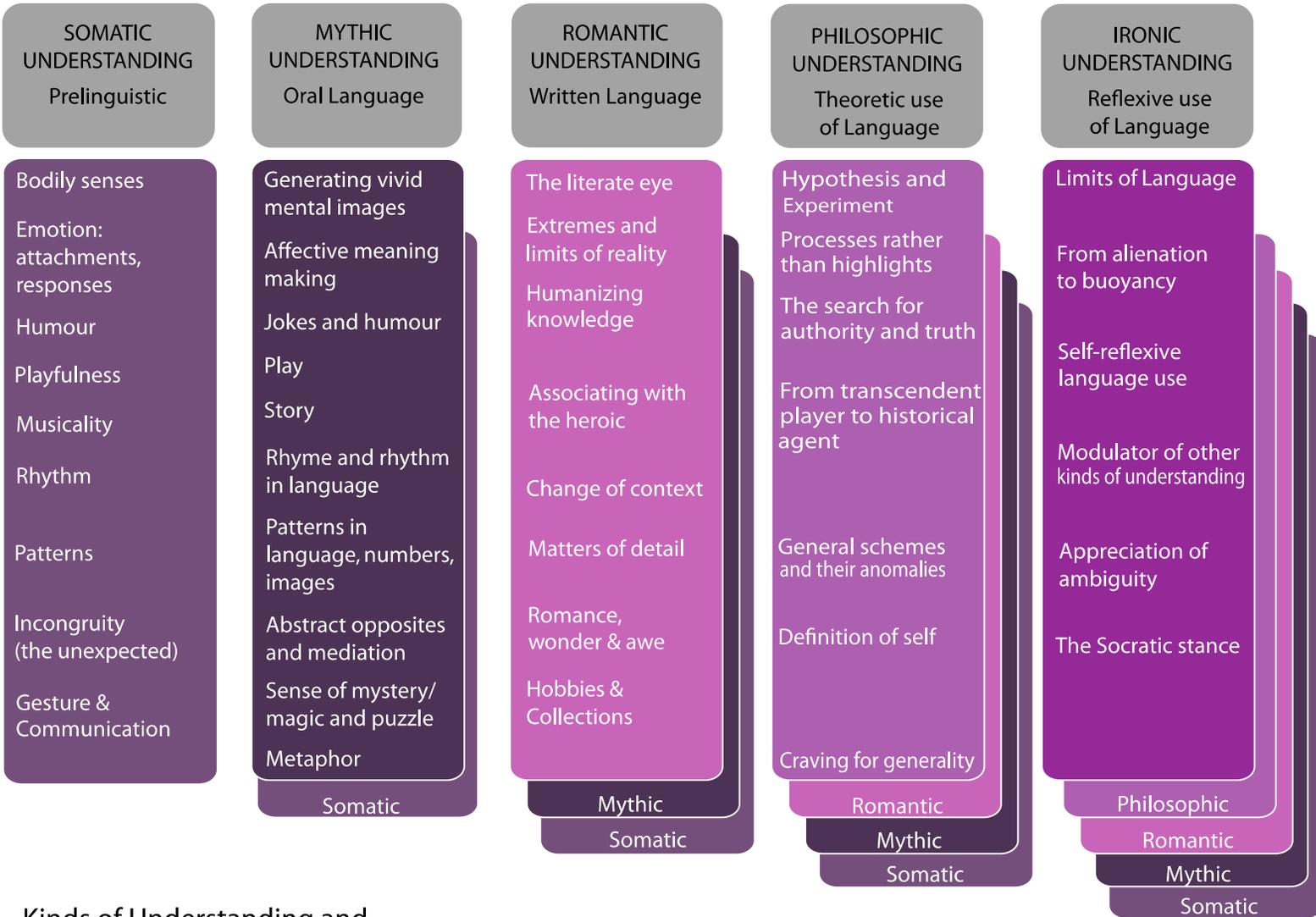
The Imaginative Education (IE) theory is based on the assumption that human education (in the Western world) follows a strict sequence of **the five kinds of understanding** that developed during our evolution and cultural history in a certain order and in a certain way: Somatic, Mythic, Romantic, Philosophic, and Ironic. In Egan's framing of the theory, language is the essential door toward the meaning making of the world; the

different degrees of acquiring and employing language determine the identification of each kind of understanding. These five kinds of understanding appear in sequence following the rhythm of language acquisition and the ways humans are making sense of the world around them. The kinds of understandings could be imagined like dark rooms with open doors with flashy and promising signs above them. Once we step inside and become accustomed to the dark, we start discovering different shadows and shapes that start becoming more and more visible the more we engage, experiment, and manipulate them. The process of acquiring and fully developing the kinds of understandings proposed by Egan, could correspondingly be imagined as the process of walking out of Plato's cave located deep in the ground by using the climbing and walking tools placed close by on the way up and out. Every new and higher stratum brings the learning person closer to the sunny outside, the peak of ways of understanding the world. Plato's prisoners were in chains, so the process of unshackling while walking out into the sun is similar to my proposal in this thesis: the *unswaddling pedagogy*, an educational practice that does not bind and allows for free movement of the body and mind alike. Egan's framing of the succession of the five kinds of understanding allows for such pedagogy.

The table below is a representation of Egan' epistemological "life" which I have designed to illustrate the layering of the KsU and, most importantly, to emphasize that with each new layer, the qualities of the previous one explored and learned are not left behind:

[Following page]

Figure 9. Kinds of Understanding as layers



Kinds of Understanding and Some Cognitive Tools – Kieran Egan

Design and perspective by Annabella Cant - 2016

As visible in Fig. 9. *Kinds of understanding as layers*, each kind of understanding is associated with a set of cognitive tools – tools of imaginative engagement that “shape the ways we make sense of the world around us” (Egan, 2006, p. vi) and “enable our brains to do cultural work” (2008, p. 40). These kinds of understanding are actually “the ways the mind works when using particular tools” (Egan, 1997, p.176). The term and meaning of “cognitive tools” was inspired by the Russian psychologist Lev Vygotsky who called them “cultural tools” and considered them to be extremely necessary in the process of educating children on how to think and learn:

Cultural tools...are developed and preserved in our culture. Vygotsky believed that the purpose of education is to introduce children to the full range of cultural tools and, show how to use them to analyse reality quickly and successfully. Children can then look at the world, as Vygostkyan scholar Zaporozhets put it, through “the glasses of human culture (Dolya, 2010, p.14). Using cultural tools, children develop new psychological qualities, which we call abilities. These are the mental habits people need to be successful in particular intellectual or creative fields. The better children's grasp of the appropriate cultural tools, the greater their abilities in any field. (Dolya & Palmer, in Dolya, 2009, p. 8)

Egan argues that the main cultural role of these tools is to enable children’s brains to understand the world around them. If education is considered a process of maximizing the cultural tool-kit of students, it becomes a process of enlarging students’ understanding “as far as possible given the tools our culture has developed” (Egan, 2008, p. 43), contributing this way to the maximizing of human potential.

These proposed tools are complex in Egan’s view, they were inherited from previous civilizations, but the five *Kinds of Understanding* (KU) come one after (and with) the other, and each new set of tools completes and develops the previous ones (without erasing or cancelling them). The progression of the *Kinds of Understanding* and their tool-kits does not come naturally. A good functionality of the new set of tools in a child’s life and meaning making requires a fully developed set of previous tools (Egan, 1997, p. 182).

Successful cognitive tool development as argued by Egan, is made possible through a special kind of education - Imaginative Education (IE) that is performed by teachers who are aware of the cognitive tools and are able to apply them to every aspect of the curriculum. IE teachers trust that children are **able** (not **unable** or **almost able**) to

make meaning of the world around them through their own channels of understanding (ones that might be very different than those of adults). IE teachers focus on aspects of learning which concern abilities, capacities, talents, potentials, and not the lack of the above. Imaginative teaching requires an initial deep understanding of the subject matters and curricular topics. From my experience, imaginative teachers need to find their own passion regarding the topics they teach on, they need to somehow relate to the content and “feel” something about it in order to better share it with the students.

I was invited to design and hold a workshop for educators about the concepts of light and shadow and their application in Early Childhood settings. Because the topic, in a pedagogical sense, is quite new to me, I am trying to discover what makes me wonder when thinking about these concepts? I am asking myself questions such as what did I notice about shadows in my childhood? What made me stop and question? How did I play with light and shadows? Once I have the answers to these questions, I will feel free to start exploring the topic more deeply. I connect emotionally with it now, so I am ready to learn, remember, apply, and teach about it.

I learned how to paint with light!

I am NOW ready to make my students feel my passion for the subject and develop their own passions.

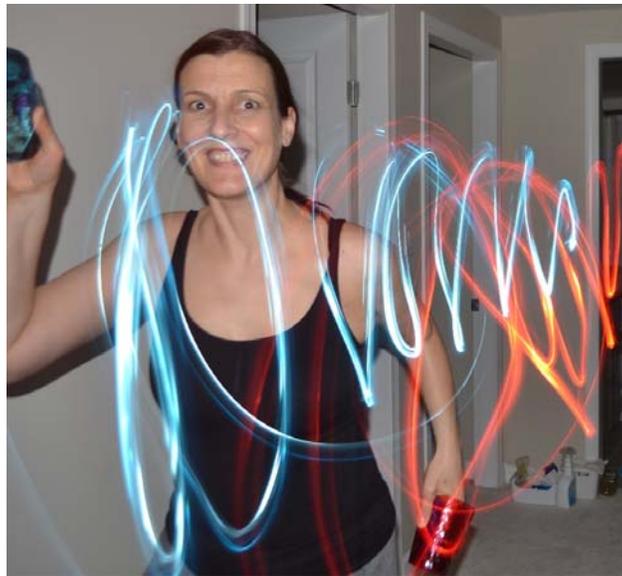


Figure 10. Discovering the art of writing with light

Thus, imaginative teachers have not only the task of connecting their students emotionally to the content, but also the task of finding personal connections that allow passion and dedication in regards to the life value of the taught content. Thinking of my own practice of Imaginative Education with all age groups: young children and under/graduate students, I can confirm that teaching imaginatively without an emotional connection to the subject (natural or built) is neither effective nor practically possible. I realized, early on in my teaching career, that I needed to immerse myself not only cognitively in subjects I was approaching, but mainly emotionally. Searching and finding these emotional connections between my own being and the topics evolved from being the most difficult process in my lesson planning, to being the most exciting. When I planned, I learned, and when I learned, I needed my memory, and to retain I needed emotion. This sequence came to me naturally, once I had the theoretical framework of IE.

Imaginative teachers are the curricula's storytellers. They find connections within the subject, provoke emotions, engage imagination, and partake in a continuous improvement of the cognitive tools.

Egan's (1997) proposal to educators is to "displace" the old dominant ideas by simply letting them go or seeing a different way in which what is important and right in each of them is still preserved in the IE theory. Only in this way, will teachers be able to understand his new pedagogical lens that invites them to think about education in terms of the five Kinds of Understanding (KsU) that he identified. Understanding these "understandings" is crucial to the Imaginative Education praxis. The IE theory is not a recipe book of teaching or a methodological handbook; it is a philosophy that examines humanity in general, and Western culture in particular. Egan articulates that his IE theory is indeed focused on this part of the globe:

it conceives of education as so intricately tied in with the life of society and its culture that it is also a theory about Western cultural development and its relationship to education in modern multicultural societies. I characterize Western cultural history, and education today, in terms of an unfolding sequence of somewhat distinctive kinds of understanding. (1997, p. 3)

I consider that the IE theory would have gained a little more depth had Egan analyzed and adapted culturally inherited principles from other cultures as well. I realize that Egan was hoping to aid the educational system closest to his life and knowledge, but, in my view,

his work could have benefitted by incorporating the global culture and paradigms for a more fluid transition between his five kinds of understandings (KsU). This would have been a better praxis in today's multicultural Western societies where teachers and students have extremely diverse histories and backgrounds. Kincheloe (2008) says that "knowledge that comes from other cultures, the colonized ones in particular, and other paradigms have always been suspect" (p.37), however, trying to adapt a Western rooted practical philosophy in a multicultural school, might encounter difficulties due to the very same reason... Piaget created a socially and culturally decontextualized, ahistorical, and clinical scientific approach to children's development and tried to adapt it to all cultures and historical eras – an approach that had serious consequences on education (Kincheloe, 2008), so would it be fair to presume that Egan wished to avoid exactly that by making visible and explicit his theory's connection to Western culture?

Egan's theory brings to life a different kind of educational philosophy that contests some generally accepted socio-psychological and pedagogical "truths". It is understandable why this shift of vision that overthrows conventional pedagogical views that have defined the educational system for a long time, might leave people puzzled and curious. From my own experience, I can state that once this theory is understood in its practical application sense, Imaginative Education opens up a practice that becomes natural to the majority of teachers with whom I have worked. The lesson planning process is quite different from the typical planning; it involves a process of connecting oneself in an emotional way to the content to be taught. In general, educators are required to invest a higher level of emotion and imagination than is usual in the process of lesson planning.

So, why imagination?

Without leaps of imagination or dreaming, we lose the excitement of possibilities.

Dreaming, after all is a form of planning.

— Gloria Steinem¹²

The tree which moves some to tears of joy is in the eyes of others only a green thing that stands in the way. Some see nature all ridicule and deformity... and some scarce see nature at all. But to the eyes of the man of imagination, nature is imagination itself.

— William Blake¹³

My imagination makes me human and makes me a fool; it gives me all the entire world and exiles me from it.

The creative adult is the child who has survived.

People who deny the existence of dragons are often eaten by dragons. From within.

— Ursula K. Le Guin¹⁴

Egan considers that successful learning requires the engagement of students' imaginations (2005). Egan (2005) noticed, however, that even if imagination is considered a key for successful learning, "making its achievement a routine part of the classroom

¹² Retrieved from <http://www.gloriasteinem.com/news/>

¹³ In Rossetti, W. M., Baum, Paul F. (Paul Franklin), Gohdes, C. L. F., Gilchrist, H. H., & Gilchrist, A. B. (1968). *Letters of William Michael Rossetti concerning Whitman, Blake, and Shelley, to Anne Gilchrist and her son, Herbert Gilchrist: With appendices containing a letter to president Cleveland and an uncollected Whitman circular*. New York: A.M.S. Press. (original, 1799)

¹⁴ In Literary Arts, I. (2014). *The world split open: Great authors on how and why we write* (1st U.S. ed.). Portland, OR: Tin House Books.

experience has proven quite elusive” (p. xii). If curriculum developers truly believed in this pedagogical and philosophical approach, and scientifically supported fact, a search of the word “imagination” within the BC curriculum packages¹⁵, for example, would have not given the following surprising results:

Curriculum Packages (BC Curriculum Packages by grades, 2010):

Kindergarten: The word “imagination” appears 4 times in 52 pages.

Grade 1: The word “imagination” appears 6 times in 70 pages.

Grade 2: The word “imagination” appears 7 times in 80 pages.

Grade 3: The word “imagination” appears 7 times in 80 pages.

Grade 4: The word “imagination” appears 3 times in 83 pages.

Grade 5: The word “imagination” appears 5 times in 77 pages.

Grade 6: The word “imagination” **appears 1 time in 87 pages.**

Grade 7: The word “imagination” appears 2 times in 108 pages.

Grade 8: The word “imagination” appears 2 times in 108 pages.

Grade 9: The word “imagination” appears 2 times in 108 pages.

Here is a chart that shows the evolution of the use of the word during the 10 grades of schooling:

¹⁵ *Curriculum Package by Grade*. Ministry of Education. Found at: <http://www.bced.gov.bc.ca/irp/gc.php?lang=en>

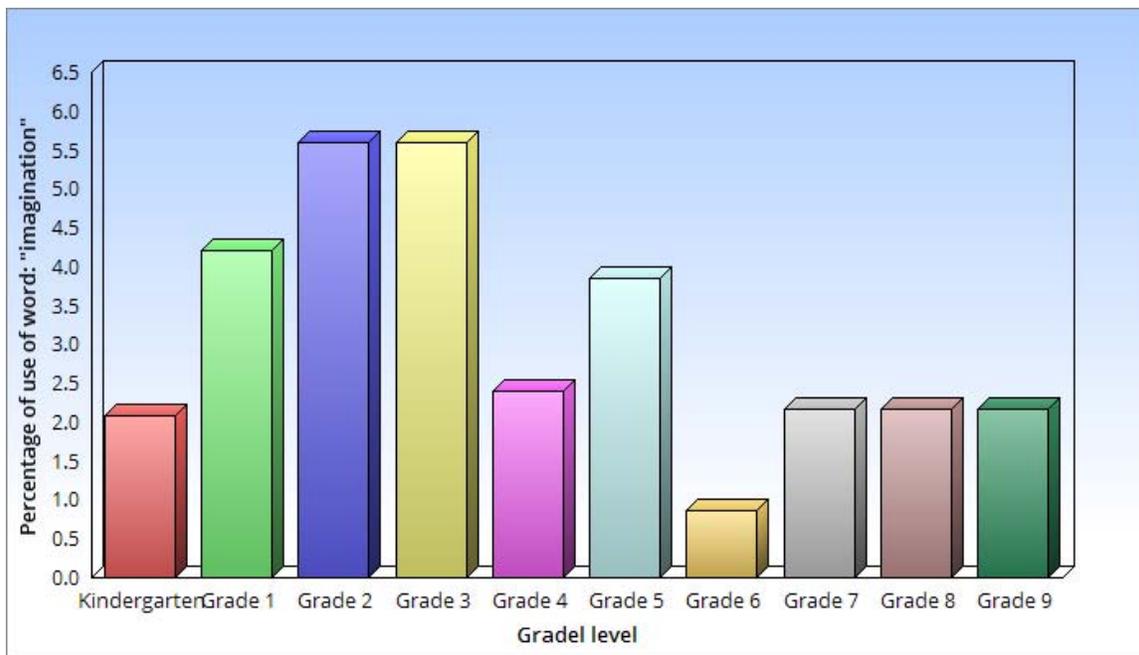


Figure 11. Percentage chart of the uses of the word: "imagination" in the BC Curriculum Package by Grade.

Why did I, as an educator, fully commit to the value of children's imagination and feel the need to count the times the word "imagination" is used in British Columbia's curriculum documents¹⁶? Did my intuition lead me to suspect imagination's elusive presence? With the exception of drama, little is mentioned about the active implementation of imagination across discipline areas as illustrated in the accounting above.

Einstein, in an interview with journalist George Sylvester Viereck (1929) was asked the question: "How do you account for your discoveries? Through intuition or inspiration?" Einstein replied:

Both. I sometimes feel I am right, but do not know it. When two expeditions of scientists went to test my theory I was convinced they would confirm my theory. I wasn't surprised when the results confirmed my intuition, but I would have been surprised had I been wrong. **I'm enough of an artist to draw freely on my imagination**, which I think is more important than

¹⁶ BC is preparing and testing a new curriculum. At this moment in time, the new proposal is not complete. I did, however, research the material online and I performed a quick search of the term "imagination". The results are as follows: in all curricula – from K to 9 – the term appears only in Art Education, and only 15 times in total.

knowledge. Knowledge is limited. Imagination encircles the world. (1929, p. 117)

If Einstein admitted to using his imagination to come up with ideas that changed the world, I consider that every teacher, parent, and curriculum developer should be actively igniting each child's imagination (and their own) in all aspects and levels of their education.

One of the main ambitions of the Imaginative Education practice is the employment of emotions into the pedagogical relationship through imagination. This ideal, but highly elusive ingredient in the pages of curricular documents¹⁷ and in conventional classrooms, emotion, is closely connected to imagination:

To bring knowledge to life in students' minds we must introduce it to students in the context of human hopes, fears, and passions in which it finds its fullest meaning. The best tool for doing this is the imagination. (Egan, 2008, p. xii-xiii)

The lens of imagination can open myriad perceptions of the world; it allows for a multi-coloured, multifaceted, and multidimensional view. I like to call this kind of view, a *plurifocal* view, which I imagine as a kaleidoscope with the power to transform reality and identify multiple versions of it. With a *plurifocal* view, students are able to produce a multitude of solutions to problems and myriad ways of looking at the same image, event, situation, or problem. This capacity of humans creates the possibility for the so-called "cosmic questions" (Cobb, 1977, p. 28):

The aim of the cosmic questionings of the child is to obtain, perceptually or verbally, some reflexive action from the external world to the self, in order to understand the world in terms of his own experience as well as through cultural explanations. For the individual, these are true acts of genesis in the creation of his personal world image. (Cobb, 1977, p. 28)

Imagination, thus, creates a worldview and allows children to question everything before making their own meanings of the world. Meaning-making starts through play; human play tests reality; play offers children the opportunities to try-out life as it looks to

¹⁷ A quick count of the word "emotion" in the same BC Curriculum Package of the Ministry of Education had the following results: kindergarten: 3 times; grade 1: 4 times; grade 2: 6 times; grade 3: 10 times; grade 4: 10 times; grade 5: 15 times; grade 6: 18 times; grade 7: 14 times; grade 8: 21 times; grade 9: 23 times. The quick search shows how little focus there is on emotions during the first few grades of schooling.

others. The power of imagination can transfer children's thinking and feelings into scenarios and situations that are not yet encountered. An imaginative view on life triggers children's mind-bodies to push boundaries (swaddles) and to see through the socially and culturally built boundaries and limitations.

A particular kind of flexibility, energy, and vividness that comes from the ability to think of the possible and not just the actual and which can imbue all mental functions.... it makes all mental life more meaningful; it makes life more abundant. (Egan, 1992, p. 65)

Many of the tool-kits assigned by Egan to the five *Kinds of Understanding* bear the traces of such a complex view on imagination. Embodying imagination within learning, if considered as one, would create curriculum documents flooded with the word "imagination" in all subject areas, not only in the Arts. Also, a deeper awareness of the role of imagination in learning, could aid the curriculum developers in regard to designing strategies for reaching learning outcomes. The good news is that, at this point in time, the province of British Columbia is working on creating a new type of curriculum that will offer teachers much more freedom and opportunities to be imaginative within the curricular content (<https://curriculum.gov.bc.ca/home>).

Imagination, placed within the pedagogical space offers the educational system a powerful tool. In Chodakowski's (2008) words:

Imagination is central to education's ability to give students a breadth of and depth of knowledge, to instil in them a sense of both personal and collective agency, and to help them develop a 'moral compass', or a sense of the ethical ways in which knowledge can be used and agency enacted. (p. 25)

In the following section, I intend to shed light on the unswaddling power of Imaginative Education (IE) and how this theory and practice can allow children to make meaning of the world in a vivid, flexible, personal, pleasant, and joyful way. I will first briefly discuss each of the five *Kinds of Understanding (KsU)*: *Somatic*, *Mythic*, *Romantic*, *Philosophic*, and *Ironic*. I will introduce the reader to the key cognitive tools (CTs) that come with each identified understanding, trying, at the same time, to explain why this specific theory offers stellar support for practicing an unswaddling pedagogy.

The Imaginative Education garden and its secrets

Egan sees cognitive tools as “thinking tools” that were created by our ancestors in order to decode and understand the world around them. These tools are imprinted in our genetic inheritance but require a certain kind of education in order to provoke and develop their use. Egan uses the following terminology interchangeably: cognitive tools, meaning-making tools, imaginative tools; I will take the liberty to do the same to avoid repetitions. I will also use the acronym: “CT”.

First, I would like to analyze the unique qualitative and compulsory succession and overlay of the five KU where, according to Egan, each previous KU needs to be fully developed before the onset of the next KU so that, instead of continuing in a linear way, the succession becomes a new layer that intermixes with the previous one, embracing all the cognitive tools that have been gained in each stage. I will walk through the five Kinds of Understanding with the help of a metaphorical garden with secret sections that only become visible once we peek through and open a new secret door. But first a warning! If this succession does not happen in a qualitative and exhaustive way, Egan warns us of the dangers:

Inadequate Somatic development leaves one susceptible to difficulties constructing meaning and seeing patterns and rhythms in events; inadequate Mythic development leaves one susceptible to uncritical and simplistic beliefs; inadequate Romantic development leaves one susceptible to sentimentality and cynicism; inadequate Philosophic development leaves one susceptible to know-all, imagine-nothing general schemes; and inadequate Ironic development leaves one susceptible to alienation. (1997, p. 202)

*The main door of the magical garden opens into **The Somatic Understanding** section of The Imaginative Education garden. This first chamber of the garden presents itself to us through a series of plants and creatures that will help us understand the world around us through our senses and emotions. We taste, touch, move, crawl, shake, drop, pull, throw, lick, observe, balance, try-out, laugh with, hug, push, sing, move in rhythm, listen, cry, love aspects of our surroundings. The first such inhabitants of the Somatic garden are the ones that we can feel with our bodies and the ones that trigger strong emotions in our hearts.*

According to Egan, the cognitive tools for Somatic Understanding are: **bodily sense, emotional responses and attachments, humour, incongruity, musicality, rhythm, patterns, gestures and communication**. The central idea here is that the body is connected to the mind (Damasio, 1994). Whenever teachers consider education and pedagogy in general, aimed only from the perspective of the intellectual capacities of children, they lose sight of the most important interrelations or juxtaposition of all: mind-body:

There are good and bad reasons why we have adopted this way of thinking about ourselves. The good reasons are derived from the peculiar development of our brain, which has resulted in the languages and cultures that are so dominant in our lives. The bad reasons have to do with the inclination to forget somewhat that our brain is a part of our body and that our mind, despite incorporating cultural stuff we share in complex ways with others, is also fundamentally embodied. The particular kind of body we have determines our distinctive “take” on the world; the body’s influence pervades even the most refined mental activity. (Egan, 2008, p. 45)

Thus, here is the first release of a possible swaddle: by considering the wholeness of the small human in front of us, we allow his/her freedom to understand the world through the use of body and mind alike. The artificial disconnect between the two, swaddles the body, consequently, swaddling learning. Here are some examples of resistance to embodied learning that I hear in classrooms that reveal and reinforce the mind/body disconnect:

“Don’t move, this is class time!”

“Don’t laugh, learning requires seriousness!”

“Look at this picture of an apple, don’t look outside!”

“Here is a definition of how the lemon tastes.”

“Don’t doodle, when I talk to you, I need your full attention.”

“Leave your problems outside my classroom.”

“Be silent, when I talk.”

“Don’t fidget!”

Most of these examples, even if extreme, are inspired by my own experiences as a student. I was educated in a strictly communistic way that disregarded the body as an action site of learning unless we were engaged in physical education class or open air shooting (yes, this was a prescribed learning outcome for grade 8).

***And then there was the Mythic Understanding ...** As we explore the first garden and become accustomed to its inhabitants, learning from them at the same time, we learn how to be in this world, and we discover a secret path that takes us to a living fence. We become curious about what is on the other side of the fence. Our deep curiosity makes us shout with wonder. At the sound of our **voice**, the living fence opens up and an enchanted view presents itself to us: a new plot of flowers full of mysteries and labyrinths. It is the Mythic garden. We notice that the living fence remains open and the two gardens become one...*

Egan (2008) called this *Kind of Understanding* “Mythic” because “it has significant features in common with the kind of thinking found in oral cultures throughout the world and in our own culture’s prehistory” (p.50). The living fence opens as children begin to articulate their oral language. The cognitive/cultural tools that children will discover in this new garden are **stories, metaphors, binary structuring and mediating, forming images from words, puzzles, play, rhyme, rhythm, patterns, jokes, and a sense of mystery.**

The unswaddling effect of Imaginative Education on children’s capacities materializes by teaching them to use language for more than expressing physiological needs. Using language becomes a tool to make sense of the world, imagine possibilities of aspects of this world, listen and create stories, connect with imaginary characters, feel the emotion of others, express/experience strong feelings, share experiments, role-play, shift meanings through metaphor use, hear and create poetry and songs, experience mystery, solve problems, taste jokes. Genetics, in Egan’s view, help us gain new abilities; but, at the same time, push for the loss of many previously accumulated abilities. The theory of IE unswaddles this evolutionary tendency by offering teachers and parents ways and tools that can help keep those competencies alive and active:

As we grow, however, we receive less precise genetic help and have to rely increasingly on a genetically encoded general learning capacity, which is not well differentiated for learning to read or to do mathematics. The

educational trick is to make those kinds of learning easier and more effective by making them conform as well as possible to the weakening genetic dispositions still operative as we grow into childhood. That such genetic dispositions are operative may be inferred from the energetic development of language up to the age of seven; because development proceeds at a rate of word accumulation and sophistication of grammatical usage beyond what we achieve through teaching at any other period of life, it seems fair to assume some particular genetic influence is still active. (Egan, 1997, p. 36)

Another unswaddling aspect of the Mythic Understanding becomes visible, through the caring effort of teachers and parents. The possibly paradoxical image here is that **in order to unswaddle, teachers need to intervene and support**. This special way of supporting, by keeping active the tools that children accumulated during the first two KsU does not view children as future adults, but as capable human beings. This support is pivotal because:

Mythic understanding is one during which weakening genetic influences merge with the increasing deployment of our undifferentiated learning capacity; learning consequently ceases to be effortless and begins to require deliberate work. (Egan, 1997, p. 36)

After discovering, exploring, and learning all that both first gardens had to offer, we were attracted by some hidden notes written by an invisible hand. We find these notes in trees, soil, or bird feathers. To decipher these written notes, we need to be able to read them carefully and follow their instructions. The notes guide us to a new entry: a wooden door full of messages. The door is gigantic. We need help to open it. We send a handwritten message with a dove to an unknown destination. Back comes the dove that brings us pencils. We realize that the pencils are the keys to the giant door. We are right. The door swings open and we run into a new connected garden full of colour and love: the Romantic Garden.

Romantic Understanding brings forward tools that become available to children once they are exposed to the technology of writing: **focus on extremes and limits of reality, association with the heroic, a new kind of sense of reality, the sense of wonder, hobbies and collections, seeing knowledge as human meaning making, revolt, idealism, and narrative understanding** (Egan, 2008, p. 62). Similar to the previous KU – Mythic – the ability to write needs to be seen as much more complex than only the simple

transformation of words and sentences into their written corresponding symbols: “one can learn to read and write without any of the cognitive tools of ‘romantic understanding’ becoming prominent in one’s thinking” (Egan, 2008, p. 63). The tools mentioned above need to be developed, nurtured and taken to their most complex uses, in order to benefit the learner to the maximum. A new sense of reality opens up to children through the stories they read and choose to read. Exposing children to a variety of such stories that offer a multitude of possibilities and variables to the experienced reality triggers their further focus on the extremes, limits, or values of their reality. Reading such stories and histories invites students to ask questions about reality, and search for answers. Egan proposed this KU in response to or, perhaps better said, in order to dispute previously held developmental views that considered those children:

[being] best or only able to deal with their immediate environments and experience, and so any attempt to teach them about more distant knowledge must always start with what they are familiar with.... If you want to discover the extent and wonders of reality, it is a bizarrely inappropriate strategy to keep focusing on the here and now everyday life of students.” (Egan, 2008, p. 65)

By trusting that children can see/do/experience more than previously considered, we can clearly identify the unswaddling quality of the Romantic cognitive tools as well. Egan suggests that if teachers could be aware of, and understand, the newly literate mind of their students, their job would not require extra effort to make learning more meaningful; they would plan their lessons driven by the thought that all details of a topic or subject have something beautiful or are full of wonder. Finding these aspects of the topics and teaching the curriculum content and teaching through them would make teaching and learning much more relevant and enjoyable. Egan contradicts many of the contemporary practitioners who believe in a traditional view on exposing children to their immediate reality and nothing more, suggesting an unswaddling of their limited views on children’s capabilities:

Even if it is true that students’ fascination with reality comes alive particularly when they learn about its extremes and limits, and its exotic or wonderful features, some educators clearly think this is regrettable and should be ignored or suppressed. But if we pause and consider what is the best strategy for learning about this vast reality you find yourself in, the “romantic” approach makes a good deal of sense. (2008, p. 66)

Another unswaddling tool and perspective suggested by Egan (2008) is one of showing adolescents that all knowledge has its roots in human passions, sorrows, feelings, experiences, hopes and fears... By attaching the curricular information to a human life, teachers unswaddle the imagination of students.

It isn't very difficult to do this. Indeed, it is more enjoyable and meaningful for teachers and students alike, but we have created a system in which the importance of human emotions for meaning seems barely noticed. The result is commonly sterility in the knowledge presented, and boredom in those to whom it is presented and, often enough, in the teachers who are doing the presenting. It need not be so. (Egan, 2008, p. 68)

I tend to consider that the pedagogical secret of Egan's theory consists in the ways teachers employ the cognitive tools of each KU that make knowledge meaningful to both teacher and student by triggering emotional engagement and the use of imagination.

*In this Romantic Garden, we find ourselves playing king and queens, pretending to be our heroes, and building several collections from the "treasures" we found in this enchanted garden. Suddenly, we find ourselves a few years older... The garden starts to feel different. We realise that finding the next door is in our hands; we are the agents of truth. We search and dismiss previously thought scenarios. We start to question the directions that we are taking. Everything that seemed simple and straightforward looks complex and confusing at this point. We notice a hidden entrance to a tunnel. We advance to the tunnel. We enter confidently and yet, every stop we make is analysed and questioned once taken. We cross the tunnel and once we cross it, we look back and notice that it disappears. Our new garden section is full of Venice mirrors; each mirror shows another kind of us. We are in the **Philosophic Garden**.*

Philosophic Understanding is reached when students acquire a theoretical perspective of the world around them. The tools of this new KU will become active when students get a good grasp of using them and learning through them in a meaningful and more complex way than previously engaged. These cognitive tools, that complete the sets of tools collected in the Somatic, Mythic, and Romantic gardens, are more difficult to attain and explore than the other CT sets. These tools require a significant pedagogical support and effort from the teachers. Egan (2008) states that not everyone can find their way through this KU and that some might get lost and decide to retract into the previous "garden" where

they feel safer or more confident. However, those students, who have benefited from good IE education and were supported in activating the cognitive tools of the Romantic Understanding, will run excitedly into the Philosophic “garden” as escapees!

The transition to this new kind of thinking can be very exciting for students who access it quickly and thoroughly. They believe that they are at last able to understand how things truly are and how the world really works. The world thus becomes re-seen as made up of vast processes— historical, social, psychological, anthropological— governed by laws and rules that abstract, theoretic thinking alone can discover. (Egan, 2008, p. 73)

I remember my own moment of running into this room. I had graduated from university with my hands, mind, and imagination tied down. I felt imprisoned in a place that showed itself scantily to me through the bars of my undergraduate institution – or should I say “underground” – prison cell. And then, I was free! I began my Master’s in a new country - Canada, in a new university – SFU, and with a new mentor – Professor Egan. He has shown me the tools, modelled their use, and made me want to discover more and more about the theories of the world and to observe them through the lens of philosophy. I became a new person. I could finally label my thoughts, explore them and transform them in a way that drove me toward the future as a confident, powerful, and pedagogically equipped educator. I was ready to transform my shadowy dreams into reality, and I did.

I threw away most of my swaddles and left them behind. Forever.

What tools are hidden in this new, exciting garden? One such tool is a **new sense of identity** that places the students as **agents of change** and not future mannequins or wax clones of their heroes. Another cognitive tool is the **openness to anomalies**: students will become aware that the general theories and ideas they previously considered general truths are not always applicable in real situations. They will notice the exceptions and this new lens will help them adjust the previously held strong general ideas:

The response to anomalies, usually, is not to discard the ideology but rather to adjust it only enough to accommodate the cases that don’t fit. ...The more-sophisticated form of the ideology will then be open to further anomalies, which, in turn, the so-far well-educated student will accommodate by adjusting the ideology further. And, in turn again, the yet-more-sophisticated ideology will be open to yet further anomalies. And so

it can go on, anomalies demanding greater sophistication, and greater sophistication bringing to light further anomalies. (p. 76)

A third tool that is waiting in the Philosophic room is the **capacity to construct metanarratives**. If stories were the ones that helped students organize information in a meaningful and emotional way, metanarratives offer the possibility of organizing theories, concepts, generalizations, ideologies, and metaphysical schemes into “emotionally meaningful patterns” (p. 77). Science, in Egan’s view, would not have evolved if scientists had not been able to build metanarratives of the possible impact and fit of their discoveries in the contexts of the wide human meaning (p. 79). The next tool situated in this sophisticated new garden is the **drive towards truth, reality, reliability, certainty, authority, etc**. This tool, even if it will not help students find the one and only truth, it will, however, keep their thinking, intellectual inquiries, and searching abilities, alert, offering to those processes “energy and a sense of direction” (p. 79). As seen in the description of the tools, learning the tools of Philosophic Understanding, does not assume abandoning the tools learned through the child’s journey in the garden. A good IE educator supports the endurance and progress of all previous tools and experiences as much as possible:

The educational task is, of course, to develop each as fully as possible and to preserve as much as possible of each in the development of subsequent kinds. The persistence of Romantic Understanding into Philosophic general schemes gives the latter energy, life, and an extended, affective meaning that the theoretic activity alone cannot provide. (Egan, 1997, p. 159)

*The Philosophic Garden together with all the previous gardens forms a complex and generative pedagogical space. We grew up in these gardens and engaged with the creatures, plants, mirrors and other treasures to understand the world around us. We have a sense of place and a sense of agency. We understand reality is constructed and we question it. We like our enchanted garden. We explore all the nooks and crannies of the garden and make all the corners accessible. We feel at home. Some of us wake up one day and realize that there must be more to this secret garden. We don’t accept that this is all that can be explored. We notice a riddle on a note that hangs on a piece of yarn. Those of us, who were unconvinced by the limits of our reality, read the riddle and seek out solutions or new possibilities. The riddle shows us an exit from the enchanted garden. This exit is placed very close to the entrance. It almost **seems** that is the same gate, but it does*

*not feel the same. Some of us give up and return to the garden we know so well. The few others go ahead and open the gate. The space that opens up is infinite. The space has benches, ponds, and mirrors. It is the **Ironic Garden**.*

The ones who enter the garden of **Ironic Understanding** will be able to see that “language can be used to mean the opposite of, or something radically different from, what is actually stated, but that there is always some difference between what we mean and what can be put into language” (p. 81). The cognitive/cultural tools of this KU make the ones that enter be **aware of and perceive the distance/gap between experience and the words that describe it**: “Words are solids, experience is liquid” (p. 81). The limit of words will be acknowledged and experienced from now on and this will give way to the imagination of Ironic thinkers to use those words in different contexts and with different meanings, sometimes opposite to what the dictionary dictates. One tool placed down in a corner of this garden (that surrounds us with sounds that seem like far-away laughter) is the one of **flexibility**. This ability allows us to look back in a critical but also appreciative way to all our previous KsU and their necessity for the development of our thinking and being in this world. This reflexive look at ourselves smiles at us and guides us toward employing the tools of our previous KsU in situations that require them:

We also can develop greater flexibility in deploying whichever kind of understanding is most appropriate for whatever mental task we face, and we can develop the ability to deploy any subset of them or all of them together in making richer sense of anything we see in the world and encounter in experience. ... The ability to move easily among kinds of understanding, and particularly to recognize the limitations on our Philosophic schemes, yields a kind of intellectual playfulness. (p. 83)

The Ironic “understander” to use Egan’s term, is flexible in his/her thinking and able to recognize that the world is multifocal, he/she is open to self-contradiction and not afraid of it; he/she “can appreciate a varied spectrum of perspectives while concluding that some are better or more valid or more helpful or more beautiful than others in particular circumstances and for particular purposes” (Egan 1997, p. 162). All these capacities and new ways for seeing the same reality, add to the unswaddling of our consciousness and of our will to learn. The Ironic thinker is completely unswaddled, if we follow Egan’s thinking process. In *The Educated Mind*, Egan connects the Ironic Understanding to the Somatic one:

Somatic understanding, then, is not something that exists only prior to language development but rather, like each of these kinds of understanding, it ideally remains with us throughout our lives, continuing to develop within, though somewhat modified by, other kinds of understanding... I argue that Somatic understanding survives both from its prehistoric forms and from its recapitulated development in infancy into modern adult Ironic understanding. (1997, pp. 163-64)

Not only does Somatic KU remain important for the educational development of children, but it is also the basis of all future learning and knowledge. In the following sections of my dissertation, **I will try to troubleshoot the persistent and mistaken assumption within conventional education as currently practiced that we do not need our bodily understanding, communication, and emotions once we acquire language in order to learn.** We do not stop living and learning and communicating through our bodies, even if we become able to express what the body feels through vocalized symbols. Movement, sense, emotion, music, rhythm, pleasure of patterns, humour, openness, etc., are all factors of Somatic KU that should not only survive for the whole length of an individual's life and learning, but also support all future KsU by being the very roots that feed them.

The map of the garden

I have used the metaphor of the garden to represent the organic way the five *Kinds of Understanding* open up to us and to describe the cognitive tools that they bring with them into life and learning. A very important aspect of these *Kinds of Understanding* is the **relationship** among them. The connections are very direct, complex and yet, calculated. My research to find a resonating image of the complexity of the temporal, cultural, embodied, and pedagogical relationships between the five kinds of understanding and their cognitive tools, guided me toward the work of the artist Ernest Thompson Seton (August 14, 1860 – October 23, 1946). His scientific, yet creative representation, of one of the “creatures” in my metaphorical garden, mirrors with accuracy the way I imagine the web of connections within the theory of Imaginative Education. So who is this creature? How can a solitary creature crystalize theoretical and pedagogical concepts that are so hard to even put into words? Here it is:

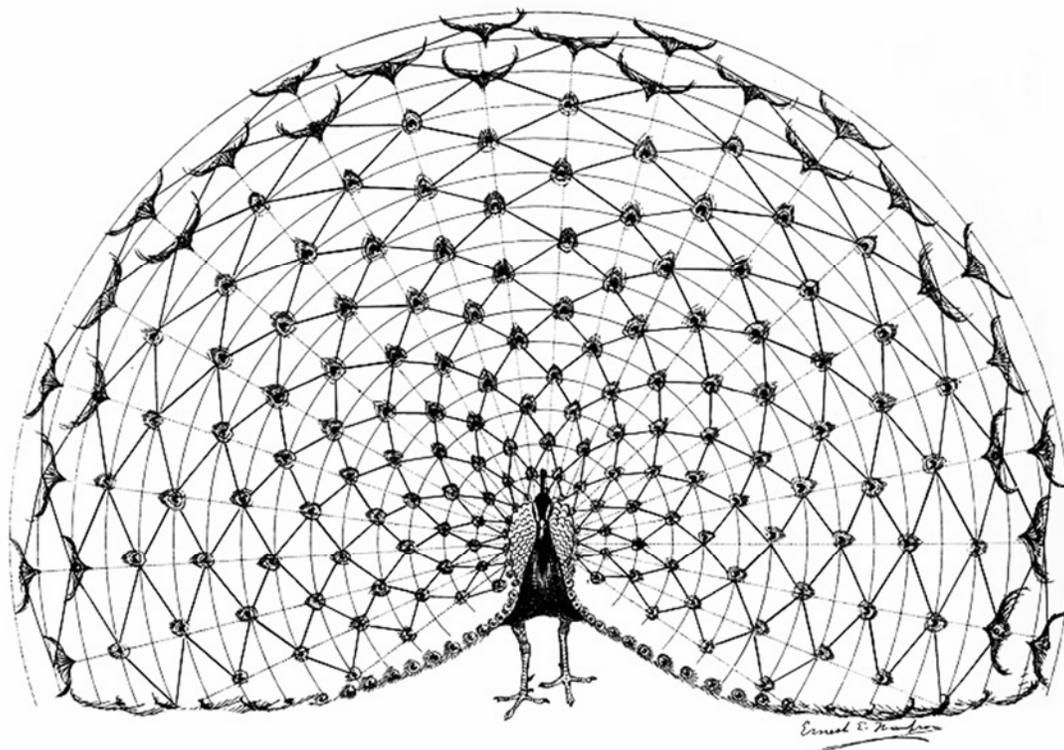


PLATE XLIX. THE PLAN OF A PEACOCK'S TRAIN.
To show the Arrangement when each Feather is present in perfect condition. The plate is $\frac{1}{4}$ of life size.

Figure 12. *The plan of a Peacock's Train* by Ernest Thompson Seton (August 14, 1860 – October 23, 1946). Retrieved from <http://setonlegacyproject.blogspot.ca/2014/11/the-peacock-for-artists.html>

Yes, the magical creature is a marvellous peacock with its train fully developed. The five KsU are growing together with the peacock train and are arranged in a concentric way: Somatic – very close to the body and, as I will describe in detail in the last chapter, even hidden behind the train; Mythic – the first semicircles at the base of the train; Romantic – above Mythic, but connected to it in every possible way; Philosophic – opening up the fan of the train even more, still connected and growing out of all the previous KsU; Ironic – the open feathers at the outer edge of the train; this KU metaphorically is turning the mind, body and heart toward the infinite possibilities of the world of learning.

Chapter 4. Somatic Understanding

Important for my argument is the fact that very young, pre-language-using children have an understanding of the world. This is not an "animal" perception; it is a distinctively human "take" on the world. It is constituted of how we first make sense with our distinctive human perceptions, our human brain and mind and heart and whatever else our bodies can deploy in orienting themselves.

(Egan, 1997, p.166)

The *Somatic Understanding* (SU) is the first *Kind of Understanding* (KU) in the set of five: *Somatic, Mythic, Romantic, Philosophic, and Ironic*. Egan (1997-2008) placed the Somatic Understanding in the period before the acquisition of oral, articulated language.

He identified a few *cognitive tools* (CTs) that come along with this layer of understanding, but, as mentioned previously, his approach to the Somatic Understanding is not explored in depth. Egan admits that the Somatic KU is the core of all other *Understandings*, but when he mentions it, he seems to keep a certain distance. He argues that this KU engages humans in a special meaning making that engages perceptions, heart and mind (Egan, 1997, p. 166).

In the year 2008, Professor Egan was the keynote speaker at an international conference organised by our organization in Romania. The conference was organised at the University of Babes-Bolyai – one of the most prestigious universities in the country.

His keynote address touched a lot of hearts and minds and provoked a lot of conversation and reflection regarding the educational realities of Romania in those days.

During the few days spent with us at the university and our school (by then, The Annabella Kindergartens were satellite schools of the Imaginative Education Research Group) Professor Egan and I had many nostalgic conversations about the time I spent in Canada during my Mater's studies. I shared with him the fact that I really miss the academic environment. The topic of a Ph.D. came up and my heart started to flutter.

In the same year, recession hit the world hard and the international organizations that were sponsoring our orphan and underprivileged children were experiencing financial difficulties, consequently, they discontinued their sponsorships. The same year, we

found out that our home, which was housing one of the schools, would be demolished due to a series of mistakes done by experts and public institutions and bribes and the threats of some criminals who needed the exact land under our home. All these factors that were piling up in our personal and professional lives, and that prompted my husband (who was the CEO of the charity) and me to have long conversations about a change that our lives required. We did not give up, though. We started to tour the country with workshops dedicated to reforming the early childhood education system in Romania. The workshops paid a small fee, but, because they became very successful (having sometimes as many as 165 participants in one room), we were able to keep the school afloat financially. The decision was made. I was accepted in the Ph.D. program, but I deferred my start to the year 2010 to let the enrolled children graduate.

On September 2nd, 2010, my two sons, my husband, and I arrived at the Vancouver airport. It was time for a new dream to be lived; a new adventure that would change our lives.

I enrolled in two courses per semester, passed my comprehensive exams and there I was in the IERG¹⁸'s office having a conversation with my mentor, Professor Egan, about possible topics and research foci of my dissertation. The conversation did not take long; Professor Egan shared with me his thoughts regarding his theory and how he felt that a better exploration of the Somatic Understanding might be needed in order to assure and build a stronger transition to the next KU – the Mythic Understanding. I think he trusted me with this task, due to my experience in the field of “educating babies”.

Here I am today trying to succeed at the task that was given to me.

I am writing about the Somatic Understanding in great detail and care, trying to smoothly augment the Theory of IE and fortify its exploration of the beginning of life: ages 0 to 3.

In the following sections, I would like to metaphorically and hopefully, practically try to unswaddle the Somatic Understanding of the theory of Imaginative Education to assure

¹⁸ Imaginative Education Research Group – at Simon Fraser University, Canada

balance among all 5 Understandings. I consider the Somatic KU swaddled from two points of view:

1. Breadth – the Somatic KU is not explored enough in the thousands of pages written by Egan;
2. Depth – when mentioned, Somatic Understanding is described “from the outside” of its core values.

I will contribute to the unswaddling of the breadth of Somatic KU by bringing to light research and philosophy that focus on the role of the body and its cognitive tools in human learning, being, and feeling. By adding to the breadth of knowledge, my purpose is to emphasize how vital Somatic KU is in the lives of humans and how much there is still to discover about its hidden features.

I will engage with the unswaddling of the Somatic “depth” by pointing out some of the less valued core qualities of this KU by the theory of IE. By analyzing, emphasizing, and adding these core qualities to the Somatic cognitive tool kit, I am hoping to revive the trust and appreciation for the Somatic KU not only in the views of my mentor – Professor Egan, but also in the perceptions and applications of the educational system in general. This second kind of unswaddling **will be seen in Chapter 6**, where I will closely examine the renewed set of Somatic cognitive tools.

Unswaddling the Somatic

One of the most important, and by now uncontroversial, findings from the past 30 years of research is that infants and preschoolers are far more cognitively sophisticated than we once thought. Similarly, developmentalists have discovered that there are complex interactions among caregivers and infants and young children that include interpretations on all sides. (*Gopnik, 2010, p. 322*)

Because this chapter is meant to discuss the breadth of knowledge that we have about the “silent” and unarticulated period of a human life (the period of the Somatic Kind of Understanding), I will start with a playful mathematical examination of the use of the term “Somatic” in the capital book of Egan – *Educated Mind: How Cognitive Tools Shape Our Understanding* (1997). I am doing this small bit of research to test my hypothesis of

imbalance among the attention given by Egan to the five KsU. I have performed a simple word count of the 5 terms used to describe the Understandings. After counting the occurrences of each, I transformed them into percentages of the total sum of the researched words. Here are my results:

Table 1. Terminological occurrences in the *Educated Mind* (Egan, 1997)

Term searched	Occurrences	Percentage
Somatic	70	6.42%
Mythic	198	18.09%
Romantic	347	31.71%
Philosophic	301	27.51%
Ironic	178	16.27%

As visible in my table, the most attention is dedicated to the third and fourth KsU, the ones that involve the literate child. The term *Somatic* is only used in a percentage of 6.42%, a fact that clearly proves my suspicion that there is a deep imbalance among the attention given to Somatic KU, on the one hand, and the other KsU on the other hand. And that what my mentor asked me to do - augment the Somatic in order to better connect it to the following KsU - is indeed a needed work.

So, what matters about this first period of learning (ages 0-3) in our lives? How might I open up its secrets in this academic work? Who is this child in our midst who cannot speak in the articulated language of us, mature humans? How shall we talk about serious philosophical issues, such as: mind–body relationship of emotion and cognition in the case of a small, seemingly voiceless being?

These are the questions that I will engage with without promising answers to them. I will speak from my experiences, practice, and review of the literature; I will voice what is voiceless in the theory of Imaginative Education, and I will seek to widen the space of the Somatic within the philosophical and practical territory of this unswaddling theory.

Who is this embodied proto-lingual being?

Just as we are beings who need to give thought to Being in the realm of language, both saying and thinking that Being is, so are we beings who need to give thought to Being in the thoughtfulness of our posture, our stance, our gait and comportment, and in the thoughtful gestures of our hands.

(Kleinberg-Levin, 1985, p. 45)



Figure 13. Kian and *Embodied Proto-lingualism*

Let's look at the two pictures of my youngest son, Kian. He is a few months old. He is not speaking. He cannot even utter a single word yet. Can you see what he is communicating? Can you decode, translate, or interpret his message?

What do you read into the first picture? Do you have a similar interpretation as I do? Would you agree with the following reactions?

“Of course! He is feeling tricked but not upset; he has caught the adult in the room trying to playfully deceive him and he is smiling in defeat; he loves the adult in the room; he is used to the adult’s presence and tricks; he is making sure that his feelings are clear to the adult; he also makes sure that the adult knows he loves these tricks, that he loves the game, that he loves to be!”

What do you feel when you look at the second picture? Do you say: “He loves his mama; he also makes his love known to her, and to the other adults in the room; he is proud of his love and he is proud that he can show off his feelings; he is hugging his mama telling her how much gratitude he has for her being there with him (even when she is exhausted and falls to sleep on the child’s highchair)?”

The two pictures above speak to the whole point of this chapter. I feel that I do not need to explain anymore. “Wrong. This is a dissertation!” – I am told by the rational angel on my left shoulder. So, I will explain, analyze, argue and provide more evidence of some of the distinctive features of young children’s *embodied proto-lingualism*. I am using the prefix “proto” to replace the “pre” used by Egan, due to the fact that, as will be discussed in more detail in the following section, language acquisition in my view starts with life itself and has no predecessor. This layer of embodied understanding (meaning making through the use of the whole body) should not be taken for granted because, as Shusterman (2006) asserts: “the body is not only an essential dimension of our humanity, it is also the basic instrument of all human performance, our tool of tools, a necessity for all our perception, action, and even thought” (p 2). He continues his argument with talking about education and humanity in general:

We need to think more carefully through the body in order to cultivate ourselves and edify our students because true humanity is not a mere genetic given but an educational achievement in which body, mind, and culture must be thoroughly integrated. (Shusterman, 2006, p. 2)

Egan’s theory is not alone in focusing more on the “languaged” period of children’s lives and learning (Gopnik, 2010). Because the initial period is “unarticulated”, proto-lingualism fell outside the magnifying glass of educational research and theory - until recent years.

According to Gopnik (2010, 2012) and Braten (2007), there has been a major shift in research, from omitting or skipping the first year of life, toward bringing out a new image of the young child, an image that hopefully will amplify the attention of educationalists:

In the last few decades, the story of human infancy that has been told by philosophers and medical and psychological sciences has been re-written. In place of the idea that infants are a-social and ego-centric, there is a new understanding that a baby is born with a lively talent for interpersonal communion. The indulgent opinion of parents has received abundant confirmation from careful observational research. Thus micro-analyses of proto-conversations with two-month-olds have revealed that infants are endowed with a cerebral system that enables direct perception of interests and feelings in another person and responsive attunement permitting delicate, emotionally regulated engagements. (Braten, 2007, p. 21)

Another possible reason for neglecting this realm in the past (before it was revived by recent research) could have been the misconception of its **ephemerality**. The regal arrival of language in one's life may have been considered the end of the pre-lingual era's tools of understanding and communicating. Egan himself notes that the acquisition of language provokes the loss of cognitive tools that come along with our first kind of Understanding – the Somatic one. He, however, points out the fact that those tools should not be lost and that Imaginative Education could have the power to prolong their availability and usefulness in education (Egan, 1997, p. 48). So, what happens during the transition from being proto-lingual to being languaged?

Research in the area of language acquisition in early childhood is abundant (Kuhl, 1992; Werker, 1984, Mehler, Jusczyk, Lambertz, Halsted, Bertoncini, & AmielTison 1988; Morgan, 1996; Wanner & Gleitman, 1982; Gervain, Nespor, Mazuka & Horie, 2008; Chomsky, 1988; Pinker, 1997; Pinker & Kackendoff, 2005; Mehler, Nespor, & Peña, 2008). Researchers seek the exact roots, stimuli, and connections in the baby's embodied mind that drive them to become agile in communicating through language. The only remarkable obstacle in the way of research has been exactly the lack of verbal communication of infants. In order for parents and educators to be ready for the moment when the child is "swayed over to the side of those who speak" (Merleau-Ponty, 1963, p. 41), they need to decode some of the non-verbal signs of infancy that might convey priceless information that can be employed for the sake of the child himself. Decoding the

language of the proto-lingual period of life in a scientific way is a very difficult process, indeed, and it began centuries ago.

Biologically speaking, the most acute growth in infancy and early childhood is the growth of the brain. Egan (2008) talks about the comparison between the brain growth of humans versus chimps, both having the approximate same size at birth but after just a few first months and years, the human brain triples in size while the chimp's only expands by 100 c.c. Our species "decided" to grow the brain instead of the jaw, as visible in the following illustration:

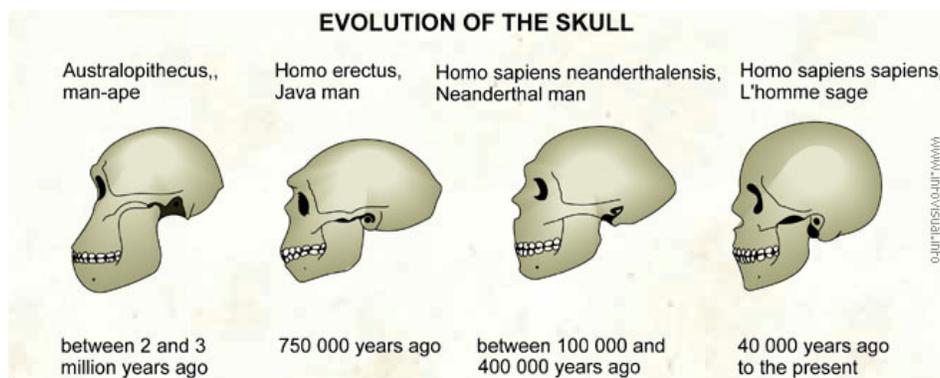


Figure 14. Evolution of the skull. Retrieved from http://infovisual.info/03/019_en.html. Used with permission.

The seeds of language and even of a universal grammar appear to be present in this growing brain long before the actual arrival of vocal language: "There is a sort of universal moral grammar, despite superficial cultural differences, just as there is supposed to be a universal grammar that underlies superficially different languages" (Gopnik, 2009, p. 203). According to research (Dodson & Tomasello, 1998, Brooks, Tomasello, Dodson, & Lewis, 1999, 2000; Abbot-Smith & Tomasello 2006; Dittmar, 2014; Chang, 2009; Yuan & Fisher, 2009; Arunachalam, & Waxman, 2010), babies appear to understand and adapt to clear grammatical rules of their own language(s). A study of the University of Liverpool (Noble, Rowland, & Pine, 2011) argues that children have a clear understanding of extremely complex grammar before the acquisition of language, before the age of two:

We tested this theory by showing two-year-old children pictures of a cartoon rabbit and duck. One picture was the rabbit acting on the duck, lifting the duck's leg for example, and the other was an image of the animals acting independently, such as swinging a leg. We then played sentences

with made-up verbs -- the rabbit is glorping the duck -- over a loudspeaker and asked them to point to the correct picture. They picked out the correct image more often than we would expect them to by chance.... The beginnings of grammar acquisition start much earlier than previously thought, but more importantly it demonstrates that children can use grammar to help them work out the meaning of new words, particularly those that don't correspond to concrete objects such as 'know' and 'love'. Children can use the grammar of sentence to narrow down possible meanings, making it much easier for them to learn." (Noble et al., 2011)

In a Chomskian sense, children have an innate set of language rules different from the grammatical rules that come later with applying language in a social context. These rules are "more like the law of gravity than like the law of the land (or the law of the English teacher)" (Gopnik, 2009, p. 99). This aspect of the young mind is so fascinating because infants are born seemingly able to take on any language in the world and it takes them just a few years to make it their own. To see the capacities of infants in a different light than just the early beginnings of knowing, or the receptors of future knowledge, we need to turn our pedagogical heads toward the new science:

Babies know important things about language literally from the time they are born, and they learn a great deal about language before they even say a word. Most of what they learn at an early age involves the sound system of language. We decode the sound cryptogram, and solve many of the problems that still baffle computers, before we can actually talk at all. (Gopnik, 2009, p. 102)

The narrator of an insightful documentary - *Evolutionary Origins of Language* (2010) - states that "language does not need a voice" in order to exist and to talk to the world and taste its miracles. The voiceless language of our first years of life could be considered the loudest. It vibrates through our present body and into the future.

Neuroscientists are using new technologies to decipher babies' proto-linguistic communication systems: "Electroencephalography (EEG)/Event-related Potentials (ERPs), Magnetoencephalography (MEG), functional Magnetic Resonance Imaging (fMRI), and Near- Infrared Spectroscopy (NIRS)" (Kuhl, 2010, p. 713). According to research, these communication mechanisms remain permanently in the foreground of the whole lived experience of human beings and their impact is reflected in the language and reading abilities of young children in their first five years of life (Kuhl, 2010, p. 713). As Egan (1997) expresses:

We do have a prelinguistic consciousness and, worse ... this consciousness is not merely prelinguistic in a temporal sense but remains with us, as part of our understanding, throughout our lives. (p. 166)

A thoughtful educational theory as IE owes it to itself to put more of an emphasis on, and recognize, the incontestable role of the emergent capabilities of infants and their role in the genesis and enrichment of the next KsU and their CTs. Egan (1997 – 2008) acknowledges the need for supporting the continuous emergence of some Somatic qualities, however, he avoids going in-depth to explain why and how this support can be done through using the IE CTs. For instance, the **capacity for intersubjectivity** of infants is reduced to the game of peek-a-boo and its real value is only recognized when the delightful communication systems of babies finds its way into the next KU – the Mythic:

The early interlockings with others that begin with our bodily copying and responses— the peek-a-boo game, the mutual sticking out of tongues, the hiding and revealing, the weeping and the laughter— will later find their way into language. (Egan, 2008, p. 47)

In the following section, I would like to approach some of the areas in the development of young, proto-linguistic children that are not explored enough by the theory of Imaginative Education. My analysis is meant to unswaddle some aspects of this period of life that would shed a brighter light onto the cognitive tools of this first *Kind of Understanding (Somatic)* and also on the need of rethinking and augmenting them. I will investigate intersubjectivity, **active self-awareness**, and the role of emotion in Somatic learning. I will start with **intersubjectivity** in the temporal context of proto-lingualism because the belief in the existence of such a capacity has taken an important turn in the last few years and this turn will offer Egan's peek-a-boo game another kind of value.

Intersubjectivity

The capacity of intersubjectivity was not always recognized, even more, it was strongly denied. One of the thinkers who denied and ignored this capacity was no one other than Freud (1911, p. 220). He did not consider such a possibility because, in his view, humans only have a physical birth (not a social birth) and they are born lacking any social capacity. He compared babies to chicks isolated from the world of adults by their shells (Braten, 2007, p. 160). Another great mind – Piaget (1952, 1954) – considered

babies as being unable to distinguish self from the other; babies, in his view, were “radically egocentric”, “solipsistic” and unable to perform any social connection before the age of 18 months (Braten, 2007, p. 160).

These sceptical views that denied infant intersubjectivity are challenged and disproved by thinkers like Gopnik (1999/2014), Damasio (1999/2014), Merleau-Ponty (1945/1962), Husserl (1950/1960), Cobb (1977) who all argue or demonstrate ways in which an infant is aware and engaged with the other. Research shows that infants as young as few hours, are able to imitate with intention (Trevarthen, 2011). Infants are able to project imitative movements in order to “enter a conversation” with the adult that cares for them and to imitate sounds and intonations long before the first words:

Most impressively, an alert newborn can draw a sympathetic adult into synchronized negotiations of arbitrary action, which can develop in coming weeks and months into a mastery of the rituals and symbols of a germinal culture, long before any words are learned. (Trevarthen, 2011, p. 121)

The complexity of an infant’s intersubjectivity - the ability to attune, engage, and communicate with another (Liddle, Bradley & McGrath, 2015) – is studied today in various ways.

Colwin Trevarthen, an Emeritus professor in Child Psychology and Psychobiology at the University of Edingburgh, has been interested in the study of infant communication since the 1960’s. He argues that a transition from denying the capacity of intersubjectivity in young children to celebrating and researching it in–depth is still continuing today. This transition takes place in two main streams: first re-asking and re-answering the classical question of why and how the mind evolves: “how conscious intentionality or ‘will’ may be generated by irrational cerebral processes that regulate and guide body movement of individual animal beings?” (p. 121) And, second, accepting and engaging with the fact that intelligence evolved with the purpose of socially sharing the intentions for actions. In regards to adapting these views to infants, there is a need for developing a new theory of “motives”. This theory, in order to grow and become believable, needs to be researched with a special focus on communicative movements that express emotion, interested gaze, interested and intentional movements of the head, hands, and feet; holding, touching, etc. (Trevarthen, 2011, p. 121). Neuroscientific research shows that human infants have, in addition to some features of the brain that

are prenatally developed in both humans and animals such as: adaptations that motivate emotions and actions, other specifically human features that:

Anticipate development of a new complex of communication of mental activity by eye movements, facial expressions and vocalizations. The subcortical components for power of movement, emotional expression, distribution of attention, and 'executive functioning', are integrated with large neocortical elaborations. (Trevarthen, 2011, p. 126)

Another interesting aspect of the intersubjectivity in infants, mentioned by Trevarthen (2011), is the “coupling of human hands with the brain stem motor centres in the functions of hands as self-regulatory and as expressive organs” (p. 128). Human hands evolved beyond their initial survival roles; hands are tools for communication and their use for this very application begins in infancy: “neonatal hands make many delicate movements in 'self-synchrony' with other body movements, face expressions and vocalizations, and these movements are capable of sympathetic 'intersynchrony', with the movements of looking and speaking of an adult” (p. 128). In Trevarthen’s view, a “rhythmic pulse” (2011, p. 128) drives this early complex human symphony of gestures and vocalizations.

This rhythmic pulse creates the sync between the parent and the infant, and this is the pulse that needs to stay in the relationship of adults – parents, educators, caregivers – with young children. *This innate rhythm of being in the world needs to be acknowledged and perpetuated in the education of young children.* The freedom to communicate with the world through movements of the body, specifically of the hands, take us back to the core metaphor of this thesis: unswaddling. The freedom of hands, viewed so closely connected to the intersubjectivity of infants, needs to remind us of how important this freedom is for the process of making meaning of the world. Babies need the freedom of their limbs to be in the world, to self-soothe, and to be, simply, human.

Active self-awareness and emotion

Another capacity recognized as a condition of infancy is **active self-awareness**. Trevarthen (2011) mentions “inwardly ‘contemplative’ states of mind” that demonstrate the fact that infants, from the moment of their birth, perform creative actions of “being

alone with the feelings of the body” (p. 130). Neuroscientists at Pasteur Institute in Paris corroborate this aspect of infants:

The vertical brain stem, diencephalic and thalamocortical pathways, which regulate the states of consciousness, become established before their connection with the horizontal GNW cortical circuits yielding, in the newborn, plausibly functional, though still immature, neural dispositions for access to a conscious content. ...The newborn brain is not “blank.” ... The primary visual areas, the somatosensory and auditory cortex are active indicating that sensory auditory and visual impressions are processed in the newborn cortex. (Lagercrantz & Changeux, 2009, pp. 255-256)

The neuroscientists in this study state that newborns demonstrate “access to consciousness” right after a possible “positive emotion” (p. 258) – triggered by a motivation focused on the outside world, specifically toward the feeding mother. According to these researchers, this positive emotion triggers motivation within the infant towards looking at and exploring with the outside world: “The infant’s affective display then becomes part of a conscious intercommunication system with the caretaker” (p. 258). This conscious communication, as the researchers call it, does not stop at communicating with the caretakers; infants are also able to transmit and receive emotions.

A more recent study (Liddle, Bradley & McGrath, 2015) sheds light on the matter of sharing emotions, demonstrating that 8-month-old infants experience empathy and are capable of responding to peer-distress. This study goes as far as demonstrating a pro-social behaviour in the infants who preferentially gazed longer at their crying peers and their mothers as if they wanted the mothers to do more for their infants:

The significantly greater number of looks babies directed to other mothers as compared to their own mother is an interesting finding. This gaze pattern during peer distress may indicate an awareness or understanding of the crying baby’s preference for his or her mother and an expectation of other mothers (not their own mother) responding to the baby’s distress. This argument is at odds with the developmental model of empathy.... The predominance of gaze as a means of responding and attending to other distress signifies the babies’ inherent interest and curiosity in others’ emotional states. (Liddle et al., 2015, p. 455)

The responses of babies involved in this study all demonstrated a sound presence of intersubjective competence and a clear ability to prosocially respond and react to other

babies' distress. The authors are among the pioneers of scientists who argue that infants demonstrated prosocial behaviour before the age of language acquisition (previous studies focused on that age due to the verbal competence of the research subjects [Farver & Branstetter, 1994; Howes & Farver, 1987; Lamb & Zakhireh, 1997]). Previously, it was thought that such prosocial behaviours were impossible in the first year of life (Liddle, 2015; Brownell, 2013; Paulus, 2014).

Both Liddle et al. (2015) and Trevarthen's (2011) studies concluded that newborns' proto-cultural intelligence is equipped with a social awareness and active agency that are the very roots of "rich imaginative ripeness in the next two years" (Trevarthen, 2011, p. 130) and offer excellent advice, which should be followed by all educators in the field of Early Childhood Education:

We must respect these intuitive beginnings if we are to comprehend the elaborately representational and rationally regulated minds of speaking humans. (Trevarthen, 2011, p. 130)

I consider that recognition and trust in an infant's ability to communicate, feel, and connect with the other is extremely important for the pedagogical image of the child. This trust also connects beautifully to my own unswaddling themes: *openness* – by the infant's turn to the world instead of exclusively to him/herself as Piaget believed; *movement* – by an infant's whole bodily intentional motion; *relationship* – by an infant's ability to care and empathize with the other; *trust* – by an infant's power to filter the quality of relationships through emotions; *identity* – through an infant's capacity of self-awareness; and *affect* – through an infant's ability to utilize emotions as triggers of intentions.

Minding the Body – Sustaining the Somatic Understanding

Mama, I do want to listen and do what you say, but my brain in my head tells me not to!

(My son, Kian, age 5)

Mama, I am not hungry at all, but my belly says that it needs some food!

(My son, Santi, age 6)

Where is the body in an academic classroom? Why do my students resist when I invite them to engage in a learning activity through their bodies? Why do I need to teach my students about how to bring the body back into the process of learning? What happened?

Why are my students swaddled?

These are questions that bother me every day. My adult students seem to have lost touch with their own physical body in an academic setting; when I say “touch” I mean connection, respect toward the body, acknowledgment of its role, and even care for the body’s well-being. I teach my students, all aspiring early childhood educators, about children, about how to be, listen, and engage pedagogically with them; I teach about childhood and its secrets, emotions and their role in early childhood. As I do this, I seek to reconnect my students with their own childhood, with their own wonders and passions, with their own minds and bodies. I need my students to feel what I am teaching about. I need them to learn from their own life experiences, and from their own hearts. How else can they learn to genuinely understand a child?

Where did this disconnect between their adult selves and the child embodied within happen? Why do I have to start the unswaddling of each and every student, hoping that they will learn to see the beauty of living and learning with heart, mind, and body?

In reference to Somatic Understanding and its pedagogical value, Egan (n.d) once wrote:

When we observe that someone doesn't know "how to listen to his body," or that someone "has become disconnected from her body," we are referring to the loss of a Somatic understanding of the world. The result can be to cut off the individual from realms of experience that are necessary for the imagination to function well, as poets and other artists know. (Egan, n.d. para. 4¹⁹)

Egan's words provoke sadness in me because of their truth. Indeed, awareness of the value and understanding of *Somatic* KU can be lost and this is what I witness in my post-secondary classrooms. Even if this next section might seem like a long jump from infants to adults, I will explain why it isn't; nurturing the *Somatic* KU throughout a child's and youth's education could help all adults stay in touch with their inner creative and imaginative "child". Perhaps if my students had experienced *Imaginative Education* or a similar form of pedagogy, if their transition from early learning (at home or in childcare) to elementary education would have been a smoother transition closer to their hearts, minds, and bodies. I am convinced that they would not now, in my post-graduate classes, resist standing up and taking a walk while learning, or dancing while thinking!

My daily experiences with the loss and recognition of the value of the somatic within education remind me of Celeste Snowber's (2011) hopeful, yet sarcastic shout-out, while impersonating the Body who writes a letter to the Academy:

I am now actually a hot subject and object, and you researchers are taken seriously for scholarly discourse that connects issues with me. I mean, I am now even being discussed at the tables of some of the finest institutions around the world. This is a big feat, given my absence over all these years. I have become more visible in theorizing and this is not to be minimized. Yet, in this presence, there are absences, ones that have implications for the health of developing the scope of full body intellectuals, scholars, and educators who not only speak about the body, but also, live from the body. So now it is time for me to speak, speak to you with a tender heart, with all the juice, and even mess of what the body is. ... I am after all, not a text and cannot be distanced eternally, as letters on a page, which do not sweat or weep, moan or bleed. ... I am actually more interested in being a centerfold than just a fold. (2011, p. 188)

¹⁹ Retrieved from <http://ierg.ca/about-us/what-is-imaginative-education/>

What a needed cry-out! The letter encompasses the main factors that work against the body's role in education and learning. Snowber (2011) asserts that the body is not a text that can be avoided, neglected, or ignored because of its impersonality. Avoiding and locking out the body from Academia was not an easy process. How can something with such an actual palpable presence be so absent? How could Academia forget that our bodies are places of "deep learning" (Snowber, 2012) and that the language of our bodies is fundamental to understanding not only knowledge, but also each other as human beings? How could Academia lock out the tools that come with our bodies, tools that we happily have been carrying for millennia? How could Academia ignore the curriculum of our bodies?

Inhabiting our bodies allows for a deep authentic voice within to emerge. This traverses across language, gender, cultural, or even philosophical differences. The lived curriculum is within our bodies. (Snowber, 2012, p. 119)

I invite my reader to advocate for the body. I invite my reader to remember his/her body while teaching and while learning. I invite you to revisit the feelings, the joy and the wonder that your body used to offer you as a child. It is time to give back! It is time to stop the slipping away... it is time to act.

The body and thus movement/dance is a place of knowing and both embodied knowledge and bodily wisdom is available to us. Many times I have said that it is like having a GPS system within, and yet not using it. The muscles of creativity connected to the body need encouragement and a pedagogy of openness in order to be integrated into life. (Snowber, 2012, p. 121)

Snowber (2011) argues that there are two ways of being: speaking about the body and living from the body. She takes on the challenge and by embodying the body she speaks in its forgotten name. She is a continuous advocate for bringing back the body into the classrooms.

*Snowber's distinction makes me think of something that I witness at many of the childcare centres where my students are doing their practica. What I see in most of the centres is the poster: "My Body" that is supposed to teach and remind children what the names of the body's parts are: hand, arm, head, etc. Children might **speak about a body**, but they are not invited to **live from the body**, specifically, to learn and know their*

own body and not a two-dimensional symbol on a shiny paper. How can we support children's learning to live their bodies by reducing its reality to a flat image on a paper?

I will use Fettes' (2011) words to describe the continuation of such a process of privileging written representations over actual experience:

Modern schooling not only privileges linguistic representation, it deliberately separates children from their normal social and natural environments for a large part of their growth towards adulthood. Even in school subjects such as science, where experience (in the form of observation and experimentation) is a key part of the curriculum, it is tightly circumscribed by second-hand accounts of what *should be experienced*. (p. 117)

The question Imaginative Education seeks to address is: How can we practice education as a mindful embodied whole instead of as a random collection of bits and pieces that propose to resemble reality?

Understanding the pedagogical swaddling of the body

By pointing out some possible causes of my students' swaddled bodies, such as isolating the body from education, reducing the body to a flat representation, or poorly translating the richness of lived experience to disembodied and unimaginative words on a page, I wished to unswaddle some of the possible reasons for the situation I witness daily: a disappearance of the acknowledgement and/or dismissal of the body and its complex collection of features as an integral part of the processes of teaching and learning. I will further identify a few attributes of the body that I consider have created some misconceptions about and/or deliberately limited the body's pedagogical role. As you read through, remember or picture yourself sitting in a seat at your desk in school five minutes before the recess bell...

The body is:

Unpredictable

Invisible

Clumsy

Noisy

Lively

Playful

Unpredictability?

The bodies of children are always surprising, always doing something new, always adapting in different ways to the environment. The body cannot be contained like words on a paper: an arm will move into the air at a most uncomfortable moment for the teacher, a physiological need will interrupt the most engaging story, or a yawn will deflate the enthusiasm of a new day. Children *are* their bodies (Snowber, 2012); Children feel and exist *within* and are not detached from their bodies.

These are the movements
one knew as a child
a bold familiarity
the fertile imagination
where freedom blooms
within our bodyminds
and anything is possible.
(Snowber, 2012, p. 121)

The body, in Snowber's (2011) words, "has a spontaneous path, circular and circulating in ways, which cry to be spoken, but often silenced." (p. 190) Can structured education

afford so much unpredictability? How can a curriculum of prescribed learning outcomes be followed and applied if it is being constantly interrupted by moving, breathing, and yawning bodies? Maybe we can already get a first glimpse into the reasons why education needed to swaddle those random movements and reactions. Swaddling the body in the classroom could produce silence, organization, control of time, and place, and so forth.

Invisibility?

It is mostly impossible to guess what the body feels. Its hidden visceral thoughts are not visible to the teacher. Its hidden secrets make the pedagogical relationship uncomfortable. I am reminded by Osho's (2007) words: "A totally new kind of education is needed in the world where fundamentally everybody is introduced into the silences of the heart.... The body is the greatest mystery in the whole existence" (p. 2).

Embodied cognition exists but it cannot be measured, seen, or categorized. Why would education take into consideration something that it can pretend not to know of its existence? So, why swaddle an invisible body? How can education make a body visible by swaddling pedagogies? Simple: make visible movements, parts, and feelings that are artificial to a child's real need and desire; make children sit for hours instead of moving around while thinking of the next great idea; make children hide their feelings and pretend to be happy and friends with everyone, because this behaviour is what is appropriate; make children name and label their emotions before they even feel them... Swaddle the invisibility and release the ordered/ measured/ categorized/ planned/ required/ preferred visible.

Clumsiness?

Does education try to avoid the clumsiness of children's bodies? Is it bothered by the lack of coordination? Children more often, adults sometimes, all have clumsy moments. These moments are born for a reason. For instance, this morning while preparing my lecture, another graduate student beside me, who had been working on his thesis for a few hours in a row, bumped a water bottle off the desk while standing up. How clumsy of him, someone might say. But I know that, this student, just like me, had not stood up in the last three hours; of course, his body would rebel and need to recover its agility. Instead of

teaching children how not to be clumsy, we might try to offer more possibilities for them to move and exercise their movements in order to discover their own ways of recalibrating their balance. Having movement as part of pedagogy helps children prevent the somatic forgetfulness that distances them from their bodies (Kleinberg-Levin, 1985).

Noisiness?

The body is noisy! This fact cannot be contested, but would noisy bodies be a reason why education swaddles the body out of its classrooms? Could someone argue that noise is harmful for learning? Of course! There are multiple studies (Klatte, Bergström & Lachmann, 2013) that measure the harmful effects of environmental noise on children's cognition; however, there are also studies that defend the presence of noise in early learning, arguing that if in the early stages of auditory processing children learn to "fine-tune" the surrounding noise, they will later be better able to "distinguish relevant information in the signal from irrelevant details" (Chandrasekaran & Kraus, 2010, p. 300).

Children's own noisiness provoked by talking, singing, or moving may even be beneficial to learning in specific, personal styles of learning - some children like to move, fidget, or stand; some learn in silence; and some like to jump (Gehris, Gooze & Whitaker, 2015).

Liveliness?

The body is active. The body does not like to sit still. Education has a long tradition fuelled by the misconception that suggests that increasing academic skills in children can only be achieved by limiting children's movement (Gehris, Gooze & Whitaker 2014, p. 122). Any early childhood educator is aware of children's love of movement, play and limitless space. A recent study's results (Gehris et al., 2014) show clearly that children do learn through movement and, rather than responding to an active body as a negative interference with learning, educators need to recognize a moving body as one that needs to be considered and utilized as a beneficial and integral support to learning:

Teachers' views were expressed in four major themes. First, young children have an innate need to move, and teachers respond to this need by using movement experiences to prepare children to learn and to teach academic concepts and spatial awareness. However, teachers wanted

more training in these areas. Second, movement prepares children for school and for life by building children's confidence and social skills. Third, teachers and children benefit from moving together because it motivates children and promotes teacher-child relationships. Finally, moving outdoors promotes learning by engaging children's senses and promoting community interaction. (p. 122)

Why would we restrict a child's movement within classrooms? Is it because teachers feel that movement brings chaos and disorder, both interfering with teaching and learning? Or is it because they fear the image others would form of her/his pedagogy if someone popped by and was faced with a fun-park environment? Or have they perhaps forgotten how much they loved movement and dance as a child, as a youth, in their lives here and now?

The liveliness feature of the body reminds me of a rule used in most of the childcare centres that I visit daily: "Use your inside feet!" Usually this request is understood by children as a command to automatically restrain the liveliness of their feet. Children look at the teacher when she/he gives the often loudly spoken command and immediately stop moving rapidly inside the building. My distress with this repeatedly witnessed occurrence is that instead of using this moment as an opportunity to create something meaningful in the relationship of the child with the place and with the people of the place, teachers seem to routinize their request for "inside feet." If routines are built on empty or unexplained meanings, they lose their value. "Use your inside feet" can be created and practiced in ways that would offer meaning and value to children. What a different pedagogical experience of consideration towards others and place would be offered to children if this command was born from a story about "The unstoppable feet" that needed and could not find rest until one day when; or a story about the magical ground on which the building is built, ground that lives and listens in silence to its beloved partners above; or a choreographed routine that invites children to adapt their "dancing feet" to calm music that plays in the background when they enter the building? If we, teachers, open up the meanings and the values of words and messages to our children, those words and messages come alive in their imagination; they become a reality that does not need a loud command, only gentle, warm reminders.

Playfulness?

The body is playful. The body makes tricks. The body laughs, giggles, and expresses emotions that are felt inside. Knowing these facts, why do we still persist on having a serious conversation about the “relationship” between play and learning? I put the word “relationship” between quotes because the very use of this word seems artificial and inappropriate to me. Play is learning! How can we leave play outside the doors of the classroom? Why can we not understand that serious play is needed for learning as multiple researchers have advocated (Verdine, Golinkoff, Hirsh-Pasek, Newcombe, Filipowicz & Chang, 2014; Hart & Risley 1995; Genishi & Dyson, 2009; Gopnik & Wellman, 2012; Astington, 1998, 2000; Gopnik & Walker, 2013; Samuelsson & Carlsson, 2008; Cant [formerly Fodor], 1999; Singer & Singer, 1990)

Playfulness is messy, unpredictable, noisy, and sometimes chaotic... Are teachers convinced that all these elements lack pedagogy? Leaving play out of the classroom and curriculum means that playfulness is considered the opposite of seriousness. This might be one of the reasons why an unswaddling pedagogy seems unacceptable in a pedagogical tradition that takes learning “seriously”.

Are the above attributes of the body to be held responsible for the absence of a pedagogical awareness of, or commitment to, what Egan has called Somatic Understanding? Are those attributes the reasons that educators turn to for preventing an unswaddling pedagogy in the classroom? Does the body’s liveliness and unsettledness cause so many classrooms to actively and deliberately disconnect students from their bodies?

How might Somatic Understanding be supported and developed? How might we facilitate the transition of the proto-lingual child into the realm of language without disconnecting his/her heart and mind from his/her body? In the following section, I will engage with the relationship between Somatic Understanding and the body-mind dialectic to try to clarify some aspects of this relationship that are necessary for an unswaddling pedagogy.

Somatic Understanding and the body/mind dialectic

The body has a spontaneous path, circular, and circulating in ways, which cry to be spoken, but often silenced. Tears are familiar to the body's voice, passion, and com/passion ... Outbursts are normal. Sleeping is needed. Spilling is central.

(Snowber, 2011, p. 188)

The child amidst his baubles is learning the action of light, motion, gravity, muscular force.

Ralph Waldo Emerson²⁰

("The Divinity School Address" at Harvard on July 15, 1838)

What with the hands? We require, promise, call, dismiss, threaten, pray, supplicate, deny, refuse, interrogate, admire, number, confess, repent, fear, express confusion, doubt, instruct, command, incite, encourage, swear, testify, accuse, condemn, absolve, abuse, despise, defy, provoke, flatter, applaud, bless, submit, mock, reconcile, recommend, exalt, entertain, congratulate, complain, grieve, despair, wonder, exclaim, and what not! And all this with a variety and multiplication, even emulating speech. With the head we invite, remand, confess, deny, give the lie, welcome, honour, reverence, disdain, demand, rejoice, lament, reject, caress, rebuke, submit, huff, encourage, threaten, assure, and inquire. What with the eyebrows? —what with the shoulders! There is not a motion that does not speak, and in an intelligible language without discipline, and a public language that everyone understands: whence it should follow, the variety and use distinguished from others considered, that these should rather be judged the property of human nature. I omit what necessity particularly does suddenly suggest to those who are in need; —the alphabets upon the fingers, grammars in gesture, and the sciences which are only by them exercised and expressed.

(Montaigne, Essays, bk. ii. ch. xii., "Apology for Raymond de Sebonde", 1570 to 1592)

In the previous section I touched upon possible reasons why education in a variety of settings has chosen to intentionally leave the body out of the classroom, consequently practicing a swaddling pedagogy that restrains the wings of the complex whole being of students. Watching this phenomenon through the lens of IE, I can describe the practice of

²⁰ In Emerson, R. W., & Emerson, E. W. (1903). *The complete works of Ralph Waldo Emerson* ([Centenary]. -- ed.). Boston, New York: Houghton, Mifflin.

locking the body outside the classroom appears to be a deliberate pedagogical stance that ignores the Somatic KU of children, and that of older students. The intricate system that plans education and curricula seems to be unconvinced that students need to understand and explore the world of knowledge through somatic channels. I consider that “binarizing” the human being into a mind and a separate body is provoking one of the main fractures of the educational system today. Physical Education, being a separate subject in elementary students’ schedule, alludes to the understanding that minds remain in the classroom and bodies run to the gym. By denying movement in the “learning” space called the classroom, educators contribute to a perceptual, conceptual and lived divide of body and mind in an intentional way.

Who is responsible for this divide so deliberately practiced in traditional school environments? Some would say that the guilty character in this story could be the 17th century thinker, Descartes, due to his *clear and strict* distinction between the *unthinking body* and the *thinking mind*:

[O]n the one hand I have a clear and distinct idea of myself, in so far as I am simply a thinking, non-extended thing [that is, a mind], and on the other hand I have a distinct idea of body, in so far as this is simply an extended, non-thinking thing. And accordingly, it is certain that I am really distinct from my body, and can exist without it (Descartes, AT VII 78: CSM II 54).

Blaming him for all the faults seems extreme, mainly because Descartes himself questioned, rewrote and re-expressed his view and the validity the mind-body dissonance, as visible in the next section from the *Sixth Meditation*:

[T]here is a great difference between the mind and the body, inasmuch as the body is by its very nature always divisible, while the mind is utterly indivisible. For when I consider the mind, or myself in so far as I am merely a thinking thing, I am unable to distinguish any parts within myself; I understand myself to be something quite single and complete.... By contrast, there is no corporeal or extended thing that I can think of which in my thought I cannot easily divide into parts; and this very fact makes me understand that it is divisible. This one argument would be enough to show me that the mind is completely different from the body.... (AT VII 86-87: CSM II 59).

Descartes considered that the mind can be the driver of the body, but he was more fascinated by the intricate sophistication of the body’s mechanism. If the mind is the driver, and young children understand the world around them through their bodies – somatically,

as Egan (1997) argues, then do we have to imagine young children as mechanisms with no drivers? How can we have trust in their capacities to learn if we think they are mere machines with no direction, no thinking, and no reason(s)?

One of the contemporary scientists whose research embraces the whole of the human cocktail: emotions, cognition, and the body that embodies them, is Antonio Damasio (2006). He considered the conceptual detachment of the mind from the awareness of its body quite damaging for a human being:

We spend a good part of our lives attending to sights and sounds of the world outside of us, oblivious of the fact that we (mentally speaking) exist in our bodies, and that our bodies exist in our minds. This neglect is both good and bad: good when it allows us to let our own physical suffering go undetected, bad when it screens us from the biological roots of ourselves. (Damasio, 2006, p. 15)

Damasio (2005) considers this detachment the main “error” of Descartes and calls it the “abyssal separation between body and mind, between the sizable, dimensioned, mechanically operated, infinitely divisible body stuff, on the one hand, and the unsizable, undimensioned, un-pushpullable, nondivisible mind stuff” (p. 250). Damasio considers this error responsible for many consequent errors, one of them being Western medicine. Especially, American medicine has neglected and still neglects the role of the mind in the functioning of other organs. Medical students learn in a disconnected way. Curricula are not organised in such ways as to offer a complex, integrated image by teaching about psychology, neuropsychology, and neuroscience at the same time. One example of the effect of this disconnected view is the neglect of a patient’s feelings about his/her disease or the disbelief in the fact that psychological disturbances in a person can create bodily diseases... (Damasio, 2005).

If we transfer these two medical consequences into the pedagogical realm, they can easily be projected as the relationship between the students’ emotions and their learning. If curricula disregard the interconnection between mind and body, diverse kinds of problems may occur. Teaching should always consider the fact that students have a body, which feels and lives in this world, interconnected deeply with the mind (Clark, 2008; Holst, 2013; Lakoff & Johnson, 1999; van Manen, 1997; O’Loughlin, 2006; Shapiro, 2004, 2007, 2011; Stolz, 2013; Varela, Thompson, & Rosch, 1993; Wilson, 2002).

As Egan (2008) objects, “bad reasons” (p. 45) are at the core of a pedagogical thought that disembodies the mind and considers it as the only pivotal tool of learning:

The bad reasons have to do with the inclination to forget somewhat that our brain is a part of our body and that our mind, despite incorporating cultural stuff we share in complex ways with others, is also fundamentally embodied. The particular kind of body we have determines our distinctive take on the world; the body’s influence pervades even the most refined mental activity. (p. 45)

It is not enough to consider the existence of our students’ bodies; teachers and curricula need to be aware that the fluid interrelation and coexistence of body and mind are the foundation of existence and learning. Edith Cobb (1961) argues that mentation is a very complex activity and that it requires the use of all organs, not only the brain. She agrees that such a perspective goes against psychology where a differentiation between mind and body is almost the status quo:

The child, like the poet, in his own instrument and uses his whole body as a mental tool. ... Therefore, for each child, the creation of the image of the world around him proceeds initially through true acts of genesis, the formulation by child of what are for him original relationships between the instrument of his perceiving self, his acts of perception, and the world towards which he is dynamically polarized. ...His body is the working tool with which he continues this process of individual cultural evolution. (Cobb, 1961)

Damasio (2006) emphasizes the importance of the two-way communication between the body and the brain. He argues that the signals and information transmitted by the brain toward the body are often forgotten:

While body states are being continuously mapped in the brain, many aspects of those body states were caused by brain signals to the body in the first place. ... Just as with the communication from the body to the brain, the brain communicates with the body via neural channels – nerves whose messages lead to the contraction of muscles and the execution of actions – and via chemical channels. Examples of the latter include hormones, such as cortisol, testosterone, or estrogen. The release of hormone results in different modes of operation for the internal milieu and the viscera. ... Mental states cause brain states, which cause body states; body states are then mapped in the brain and incorporated into the ongoing mental states. (p. 17)

Similar to Damasio's assertion regarding the loss of signals between mind and body, Egan (n.d.), as previously cited, acknowledges the loss of lines of communication between the self and the body and declares this phenomenon damaging to the development of imagination:

As other kinds of understanding are developed, it can be quite challenging to maintain mastery of the body and its senses. When we observe that someone doesn't know "how to listen to his body," or that someone "has become disconnected from her body," we are referring to the loss of a Somatic understanding of the world. The result can be to cut off the individual from realms of experience that are necessary for the imagination to function well, as poets and other artists know. (Egan, n.d., para. 4)

On a daily basis, I experience groups of students that come to the benches of the university in what I perceive as a disembodied state. The majority of my students seem to have forgotten how to connect with their bodies: how to listen, how to engage with, how to care for their own body in pedagogical venues and activities. Could such ignorance of the body as a pedagogical entity be a result of years of compulsory disconnect and mandatory constriction of their bodies in classrooms and other educational settings? Sometimes, it appears that "growing-up" means, to some adults, learning how to dissociate the mind from the body. A "disembodied" parental or structured education works against the natural interconnectedness of the mind with the body. My adult students seem to have gone through this loss and disconnect and my endeavour as their teacher is, among others, to try to reconnect them to their bodies in active ways in order to support a genuine openness to the world so needed in the practice of early childhood education.

Organs and the mind

Years of experience as both educator of young children and mother have taught me that children are indeed a mystery. Some voiced questions or wonderings made me reflect upon children's perception of their own identity, body and mind. One of the most frequent of such situations was when children identified activities of their internal organs, as if they knew exactly what was happening inside and why it was occurring. By knowing and loudly sharing what internal organs do or wish to do, children seem to demonstrate an ability to connect with their bodies, even if sometimes, the ways they put their feeling into words shows anthropomorphic projections onto the separate organs (as in the

previous example of my son talking about the hunger felt by the stomach). Scientists label this phenomenon as “vitalistic causality” (Inagaki & Hatano, 1993):

... young children's biology can be described in terms of "vitalistic causality." Our definition of vitalistic causality is that it explains phenomena inside the body by attributing agency to an internal organ, more specifically, treating it as if it were a human-like living thing that initiates and engages in activity inducing such phenomena. The activity is typically an exchange of unspecified substance, energy, or information (e.g., vital force). ... We speculate that, when children notice through somatosensation that several "events" are going on inside the body, irrespective of and uncontrolled by their intention, but are unable to see the inside of the body, they will probably try to achieve global understanding by attributing them to the agency of personified organs. Considering that vitalistic explanations for living things were completely replaced by mechanical ones only in recent centuries in the history of science, young children's vitalistic causality can be taken as a necessary preceding step toward mechanical causality for biological phenomena. (pp. 1547-1548)

The mind-body dualism in these situations seems to be different than the one experienced and formed by adults. A recent study that tested the hypothesis that adults are intuitive mind-body dualists (Forstman & Burgmer, 2014) concluded that, “despite any acquired scientific knowledge about the neurological origins of mental life, most adults remain ‘essentialistic mind-body dualists’ at heart” (p. 222). The study mentions, however, that adults have not considered the body and mind separate in the Cartesian sense, but more as one belonging to the other:

[M]ental properties are not treated as fully independent from physical properties. ... people perceive the “mental substance” to be tightly linked to its physical counterpart. In fact, more in line with theories of psychological essentialism, people seem to perceive the mind to be partly inherent in the physical matter that makes up an entity, even on a molecular level. (p. 233)

Babies start life by being able to show, express, shout-out what their bodies feel. Parents can tell from the facial expression or from the whole body whether the child is happy or sad; the mind is corresponding closely with the body. This is especially true before the child is enculturated and “taught” by adults in his/her surroundings. The infant needs to be able to express feelings and states of mind through bodily expressions in order to survive (functional preadaptation). This strong connection is more than necessary before socialization because of the lack of language, other than the body's. During socialization

and enculturalization, young children learn how to show different expressions as opposed to real feelings; they learn how to pretend for the sake of social success and survival. This pretence is called *mind-body dissonance* (Huang & Galinsky, 2010; Centerbar, Schnall, Clore, & Garvin, 2008). We could conclude that in the socializing of young children, among other survival tools, we are offering them the one of pretence – the tool that teaches them how to hide their real feelings. *We are swaddling their innate capacity to be genuine.*

By swaddling children’s capacities to move, dance, live lively, think freely, to explore more than the concrete, to experiment and experience reality in their own ways, to look at the world in multidimensional and multifaceted lenses, and so many others...we are, in reality planting seeds for detachment and emotional disconnect between the children on one side, the curriculum, learning process, and school in general, on the other side. In the following section I will engage with the topic of emotion – a vital ingredient of understanding the world – and a necessary bridge that unites body, mind, learning, and growing.

Emotion, cognition, and the china shop

It is not reason that leads us to action, but emotion.

Maturana (1997, p. 23)

One of the natural and logical consequences of the intentional, planned and scheduled “pedagogical” disconnect between mind and body is the isolation of emotions from education and learning. Historically, according to Linnenbrink’s review (2006), research has been focusing for some time on the importance of affect on the cognitive and motivational processes (Atkinson, 1964; Ford, 1992; Smith & Lazarus, 1990; Scheler, 1999; Forgas, 2000; Fredrikson, 1998, Schwarz, 1990; etc.); however, this particular focus has only recently started to integrate “affect, motivation, and cognition into our understanding of students’ and teachers’ experiences in educational settings” (Linnenbrink, 2006, p. 311). After reviewing a series of papers written on the topic of integration of cognition, affect and motivation, Linnenbrink (2006) concludes that “there are bidirectional, reciprocal relations among motivation, affect, and cognition” (p. 311) and that “this perspective calls for a dynamic, integrated model in which neither motivation, affect, nor cognition is given precedence—but rather all three are critical variables for understanding students’ educational experiences” (p. 311). The emotional aspect of this trio is completely related to the body and its role as a tool for understanding and learning about the world around us.

An interesting historical fact exposed by Immordino-Yang and Damasio (2007 and 2011) is that in the 1980’s the study of brain systems responsible for cognition and behaviour took a top-down approach from the “high-order systems” such as learning processes, language, and reasoning, to the “obedient” unimportant soldier-like body. There was no importance given to emotions at all: “emotions were like a toddler in a china shop, interfering with the orderly rows of stemware on the shelves” (p. 118). The shift in brain studies took place due to surprising results that involved neurological patients who had sustained damage in the frontal lobe (specifically to the ventromedial prefrontal cortex). The social behaviour of these patients was entirely compromised and their lesions could not be accounted for by invoking only cognitive mechanisms. Thus, an important new question arises: why did patients who were suffering from compromised social

behaviours also have serious problems in regards to decision-making, causality and other rational judgments? Traditional answers to this question were elusive and implied that there must have been an added loss of knowledge to the lesion. Recent research (Immordino-Yang, 2007, 2011; Damasio, Grabowski, Frank, Galaburda, & Damasio, 1994; Damasio, Tranel, & Damasio, 1990, 1991) proves a quite different reason: “disturbances in the realm of emotion” (Immordino-Yang, 2007/2011, p. 118). What they could not recall was not the rational knowledge-like information, but the emotional memories connected to their past experiences that would have had the power to guide their decision-making:

This is significant in itself, but even more intriguing was the realization that, without the ability to adequately access the guiding intuitions that accrue through emotional learning and social feedback, decision making and rational thought became compromised, as did learning from their mistakes and successes (Immordino-Yang & Damasio, 2007, p. 5).

The results of these recent studies (referenced above) show us that emotions, instead of representing careless young children in a china shop, “are more like the shelves underlying the glassware; without them cognition has less support” (p. 5). The results in this area become even more relevant when they show that in the unfortunate situation of a brain lesion happening in early childhood, unlike the remarkable process of compensation of linguistic capacities in children’s brain, capacities that were acquired with the help of emotions (*emotional rudder*) do not have this power and they will be forever lost.

One of the pivotal ingredients of a genuine and embodied understanding of the world around us is emotion; a long lasting swaddle that seems to have asphyxiated the flow of emotion in institutionalized education has started to release its strong grip, as more and more pedagogies recognize the indispensability of emotion in education. I will try to build a case for the presence of emotion in the whole educational discourse in order to raise awareness for its paramount role in a non-swaddling or unswaddling pedagogy.

According to Maclaren (2008), Western philosophy has a long tradition of considering emotions as a psychological state that had little to do with the intellect. As a result of this view, emotion, when viewed along with education, was considered in one of

the following two ways: first, an external motivator for using our intellectual capacities, secondly as a motivator that pushes us to set up a purpose - an end result – having to reach that end result through intellectual reasoning (p. 472). In each of these perspectives, emotion stays separated from the process of education: “Emotions are thus regarded as the raw materials that are reshaped by rational practices, or the initial mechanical causes, or the things which set the ultimate agenda for intellectual reasoning. (p. 472)

However, many contemporary thinkers (Bruner, 1986; Sylvester, 1994; Egan, 1997, Noddings, 1984; Eckman, 2004, Schutz & Lanehart, 2010) and researchers argue that one of the mistakes of the educational system is the lack of belief in the importance of emotions in learning:

Isolating cognitive learning from affective learning is a mistake – a mistake, the impact of which we are feeling on campuses and in classrooms all over the country. It’s a mistake which has created a large number of intellectual “half-men”, brilliantly developed, perhaps on the intellectual end of the continuum, but severely lacking on the feeling or affective end. (Lyon, 1971, p. 4)

Antonio Damasio (2005), inspired by a patient who suffered from a neurological disease that attacked a certain part of the brain, came to realize that reason was not as pure as once thought to be, and that emotions, instead of being intruders of reason, may be “enmeshed in its networks, for worse *and* for better” (p.xvi). He does not deny the fact that emotions could interfere in a negative manner in the processes of reason; he only considers the other side of the coin: the damaging effects of the **lack** of emotions or feelings in the equations of rationality. He considers feelings as being cognitive:

Feelings, along with the emotions they come from, are not a luxury. They serve as internal guides, and they help us communicate to others signals that can also guide them. And feelings are neither intangible nor elusive. Contrary to traditional scientific opinion, feelings are just as cognitive as other percepts. They are the result of a most curious physiological arrangement that has turned the brain into the body’s captive audience. (p. xix)

The birth of acknowledging the pivotal role of emotion in education in North America and thus focusing a more consistent attention on the subject, is considered to have been the San Diego AERA (American Educational Research Association)

symposium, titled: “The Role of Emotions in Students’ Learning and Achievements” (Schultz & Lanehart, 2002).

The importance of affect in early education (and not only early education) is shown by a study by Damasio & Immordino-Yang (2011), which proposes that emotion has a quintessential role in connecting the mind to the body; cognition without emotion is not viable, the authors state. In learning, the two elements must be almost completely overlapped like in the following diagram created by Damasio & Immordino-Yang:

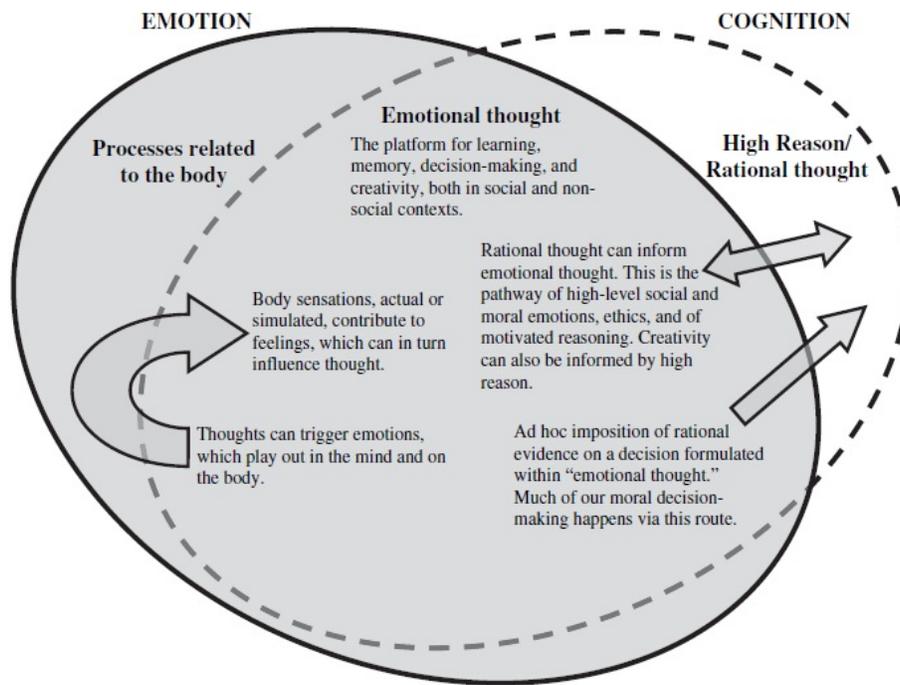


Figure 15. Graphical depiction of the neurological relationship between cognition and emotion (Damasio & Immordino-Yang, 2011). Used with permission.

The authors of the diagram explain:

The evolutionary shadow cast by emotion over cognition influences the modern mind. In the diagram, the solid ellipse represents emotion; the dashed ellipse represents cognition. The extensive overlap between the two ellipses represents the domain of emotional thought. Emotional thought can be conscious or nonconscious and is the means by which bodily sensations come into our conscious awareness. High reason is a small section of the diagram and requires consciousness. (p. 8)

This particular research states that living, acting, and understanding the world around us requires the strong interrelation between the body, feelings, mind, and thought:

Emotional thoughts, either conscious or nonconscious, can alter the state of the body in characteristic ways, such as by tensing or relaxing the skeletal muscles or by changing the heart rate. In turn, the bodily sensations of these changes, either actual or simulated, contribute either consciously or nonconsciously to feelings, which can then influence thought. (Simulated body sensation refers to the fact that sometimes imagining bodily changes is sufficient; actually tensing the fists, for example, is not necessary). (p. 127)

We cannot learn when we are tense, stressed or uninterested. Imagine a conference presentation (and I am sure this won't be difficult to imagine) where a speaker reads his/her amazing study without intonation, eye contact, or show of passion. The content of the presentation might keep us engaged for a few minutes, but then, our minds will start wandering away, from the presenters' clothing, to what we would eat for dinner. The presenter could have had the most amazing study, but if he/she looks or acts disconnected from his presentation emotionally, we will tend to do the same. Our feet and hands will start to fidget, and our thoughts will start taking us to the next presentation with high hopes for a better experience.

Learning, understood here as being touched by a piece of information in a meaningful and emotional way, can only take place if we live the content that is shared with us, if it allows us to imagine its shape and its meaning for our life. In Egan's (1997) words, a good education is "shaping the hearers' emotional commitment to those contents" (p. 10); learning focuses consciously or even unconsciously on the deep connection of the learner with the new content. The question each teacher might ask when entering a classroom is: how will I make sure that what I teach, will have a deep emotional effect on the hearts, minds, and bodies of my students?

Emotion and the Role of the Teacher

During most of my presentations and workshops dedicated to practicing and student teachers, I like to surprise them with a statement that seems to provoke a deep shift in my audience's view on education. I simply tell them that I do not believe that education needs to start with the student.

At this point, all eyes in the room are looking at me with reticence and doubtful curiosity.

I continue my statement with the following: Education needs to start in the heart of the teacher. Before entering any classroom, the teacher needs to perform personal research on the subject/topic to be taught in order to develop a real passion for it. The teacher needs to become emotionally connected to the material and then, and only then, should he/she enter the classroom. If this passion is absent, how can the teacher imagine that the students will learn and become passionate about the material? How can the teacher dare to expect students to love to learn if he/she doesn't?

Thus, the first relationship to be nurtured within the pedagogical realm needs to be the one between the teacher's heart and the teaching material.

At this point, my audience always pauses and looks deep into its own heart.

Lyon (1971) calls education that connects affect with cognition “humanistic education” because learning this way requires teachers to build a human bond with students, a bond that is only possible to build through emotional, motivational, and trusting ways. He recalls a visit to the West Point Military Academy to talk to their gifted students. When asked what made them successful during their schooling years, all the students, without exception, shared that one, or two persons – teachers or coaches – were the ones who impacted their success and motivated them to believe in capacities that they never thought they possessed.

Again and again I have observed in the lives of especially gifted and inspired people that one teacher, somewhere, was able to kindle the flame of hidden talent. (Erickson in Pajares, 2008, p. 103)

The concept of **hidden talent** is quite fascinating. It seems to suggest that all of us have these hidden seeds of talent that can only see the light of day with the help of a passionate teacher or other adult who is able to connect with us in an emotional and genuine way, through his/her passion for learning and for his/her field. Egan (1997) emphasizes that a good Imaginative Education needs a well prepared, passionate, storyteller teacher: “Response to the child's efforts is crucial; the teacher or parent has the somewhat delicate task of encouraging what may be chaotic exploration while also encouraging the selection of meaningful patterns and the discipline required to refine them” (p. 212). In Egan's theory, the hidden talents could be considered the cognitive tools that need to be engaged in a meaningful and pedagogically relevant way.

In order for the teacher to be able to gently motivate and share the love of learning, he/she needs to find a deep emotional resonance in the subject/topic that needs to be

taught. An emotional connection of the teacher to the teaching material, brings with it the opportunity and possibility for emotional engagement of the students with the material, subsequently, meaningful learning will take place. Learning happens due to the fact that “educational pedagogy is ultimately triadic, involving the relationship between the students and the teacher and their joint orientation toward a particular school subject” (Henrikkson, 2008, p. 21). This triadic relationship embraces the uniqueness of each child and the fact that each and every one of the students has a personal rhythm of understanding and unique ways to get to that understanding. “So, how can teachers act tactfully to create an atmosphere in which joyful learning and teaching can take place and thus promote the child’s development?” (Henrikkson, 2008, p. 21).

I have many answers to this question, but I will share only a few that connect to the presence of emotion in the pedagogical triad, answers that I learned from experience in the field and from my practice with student teachers. All my answers refer to the importance of this joyful and complex relationship for a better understanding and acceptance of students’ complexities to assure that an imposed unifocal perspective on education will not swaddle any of those complexities:

- ☉ Genuine pedagogical listening – the power to slow down the rhythm of “teaching” to the rhythm of hearts involved in the pedagogical relationship for a clear listening to children’s perspectives and understandings;
- ☉ Genuine care – the wonderful ability of teachers to care for each student and for each piece of learning that they bring to the table of understanding the world;
- ☉ Genuine enjoyment – the ability to make student’s learn through laughter; to take learning seriously while feeling a deep joy for it;
- ☉ Genuine and visible passion for the profession of teaching;

- ☉ Readiness to invest emotion and trust in the pedagogical relationship.

All in one, the unswaddling teacher is a reflective teacher who feels, cares, trusts, listens, and smiles. An unswaddling pedagogical praxis requires a deep, multileveled connection that does not need words to come into being. This relationship is formed by mutual respect that manifests most of the time, Henrikkson claims, through the seemingly

simple *look* between each other that can produce change and transformation in all participants:

Regardless of the intention of the look, the Other becomes the medium through which I see myself. The responsibility for the person I become through the eyes of the other rests not on the Other, but on me. (Henrikkson, 2008, p. 88)

An unswaddling teacher looks, feels, gestures, and moves in ways that communicate trust and security and care for all students regardless of their rhythm of learning, ways of being, or presence or absence of language capacities.

I imagine a pedagogy of trust: trust in students and their ways of understanding. Trust comes with awareness of the present intellectual powers of students and with the delight of their acknowledgement. When educational practice embodies and **continues** a process that is already in place (Somatic Understanding and students' expertise in using its CTs) instead of **restarting** with a new process by neglecting and/or erasing what the child brings into a classroom, then we can talk about a genuine non-swaddling pedagogy.

The reasons why we should practice such a pedagogy of trust are beautifully described by Gardner (1991):

By the age of five or six, children have developed robust senses of three overlapping realms. In the world of physical objects, they have developed a theory of matter; in the world of living organisms, they have developed a theory of life; and in the world of human beings, they have developed a theory of the mind that incorporates a theory of the self. These theories are supplemented by skill in different kinds of performances, mastery of a wide set of scripts, and an ensemble of more individualised interests, values, and intelligences. Children bring this formidable "homespun" set of theories, competences, understandings, and penchants with them to school, and, of course, these in turn strongly influence the way in which young students apprehend newly encountered materials. (p. 85)

Multiple other scientists, philosophers, and educationalists are now convinced that a day in a baby's life is as complex as a day in a scientist's life when he/she discovered the solution to one of his/her most important professional puzzles (Gopnik, 1981/2010).

Trust in the complexity of each student's present abilities needs not only to be felt, but also to be shown to students. Again, teachers might find themselves in a vulnerable position because they will have to admit that they do not know everything and that the student has the power to teach the teacher as well. I have always admitted to my students that I need to learn **from** and **about** them in order to be able to teach **to** them. Most of my students understood with one exception: a practicing teacher who was completing a Master's degree in our program. When asked in a questionnaire what the class and the instructor could learn from him, he responded by saying that he was tired of teaching others; he was in class because he wanted to learn from others and get his money's worth. Reading this answer, I became sad: sad for this teacher and sadder for his students... How detached he must be from his students if he does not see the necessity of learning about their life and abilities! How swaddled he was! A beautiful message comes to mind here; a message from Freire, who would know how to respond to such student:

If, during the time of my education, which in any case should be ongoing, I begin believing that my teacher is the "subject" in relation to whom I consider myself to be the "object" ... then I put myself in the passive role of one who receives quantities of accumulated knowledge, transferred to me by a "subject" who "knows". Living and understanding my educational process this way, I, as "object", will become in my turn a false subject, responsible for the reproduction of further objects. It is essential therefore, from the very beginning of the process, that the following principle be clear: namely, that although the teachers or students are not the same, the person in charge of education is being formed or re-formed as he/she teaches, and the person who is being taught forms him/herself in this process. ...There is, in fact, no teaching without learning. (Freire, 1988, pp. 30-31)

Practicing a non-swaddling pedagogy should start with appreciating and cherishing the complexity of each student, from the 1-year-old to the 50-year-old and, as the instructor, being ready to learn from that student. The sense of openness felt by all of us in infancy should drive our everyday practice. I know that what I am proposing here does not seem viable, but I learned from my practice that once I understood what it means to be an imaginative educator, everything fell into place like a self-aligning puzzle.

In the following section of my dissertation, I will introduce Mythic Understanding, the next KU, in order to present the visible and invisible emergent capacities of young

children that should continue in a flowing and natural way from the ones described earlier within Somatic Understanding. New Mythic abilities gradually augment and complement children's proto-lingual Somatic qualities if and when unswaddling Imaginative Education is practiced.

Chapter 5. Mythic Understanding

The Learning in Depth (LiD) program was created to assure that students graduate from school with expert knowledge in one particular topic of the world. Egan (2008) designed the program with his IERG (Imaginative Education Research Group²¹) research group after realizing that the educational system offers a lot of breadth of information, failing to offer any depth of knowledge for the students. Thus, through the program, each student receives a topic in kindergarten and continues to research it in his/her own rhythm and ways until the end of schooling.

While implementing the Learning in Depth Program (LiD) in several elementary schools in BC, we encountered quite a few conceptual and practical bumps in the road.

*This was expected and we were prepared to clarify them and support the teachers in understanding the concepts of this program to assure a **smooth implementation** (we know now that these two words do not mash together). Personally, I was ready for all the questions and concerns coming from administrators and teachers; I was there almost every LiD day trying to model some of the strategies required by this program and also to catch any difficulties in time.*

After a few months, the administrators of a few schools reported back to us about the successes and challenges of the LiD program.

Again, all expected hopes and bumps - except one.

The challenge shared with me by administrators was that their kindergarten teachers did not know how to help students engage with their topics because

“THE CHILDREN CANNOT READ YET!”

This one challenge derailed me in my dreams of a smooth implementation. This challenge was so unexpected that I was caught speechless (and, I assure you, this does

²¹ Retrieved from www.iERG.ca

not happen to me often). I needed to take some time to get to a moment of comprehension that would allow me to start to engage with a response and solution.

Why had I not expected this challenge?

Why had I assumed that this part of the implementation will be the “smoothest”?

Why was I a little hurt?

My story reflects a situation when I reacted emotionally even though I was able to pretend under the veil of professional calm. My struggle followed... and this struggle taught me a valuable lesson that I should have recognized long ago: the fact that even if we think and feel one way, that does not mean that others agree with or even understand our point of view. I was committed to my own principles and perspectives of Imaginative Education and I wasn't able, in that moment, to analyze the situation and imagine the other side's point of view or perspective on the learning abilities of young children or the teachers' own abilities to teach children who had not yet learned to read. My heart reacted because of my personal and professional history working with young children, while I neglected in the same time, to consider the history of the other's point of view and experience. Hence, the blockage.

Here are some of the reflective questions I have raised to myself:

- *Why did I assume that kindergarten teachers would have no problems engaging children in learning before the age of reading?*
- *Why did I think that learning in depth about the topic at the age of five would be a walk in a park for teachers?*
- *Why didn't I predict this challenge? What blurred my thinking?*
- *Why did I imagine teachers sharing pedagogical moments with unswaddled children would be an easy concept for kindergarten teachers to understand and implement?*

I will try to address these questions by reflecting on my own journey of thought, in parallel with a discussion of the possible reasons for the above-mentioned struggles of teachers in imaging kindergarten children as capable of research prior to being able to read. I consider this discussion salient to my thesis as it will speak to and help create an

understanding of some of the reasons for the swaddled state of some of today's pedagogies:

If we teachers are to develop a humane and liberating pedagogy, we must feel ourselves to be engaged in a dialectical relation. We are more likely to uncover or be able to interpret what we are experiencing if we can at times recapture some of our lost spontaneity and some awareness of our own backgrounds ... (Greene, 1995, p. 52)

In the previous chapter, I put an emphasis on infants' emergent capacities that should be considered by parents and educators in order to practice an unswaddling pedagogy, by understanding, trusting, and allowing those somatic qualities to flourish under our guiding but un-controlling education. To continue to practice such pedagogy, we will have to connect, or reconnect those initial emergent capacities to the ones that arrive with the acquisition of **oral language**.

Imaginative Education engages with pedagogical notions that paint the **teachers as storytellers**, emotional beings, passionate, in touch with their body, and knowledgeable. This educational theory tries to offer teachers and students the pedagogical, social, emotional, and physical tools of engagement that will change their practice and will morph the educational system into a new, more engaging and successful one. Yes, I confess, this vision and ambition does seem like a Utopia. Teachers from all over the world would love to receive easy-to-use sets of pedagogical cognitive tools, guaranteed to assure overall, hopefully painless educational success. The difficulty teachers experience as they seek to incorporate IE in their practice comes from the necessity of change: change within themselves and their pedagogical approach, change in their understanding and interactions with children, and change toward the emergent curriculum of Imaginative Education. This particular kind of change of how to teach and learn with children is challenging and extremely difficult, which can shake one's principles and practice from their very depth. Teaching according to Egan's theory does not only require a collection of ready-to-use-tools that fit any teacher, or any school. This practice requires a change of heart; a change of perspective that will cause several pauses, controversies, and self-doubt.

Let us delve into the details of this second KU and see if the proposed pedagogical metamorphose could contribute to an authentic unswaddling pedagogy.

According to Egan, The Mythic Understanding is experienced/lived by children at the age of verbal/oral language acquisition: from 2-3 to 6-8 (Egan, 1997, p. 36). In describing this kind of understanding, Egan is careful to clarify and differentiate his approach to life and development from the ones of Piaget:

The change to a somewhat distinct kind of understanding at about age seven is a result of the mind's ability to incorporate literacy among the tools it deploys [and not a result of some Piagetian-style mental development spontaneously occurring, though some such development might be implicated in it]. (p. 36)

Mythic Understanding comes as a consequence of the capacity of oral language and overlays Somatic Understanding. According to Egan (1997, 2006), language tends to take the front seat in the life of the toddler and drives the automobile of life in a different, more “articulate” way. Egan states that this understanding requires an intentional and calculated adult intervention as opposed to the so-called assumed “simplistic” physical care needed for the development of Somatic aspects of development.

Language development in human beings is genetically determined, even if more fragilely so than such Somatic developments as learning to walk or attending to rhythms. So long as infants are fed and cared for physically they will develop those Somatic abilities, but language development requires also the deliberate influence on the young child of a language-using society. (Egan, 1997, pp. 35-36)

This raw distinction prompts us to identify a possible damaging **disconnect** here, at the very root of Egan’s theory. If the Somatic KU is perceived as an existential layer that only requires food and physical care to exist, how can the next layer then be juxtaposed? The difference in Egan’s description of the two kinds of understanding seems so deep that if we try to picture them in our minds, they look detached, different, clearly consecutive, and qualitatively different. Egan acknowledges several times in his writings the salient role of the Somatic KU, but without offering his readers clear reasons for this stance. Another quasi-qualitative difference in describing the two KsU comes from what he denotes as the degree of genetic versus cultural contributions in terms of cultivating the appearance and consistent sustainment of somatic capacities.

But we are robustly programmed to walk and robustly programmed to talk in an appropriately supportive environment. As we grow, however, we receive less precise genetic help and have to rely increasingly on a

genetically encoded general learning capacity, which is not well differentiated for learning to read or to do mathematics. The educational trick is to make those kinds of learning easier and more effective by making them conform as well as possible to the weakening genetic dispositions still operative as we grow into childhood. (Egan, 1997, p. 36)

These educational “tricks” are only proposed after the arrival of language, as if, before this milestone, children are well off with their genetic backpacks. This perspective of somatic capacities as subject to diminishment over time as a child attains oral language has the **potential of building a gap between the Somatic and Mythic KsU by silencing the Somatic one**. However, as I mentioned before, this gap can be filled if we change our view of infancy and paint the Somatic KU in a new light, which, instead of being overshadowed by the Mythic KU, will be supported and enhanced by it. Here, Egan emphasizes the speed of learning during the Mythic KU, yet again neglects to mention the speed of brain development and learning capacities during the proto-lingual period. (Gopnik, 2010, Damasio, 1994, Immordino-Yang & Damasio, 2007)

However, before introducing the cognitive tools of the Mythic KU, I would like to delve into the aspect of orality – the newly arrived vocal/articulated capacity of young children – for making visible the ways that the Somatic CTs can ease into the tools of orality of Mythic KU.

Orality and narrativity

The mental life of young children is seen as a starting point at which their knowledge is little, their experience is narrow, and they largely lack the desirable qualities the educational process is to bring about.

(Egan, 1986, p. 2)

If, instead of seeing myth and other expressions of oral cultures as failed attempts to be rational, we consider them as a set of positive and powerful techniques for making sense of the world and of experience in the absence of writing, we might get a more proportionate sense of them. Thus we will get an image of what is coming to be called “positive orality.”

Indeed, in light of the achievements of oral cultures in providing intellectual coherence and security and a sense of participation in the

natural world, we might even begin to question the presupposed superiority of Western rationality, or at least overcome the evolutionary sense of an historical movement from "primitive" to "rational" thinking. They are appropriate forms of thought in different environments for different purposes.

(Egan, 1986, p. 12)

In a primary oral culture, where the word has its existence only in sound... the phenomenology of sound enters deeply into human beings' feel for existence, as processed by the spoken word. For the way in which the word is experienced is always momentous in psychic life.

(Ong, 1982, p. 73)

Egan, after publishing his famous *Teaching as Storytelling: An alternative Approach to Teaching and Curriculum in Elementary School* (1986), wrote another part for the book called "The Supplement". In this supplement, Egan completes his previous ideas in regard to the cognitive tools of the Mythic KU with a more in-depth look at the mental life of young children. This supplement was a welcomed addition because it addressed some of the previously identified gaps in the fluidity of growth through the lens of Imaginative Education. One of the topics Egan touches upon in this supplement is the **neglected capacity for orality of young children**. He takes the readers back in time and discusses some of the theorists who have influenced today's education and forgot or dismissed the existence of children's orality: Plato and his cave allegory, St Augustine and his view on childhood as a state of monstrous egotism, Descartes and his emphasis on rational thought, Rousseau and his will to ban fantasy, Dewey and his view on education as being only genuine if it reflects real life, and Spencer and his Lamarckian recapitulation theory. The main commonality amongst all these theorists was, according to Egan, "great attention given to what one wants to educate children towards, and rather less to what they were being educated from" (Egan, 1986, para. 17).

Egan invites us to delve into the mental life of oral cultures in order to learn about the culturally and genetically imprinted learning tools that children in our western societies possess. This journey shows us how **orality and narrativity are strongly connected** and co-dependent.

As teachers, instead of “identifying” differences, classifying and even erasing them by fixing the broken, filling the gap of the missing, or hiding the useable, we should value their existence and learn from them. **A pedagogy that considers differences as deficits rather than benefits is a swaddling pedagogy.** Cherishing the differences among children and among children and adults, learning from these differences in order to apply a more human pedagogy seems to take us toward an un-blurred image of an unswaddling pedagogy, a pedagogy that values “difference on its own terms, without trying to ‘fix’ it, render it ‘normal’, or ‘restore’ it” (Holmes, 2012, p. 165).

Taking the right to be dissimilar away from children is part of a swaddling pedagogy.

Egan (1986), as well, describes Western cultures as cultures that treat rationality as the privileged way of looking at the world of reality. He quotes, Francis Bacon (1609) who alludes to the fact that myths and stories are too far away from reality to even be worth a look. If this was true, Egan (1986) states, it means that humanity must have always been buried in immense confusion: “Myth, ubiquitous in all oral cultures and preceding the development of rationality in ancient Greece, was explained in terms of diseases of language, lies, infirmities of mind, and in general of ‘primitiveness” (p. 11). Those stories and myths contained emotionally charged images that had the role of helping the young retain the body of knowledge necessary for cultures to survive and assure that their identity was completely transmitted into the future and not at all a confusing role.

This kind of situation is encountered daily by educators; children create a different kind of art, faithful to *their* view, *their* imagination, and to *their* reality. Children need to draw how they imagine; they also need to draw objects in what may be perceived as “peculiar” or “incorrect” colours because this is how they *need* to draw. An unswaddling pedagogy would not be “correcting” these “mistakes” that do not align with adults’ (teachers’, parents’, etc.) kind of reality; such pedagogy would encourage children to take multiple avenues and live another kind of learning: a kind that is closer to the heart and orality of children.

I am reminded of a song that communicates this very message to all teachers and parents alike: *Flowers are Red* by Harry Chapin. Here are a few lines of its lyrics:

*The little boy went first day of school
He got some crayons and started to draw
He put colors all over the paper
For colors was what he saw
And the teacher said.. What you doin' young man
I'm paintin' flowers he said
She said... It's not the time for art young man
And anyway flowers are green and red
There's a time for everything young man
And a way it should be done
[...]*And she said...*
Flowers are red young man
Green leaves are green
There's no need to see flowers any other way
Than the way they always have been seen
[...]
Time went by like it always does
And they moved to another town
And the little boy went to another school
And this is what he found
The teacher there was smilin'
She said...*Painting should be fun*
And there are so many colors in a flower
So let's use every one*

*But that little boy painted flowers
In neat rows of green and red.*

The song of Harry Chapin – *Roses are Red*²² – was inspired by a report card received by Chapin's secretary from her son's school. The teacher describes the boy in the following way: "**Your son is marching to the beat of a different drummer, but don't worry, we will soon have him joining the parade by the end of the term.**"²³ In one of his live concerts Harry Chapin describes that somehow this one song received more interest from the public than the other 19 songs together. This should make us wonder...

²² Retrieved from <http://www.youtube.com/watch?v=4cVpkzZpDBA>

²³ Retrieved from http://en.wikipedia.org/wiki/Flowers_Are_Red

Intuitively people connected to the lyrics of the song. Most of us become emotional while listening to the song because it describes such a familiar experience.

Egan's educational theory has many similarities to this story's message, encouraging teachers to see children's ability to create myths and draw different realities "as a set of positive and powerful techniques for making sense of the world and of experience" (1986, p. 12).

Indeed, in light of the achievements of oral cultures in providing intellectual coherence and security and a sense of participation in the natural world, we might even begin to question the presupposed superiority of Western rationality, or at least overcome the evolutionary sense of an historical movement from "primitive" to "rational" thinking. They are appropriate forms of thought in different environments for different purposes. (Egan, 1986, p. 12)

Orality, we shall see, is not a condition of deficit — to be defined simply as the lack of literacy. ... Orality entails a set of powerful and effective mental strategies, some of which, to our cost, have become attenuated and undervalued in many aspects of our culture and in educational systems. (Egan, 1988, p. 52)

One of the ancient ways of transmitting knowledge to the young was and still is the **story**. The recognition of the immense importance of stories and myths is part of Egan's invitation to all educators; it is one of the main cognitive/cultural tools he is proposing as an integral and daily part of the pedagogical happenings:

If one can encode the lore to be remembered into a story, it has been found universally, then one can more securely fix it into other minds. This is because the story can attach emotional orientations to the elements that make it up; that is, the story can not only convey the lore of the culture but can do so in a way that encourages emotional commitments to it. If the encoding of the lore can be achieved metaphorically in terms of vivid and dramatic events, with weird creatures performing outlandish acts, then the memorability is even further increased. These are some of the typical characteristics found in myth stories around the world. (Egan, 1986, p. 13)

A usual test of this theory that I apply to my students and teachers who participate to my lectures and workshops, is asking them to recall stories from their childhood or actual happenings. It always takes some time until students are able to get into the state of mind that allows them to recall those memories. Once they succeed,

most have smiles or tears in their eyes. The memories, once recalled, then reflected upon, and then shared with others, become clearer and clearer. Students loudly and expressively share their memories, recalling more and more details as they tell the stories. After these narratives release, I ask them to identify whether or not there are some strong emotions connected to those stories or memories... Their answers come almost immediately, and students are able to identify at least one emotion that acted as a rope that pulled the memory into the present. This experience of sharing stories together is a wonderful way for me to see the Somatic-Mythic correlations; the recalling of memories is done whole bodily and with intense emotions of happiness, sadness, nostalgia, love, and many others. In addition to these expressed emotions, participants, when I ask them to sketch the memory and emotion on a piece of paper, always do so by using metaphorical images (another two Mythic CTs).

Oral stories have always been a way of sharing information and learning new information about the world around us. We like to tell stories to make a point, we like to share experiences in the form of stories, and we love to listen to stories. Egan's proposal to transform curriculum into narratives comes from his knowledge and analysis of oral cultures and the storyteller's ability to put life into oral stories in order to teach the young about the world. It is as if our ancient ancestors knew of Bruner's (1986) argument that describes emotion and cognition, together with the action that follows them, parts of an integrated "connected symbol system that constitutes culture" (p. 117). Emotion, he argues, is "not isolated from the knowledge of the situation that aroused it. Cognition is not a form of pure knowing to which emotion is added" (p. 117). The following story demonstrates exactly this point:

One September, after a long two-month school holiday, I was walking my group of 4-5-year-olds in the central park of my city. We were doing our usual collection of horse chestnuts and colorful leaves, when, suddenly, a little boy uttered a request: "Annabella, can you tell us the story about the little sick fish again? Please, please!" I listened to the request and paused for what seemed to be an eternity. I could not, for the world of me, remember which of the hundreds of stories of the last school-year the little boy was referring to - Fish... sick...wow! Why would I talk about sick fish? What story was that? Why was the little boy asking for this particular story? What could have reminded him of it in the midst of this calm sunny walk? All these questions were swirling

in my mind while silent and lost. One of my personality's features that I am trying to consciously eradicate is the inability to hide emotions; I am unable to put a mask on and pretend I am not feeling what I am feeling. As we teachers know very well, the best emotion readers (even if hidden) are the young children.

The little boy noticed my puzzlement; he looked at me and with a supporting gaze he completed his request with: "You know, Annabella, the story you told us while teaching us about ocean pollution!"

The lived experience of this walk taught me many pivotal lessons that mark my practice today. The emotional impact of a story outlasts even the memory of the storyteller. In this example, I did feel a little ashamed by not remembering the requested story right away; but, at the same time, I felt proud that the children remembered it. The emotions stimulated by the telling and the content of the story were strong enough to place it in my students' memories. I felt like a "good storyteller" as Egan (1997) defines it:

The good storyteller plays with our affective responses to events, and we often take a peculiar delight in the unexpected twists and turns of the plot. We know we have reached the end of a story, however, when we know how to feel about the events that make it up. ...There are no neat logical formulas for determining how to construct a story; no program exists that would allow a computer to distinguish between a successful story and another kind of narrative made up of characters and events. The refined instrument we have is our emotional response and the recognition of that peculiar satisfaction that tells us a story has ended, whether as comedy or tragedy. We may feel glad or sorry, elated or distressed, but we know when the story has ended. (p. 63)

If I was able to have children remember and wish to hear the story of "pollution" again, I must have provoked the right kind of emotions in order to make it resonate with the children's realities, hopes, and imaginations. Regarding my almost-lost memory of the story, I learned that I should work more at finding my own wonder about the topics that I am teaching; I realized that if I become passionate about the subjects that I am communicating to students, I will keep my own memory of them and continue learning about the world day-by-day.

The belief in orality as a present and powerful layer of children's understanding of the world around them drew Egan toward identifying some of the tools belonging to what

he named the Mythic KU that could be utilized by teachers in favour of an education that involves imagination, long-term effect, and success. This layer of understanding adds to the richness of the previous layer (Somatic KU), but, in Egan's theory, this supplementing needs a little more discussion and visibility (I will reengage with this topic in the following chapter).

I hope I have presented the reader with a clear image of the pedagogical reasons why the layer of oral understanding should not be neglected by curricula developers and educators. The cognitive tools that the Mythic KU brings to the table are extremely valuable and ideally should be utilized in all subsequent kinds of understanding.

Let me now return to my initial reflective questions and try to respond to them in the light of my understanding of the theory of IE, and my experience as an early childhood educator and university instructor. As I stated previously, the swaddling effects of education start early in the life of young children, and I will try to demonstrate how such swaddling continues into the Mythic layer of understanding.

- *Why did I assume that kindergarten teachers would have no problems engaging children in learning before the age of reading?*
- *Why did I think that learning in depth about the topic at the age of 5 would be a walk in a park for teachers?*
- *Why didn't I predict this challenge? What blurred my thinking?*
- *Why did I imagine teachers sharing pedagogical moments with unswaddled children would be an easy concept for kindergarten teachers to understand and implement?*

Learning before the age of reading – an unswaddling view

First, I will try to analyze my feelings regarding the response of the kindergarten teachers: “The children don’t read yet!”

This response belongs to the “Not-yet pedagogy” I described earlier in this dissertation. The “not-yet” aspect might seem an escape, or postponement, or excuse from implementing the *Learning in Depth Program (LiD²⁴) that we had introduced into their schools*. However, on closer examination, the response of the teachers is in line with the curriculum requirements, educational planning, and class management regulations of their Ministry of Education in British Columbia (BC). And their question, given their own training and experience, seems legitimate. Indeed, as they questioned, if children are not yet able to read, how can they study by themselves?

If we take a look at the kindergarten and grade one curriculum in British Columbia, Canada, we will notice a quite detailed section about oral language development. This section offers teachers a variety of strategies and activities that are designed to help the formation of a good oral language capacity that will allow students to “speak clearly enough to be understood by peers and adults” (Ministry of Education, Kindergarten Curriculum Package, 2010, p. 12). If the curriculum offers such a good support for teachers regarding the “Oral Language Learning” (2010, p. 9), why then the acute need as perceived by these kindergarten teachers for children to have written language in order to learn something new in an individual exploratory way? I do not consider my answers to be the only ones, but I will share them here to offer readers a better understanding of my own views and my own reactions in the particular situation in which I unexpectedly found myself.

After an in-depth look at the BC kindergarten curriculum package, I realized that the way of approaching the oral language development in children is calculated and rationalized. This approach seems to be focused on children’s ability to orally communicate but in a very particular way. This prescribed capacity for oral articulated communication is also designed to be measurable by the “suggested achievement

²⁴ Retrieved from <http://ierg.ca/LiD/>

indicators.” I can understand that teachers would feel a certain pressure while trying to get students to achieve the set goals. The freedom required for the development of independent exploration and development of imagination is swaddled by expressions such as: “use story language in imaginative play (e.g., “Once upon a time...,” “Long, long ago...”)” (p. 8). Allowing myself a little irony, I confess that I was unaware of the existence of such a foreign language: the story language.

In the curriculum package that is designed to support teaching strategies that can reach the “prescribed learning outcomes” for oral language, we find quite a few suggestions and pedagogical advice, such as the following excerpts:

1. use story language in imaginative play (e.g., “Once upon a time...,” “Long, long ago...”);
2. use language rather than actions to negotiate situations;
3. ask appropriate questions and/or give appropriate comments in response to what has been heard;
4. use gestures and other nonverbal means to communicate more effectively (e.g., nod to show agreement);
5. begin to ask relevant questions before, during, and after the teacher reads a book aloud;
6. frequently use appropriate volume, tone, pace, and intonation (BC Ministry of Education, 2010, pp. 8-12).

The relationship between imagination and oral language is powerful (Gallagher, 2006; Johnson, 1990; Sherry, 2013; Harris, 2000), but the way they are addressed in IE is different than the approach of the BC curriculum. In IE, imagination is the space where the child can engage (somatically and using oral language) with something he/she has not yet experienced. The BC curriculum *reduces orality to strict rules and contexts that need to be followed: using a certain kind of language, reproducing a certain story or event (see the Creative processes section of the BC curriculum package), use “appropriate” volume, tone, words, syntax, etc.* Stopping imagination in its prime, by requiring a set of rules to be followed is similar to asking a baby not to babble nonsense, when we know from

research that babbling is the definite and indispensable precursor of language (Fagan, 2014; Wu, Pan, Su & Gros-Louise, 2013; Wu & Gros-Louis, 2015; Gros-Louis, West & King 2014; Ramírez-Esparza, 2014). Freedom and imagination need to go together in order to ensure the development of the imaginative functions such critical and creative thinking, meaningful and empathic engagement and innovation. All cognitive tools proposed by Egan within the Mythic KU are closely dependent on the imaginative capacities of children: **stories, metaphor, binary structuring and mediating, forming images from words, puzzles, play, rhyme, rhythm, patterns, jokes, and sense of mystery.**

The second achievement standard (in the list of excerpts shown above) focuses on the *use of language rather than actions, while negotiating*. This point comes in contradiction with another standard (no. 4) that suggests the need of non-verbal action for good oral communication. I decided to discuss these points because they might bring to light reasons for teachers' "not yet" response. If teachers do not understand that a child's orality is a direct result of development of the Somatic KU (whole bodily being in inquiry and learning about the world), and that understanding is not reflected nor clearly communicated to teachers in the curriculum requirements, then their response makes sense. If reading is seen as the *primary* component of independent learning, teachers will logically be reticent when faced with the independence proposed by the Learning in Depth Program [LiD] (Egan, 2010). If children need to use gestures and body language only in certain "appropriate" situations (see point 6 above and many others in the curriculum package: the word "appropriate" appears 36 times, and the word "independent/ce" appears 0 times), then their students' natural orality will be swaddled from the first day of school:

Human language, then, can be wordless but not silent. The gestures are the language. Not only do we need to see the gestures in order to hear the worlds behind them, we also need to hear the gestures in order to see the words. ... Gesture is related to tone, and tone is a gesture, within which is held our feelings toward a content of the statement. (Henriksson, 2008, p. 77)

I wonder if the swaddling of the Mythic KU starts by swaddling the teachers' freedom and independence to be in the moment with their students, to taste the present and not be worried constantly by the future. In Henriksson's words:

Processional temporality tends to disregard the present in favour of the future. Protemporalism is what matters. There is always a next lesson to attend, the next assignment to plan, the next course choices to make. Being on time is still more important than Being in Time. (2008, p. 78)

This statement returns our attention to the Not-yet Pedagogy because within that kind of practice the present is perpetually incomplete; it needs the patches of the possible future in order to have any value. The danger in today's education is this very disregard of the present moment, present being of the child with his/her complexity and capacities. As adults we do have a different perspective, but, what if we as educators try not to let the future "colonize" the present if I were to use Henriksson's (2008, p. 67) metaphor.

So, after sharing some possible reasons for the kindergarten teachers' resistance to the challenges of implementing the LiD program, I would like to engage with my own personal question of *Why I didn't predict this challenge. What blurred my thinking?*

This is a more difficult question to respond to because it requires a deep reflective journey into my own history of forming a pedagogical philosophy.

I have experience with young children due to my education, my work, and my passions. I have worked with hundreds and hundreds of very young beings and, as I stated in the beginning of this dissertation, all I really know, I know from children, from my experiences and from my mistakes.

One of the first lessons I learnt from children was a new construction of the concept of time. I remember rushing from one minute to the other, from one space to another, from one activity to another. Then a sudden realization of what truly matters came after the following experience:

It was the year 2000. I had the school for a full year already and I felt good. I set some new plans of change for the new school year and one of them was to try to have a stronger relationship with the staff that worked at the orphanage where most of my students came from. So, I decided to go to their weekly "family meeting". This meeting was held among all the staff that directly worked with the young children. The meetings gave me opportunities to ask questions and to visit the "home" of my young students more often. I noticed their dormitories. I noticed their perfectly folded clothes, their

perfectly in tune biological rhythms (eating, washing, toileting, sleeping...) and I started to feel more and more sad. Sad for their lack of freedom, for their lack of space (in the first years of collaboration there were 40 children in one room locked by doors with wooden bars). Everything was preplanned. Everything was a well-oiled machine except for some cries coming from children whom, I was told, must have some kind of mental problems as they are not yet able to fit in with the others.

*One day I asked the staff, why the 2-year-olds are obliged to fold their clothes perfectly?
Why wasn't anybody helping them?*

A caregiver responded with an unhidden surprise on her face: "We teach them from the very first moment because we don't have time to help all of them all the time. My next question was: Why do they have to go to the washroom all together at the same time? The answer came as sharp as the previous one: "Because this is the only way! We don't have time and "nerves" to deal with individuals. It would drive us insane! I reluctantly asked another questions: Don't the children feel like little inmates? Don't they need more care and independence, in the light of the fact that at 16 they will be released into the world, all alone, without any support? The response changed my life:

"Oh, but Ms. Annabella, we are not allowed to love them. If we were to love every child here, we would spoil them and then work would be impossible. There is not time to love. And, anyway, they will have a life without chances. They are inmates - inmates of an unlucky life."

This encounter was my last weekly visit with the staff. My next visits were only with the children. I decided that I wouldn't have time for the staff anymore because I needed to offer all the time I had and even more if possible to loving the children that were in my care. I decided to generally slow down and show the children a "lucky"- kind of life and education. I decided to make everyone in my care happy to be there, loved and never rushed. I broke all the rules of the orphanage and showed them that there is hope and love and kindness in their life. My days slowed down, the curriculum slowed down, and I was finally able to offer them the freedom to be and learn at their own rhythm and breath. This learning was more and more independent and showed me the fact that children need their whole bodies to investigate, explore and learn about the

world. It also showed me that the lack of language (many of my orphans had language delays due to abuse and lack of care) which did not impede learning. I also learned that smiles open doors to lost souls and bring them back to reality.

And this is how I learnt about a new kind of pedagogical time.

Returning to my question, none of the children who came into my care were readers, most were not even talkers even if they had the biological age for it, and yet they were wonderfully able to learn, explore, laugh, experiment, and form genuine relationships. Was it this experience that blurred my eyes? It must have been, because thinking back to those times I tear up. I learnt to trust the young child; I learnt to discount rushed time from the pedagogical relationship; I learnt that there is so much pre-reading potential to be released!

So, yes, I was biased by the freedom I have had to explore all possibilities and capacities children have before my even starting to worry about their written language acquisition. I had the time to reflect, to be with, and to understand and be understood by children.

Among many possible swaddles, one swaddle confronted by teachers who seek to engage in the Mythic KU might be the BC curricular outcomes: a curriculum that endorses the future and forgets to appreciate the present. This curriculum suggests an orality that needs to follow rules such as: “frequently use appropriate volume, tone, pace, and intonation” (Ministry of Education, Kindergarten Curriculum Package, 2010, p. 12²⁵); an orality that seeks to lose its oral qualities and practices as soon as possible to allow written language to take over. This swaddle blindfold needs to be released from the teachers’ eyes so that their view of what is possible through orality will open up, the

²⁵ BC is preparing and testing a new curriculum. At this moment in time, the new proposal is not complete. However, I could find some encouraging shifts in language such as: “adjusting the volume, pace, tone, and articulation; focusing on the speaker; taking turns; maintaining a “listening” posture; asking questions related to the topic; making personal connections; and making relevant contributions to the discussion, talking and thinking about learning (e.g., through reflecting, questioning, goal-setting, self-evaluating) to develop one’s awareness of self as a reader and as a writer, using scribble writing or letter strings to communicate meaning; distinguishing drawing from writing; and using pictures to tell stories.” (Building Student Success, BC’s New Curriculum, English Language Arts, Kindergarten level. Retrieved from <https://curriculum.gov.bc.ca/curriculum>, 2016)

stress of anticipating the next moment will dissipate and the teachers will be able to engage with what Gardner (2011, p. xiv, xv) calls “the unschooled mind” – young minds with surprising power and tenacity, endless potential and imagination that are being “missed” by educators. Gardner proposes that the unschooled mind (that I like to interpret as the embodied being of the child) is present in all children, his theory being similar with Egan’s theory of cultural tools that Egan suggests are present in every child and only require nurturing. The key to a good education in the view of both thinkers is the awareness of the capacities embodied within each child, capacities that open up endless pedagogical possibilities/opportunities.

In the following chapter, I will introduce in depth the cognitive tools of both Somatic and Mythic KsU, identifying the strong connections between them; adding my own discoveries into the mix, in order to propose a non-swaddling kind of pedagogy to be practiced from the very beginning of a child’s pedagogical journey to the arrival of the Romantic KU with its written language tools and beyond.

Chapter 6. Un/non-swaddling Pedagogy

They do not learn those concepts; they already have them when they arrive at school. They use those concepts to learn about the world and experience.

Egan (1986, p. 14)

I would like to start by making a terminological distinction between **unswaddling pedagogy** and **non-swaddling pedagogy**. The distinction is temporal: If a non-swaddling pedagogy is practiced from the very beginning, there will be no need for an unswaddling one. If the students in our care have been exposed to some pedagogical swaddling strategies already, then we need to engage with the strategies and views of an unswaddling pedagogy.

My intention in this thesis is to raise awareness of, and trust in, the hidden and not so hidden somatic capacities of young children that should be taken into account within any pedagogical setting and relationship in order to avoid an instructional swaddling of those capacities and to assure a smooth pedagogical transition and transformation from the Somatic KU to the Mythic KU. By emphasizing the pivotal role of the Somatic KU and by accentuating its existing CTs as well as some new ones that I will introduce, I seek to reconnect the as-yet theoretically disconnected Somatic and Mythic Understandings to avoid a swaddling of one in favour of the other. Future research should attend to continuing the unswaddling process to minimize the losses as all the KsU unfold throughout a child's pedagogical journey:

In the conception of education to be developed here, at least, education will be seen not simply as a maximizing gains but, equally importantly, as minimizing losses. To minimize them, one first has to be aware of them A clear sense of the losses that come with, say, literacy, enables one to teach literacy more effectively and more richly, minimizing cognitive and affective losses. (Egan, 1988, p. 5)

Egan's thoughtfulness regarding the importance of the awareness and the minimalizing of the losses is admirable; however, it assumes a previously acquired awareness among educators of the particular capacities and kinds of understanding he proposes in his theory.

To practice a non-swaddling pedagogy from the very beginning of a child's pedagogical journey requires the following aspects (enumerated from the perspective of the six fundamental elements of my own un-swaddling):

OPENESS – a pedagogy that is open to a constant change and adaptation to the organic fluidity of students' rich, emergent capacities; knowledge and deep pedagogical awareness of the multitude of gains acquired by children through their valuable qualities and capacities if allowed proper space, time, and care;

TRUST – a practice that recognizes and trusts, celebrates, and supports the value of the initial lived experience of the very young;

RELATIONSHIP – a pedagogy that needs to be built on a strong, powerful, and genuine relationship between all involved;

MOVEMENT – an education seen as a dance; movements that connect and constantly reconnect the Somatic cognitive tools to the Mythic ones, and then to the Romantic, Philosophic, and Ironic ones; awareness of the possibility of growth and development of the tools while correctly utilizing them in the educational practice;

IDENTITY – an educational practice that considers the uniqueness of each student and their personal view on the world; a pedagogy that perceives difference as gain and not deficit;

AFFECT – a non-swaddling pedagogy cannot be practiced without the full emotional engagement of the teachers in the content, environment and their role as world-guides in the lives of their students.

Egan's theory is indeed un-swaddling, but in order to perform a non-swaddling pedagogy from the start, educators need to care of and know the secrets of the valuable beginnings of human life. If done effectively, thoughtfully and conscientiously, children will experience education in a fluid and natural way, understanding the different "languages" of the

teacher. These “languages” will follow the rhythm of children’s ways of understanding the world.

A new outlook on the Somatic and Mythic cognitive toolkits

We need only go back to children. We know that their perceiving is our initial mode of configuring the experience of external events, of orienting the self to the surround. Like imagination which organizes the imaginary (ranging all the way from elves and unicorns to the adult world not yet seen and adventures not yet lived) their perception is the primordial operation that underlies the relation between the knowing subject and the object that is known. Such initial modes of ordering lived reality, along with the feeling associated with family and other relationships, have much to do with children’s language learning and their intellectual elaboration of experience. This insight surely points to the importance of our freeing children to tell their stories, not only so that we can hear them but so that they can make meaningful the birth of their own rationality.

It may remind us, too, of the importance of affirming the validity of many kinds of experience, even those that seem incompatible with our own interpretation of the world.
(Green, 1995, pp. 53-54)

The natural assumption that the child has about the world—that it makes sense and has meaning—reflects back on the foundations of being human: that human beings have to give meaning to the world. The world view of the animals is the counterpart of their instinctive life patterns: only on this instinctive level is the world clear to them. Humans, however, do not exist at this level of meaning, or if they do, then it is only temporary or partial. Children may be temporarily occupied with the problems of their organic reality, but soon they begin to act on and give significance to the world.

(Langeveld, 1984, p. 215)

We do not learn that we have such a somatic axis; rather we are able to learn everything else (and at all!) because we have it.

(Merleau-Ponty, 1964, p. 94)

The sets of cognitive tools proposed by Egan in his Imaginative Education theory provide a great support to practicing teachers by opening the avenues for a pedagogy of multiple possibilities. These cognitive tools are special because they do not belong to only one side of the process of education; they are not “teacher tools.” The cognitive tools of IE belong to everyone involved in the pedagogical relationship and most importantly, they are inspired by who each individual child is within the large spectrum of humanity. The more I practiced IE, the clearer the tools became; the deeper my understanding of each tool became, the more need I felt for additional tools. The need to complete the cognitive

toolkit of the Kinds of Understanding has been my focus for a few years now. I have been focusing only on the first two KsU due to my passion for the early-year pedagogies. I definitely see the need for further research and work on completing all the subsequent sets because Egan has designed them as being a gradual and fluid completion of the tools of preceding KsU.

The need of completing the set of Somatic cognitive tools emerged from my educational practice with very young children. I realized more and more that children engage with complexities that were not mentioned in the theory of IE. I have always tried to apply Bruner's (1986) advice, according to which everything can be taught to anybody, any time, if the right strategies are used: "We begin with the hypothesis that any subject can be taught effectively in some intellectually honest form to any child at any stage of development" (p. 33). So, I started to listen more, observe, and try to understand the needs of the very young children. By doing so, I shifted my own pedagogy toward one of more trust and... more time. Slowing down, allowed me to see clearer and communicate more directly with the children. Lack of language was not a hindrance; it was a bonus. The children were "talking" to me in so many other ways. I didn't need to wait until the arrival of oral language to support their wonder, abstract thinking, meaning making motility, and their expressions of embodied metaphors. I understood them!

I realised that even a theory like IE neglects all these emergent, but PRESENT capacities of the very young child.

I wasn't about to wait to employ cognitive tools like "mystery and puzzles," just because the children were non-verbal.

I wasn't going to wait to live metaphors with them until they can say the words!

I wasn't going to define movements only in term of physical development, as I was trained in college.

I wasn't going to ignore the abstract just because the concrete needed space!

I didn't wait.

My way of finding the “missing beginning” started when I realized that the flow of the Somatic CTs into the Mythic CTs had interruptions and even ruptures. The shiny new Mythic toolbox that was supposed to contain tools that connect in one conceptual way or another to the tools of the previous KU, seemed to “forget”, somewhere in a corner, the connecting bits of equipment. Some beautifully designed new Mythic tools had no clear predecessor in the Somatic box. It seemed as if they were printed with a 3D printer, out of invisible, non-existent material.

In order to imagine IE as a non-swaddling pedagogy when applied in practice, I needed to unswaddle or unpack and bring to light a few new cognitive tools that deserve a place in the shiny toolbox of Somatic Understanding.

In this section, I will present the current sets of CTs – as they appear in Egan’s writings – followed by a renewed set that will contain my proposed CTs inspired by my experience and analyses shared in all the previous chapters of my thesis, and the research that has been done since Egan’s *Educated Mind* (1997). These first two KsU have been designed with the following CTs (I have read and studied in depth most of the writings of Egan on this subject [1986-2010] and made a compilation of his labels, order, and possible transformations from one to the other):

Table 2. Egan's compiled list of *Somatic* and *Mythic Cognitive Tools*. Lines indicate missing elements in the two sets of cognitive tools, according to my perception.

Somatic Cognitive Tools:	Mythic Cognitive Tools
☉ Bodily senses	☉ Generating vivid mental images
☉ Emotion: attachments, responses	☉ Affective meaning making
☉ Humour	☉ Jokes and humour
☉ Playfulness	☉ Play
☉ Musicality	☉ Story
☉ Rhythm	☉ Rhyme and rhythm in language
☉ Patterns	☉ Patterns in language, numbers, images
☉ Incongruities (or the unexpected)	☉ Abstract opposites and mediation
☉ -----	☉ Sense of mystery/magic and puzzles
☉ Gesture and communication	☉ -----
☉ -----	☉ Metaphor

As visible in the table, almost all Somatic CTs morph into Mythic ones. The two odd Mythic CTs that do not have a clear root in the bodily meaning making are the *sense of mystery* and the *metaphor*. The reverse happens with the Somatic CT of *gesture and communication*; it doesn't seem to become a Mythic tool. What I have tried in the following representation of the list of CTs is to augment the Somatic set with four more CTs and identify possible transformations of the four into Mythic CTs. I am aware of the fact that

these lists are simplified for the benefit of clarity and discussion and that they cannot be ordered in a static pattern:

Table 3. Egan's compiled list of cognitive tools, modified according to the following Legend: *Italicized CTs* are modified by being disconnected from each other and connected to other CTs; *Cursive CTs* were added to the list; ~~Strikethrough CTs~~ were replaced.

Somatic Cognitive Tools	Mythic Cognitive Tools
☉ Bodily senses	☉ Generating vivid mental images
☉ <i>Embodied conceptualization</i> <i>(Conceptual, linguistic, experiential generalizations)</i>	☉ <i>Abstract opposites and mediation</i>
☉ Emotion: attachments, responses	☉ Affective meaning making
☉ Humour	☉ Jokes and humour
☉ Playfulness	☉ Play
☉ Musicality	☉ Story
☉ Rhythm	☉ Rhyme and rhythm in language
☉ <i>Patterns & Incongruities (the unexpected)</i>	☉ Patterns in language, numbers, images
☉ <i>Sense of openness/Embodied curiosity</i>	☉ Sense of mystery/magic and puzzles
☉ <i>Meaning bearing motility</i> (Gesture and communication)	☉ <i>Role play, Story play/telling</i>
☉ <i>Embodied metaphor</i>	☉ Metaphor

The two tables present a linear enumeration of the sets of CTs as envisioned by Egan and the same set with some modifications, added by myself in order to emphasize

the salient role of the Somatic KU in the development of all the subsequent individual CTs and kits of CTs. Even if Egan (2008) is careful in stating that each CT of the Somatic KU does not morph into another of the Mythic KU, he also asserts that there are important links that cannot and should not be ignored:

The complexity of human development is such that these crude and general categories are inevitably imprecise so it would be a mistake to assume that each of the previous tools will morph in some direct way in the tools we will explore in this section. Indeed, these are fairly general categories, and not very well sorted into a coherent set; story, metaphor, and binary opposites, for example, may seem to be at different “levels” or, at least, are not, apparently, items of the same set. So we should not expect any simple and direct movement from, say, our senses to our use of metaphors even though we will be suggesting there are important connections. Even in the case of bodily humour and oral jokes, the connections are far from simple, and bodily humour slops over in ways that bits could be picked up by other oral language tools, such as rhyme, or stories. (Egan& Chodakowski, 2008, p. 14)

Yet, during a personal communication (Egan, November 23, 2013), Egan was worried about my adding the term “wonder” to the Somatic toolkit because “If the progression to earlier times is from wonder (Romantic CT) to magic (Mythic CT) what is next – a kind of **welcoming openness to unusual experience** in the infant?” My entire collaboration with Professor Egan taught me that there is nothing random in his theory. He has thought through every single detail of it and took a myriad of breaths before sketching the toolkits of his “understandings’. His vision includes a logical progression from one KU to the other, but paradoxically (in my view) language is restricting his genius thinking (I must smile here).

Before analyzing each Somatic CT and identifying its role, connections, and transformations within the next KU, I would like to reengage with the visual representation of the position, roles, interrelations, complexity, and organised messiness of the five KsU and their assigned CTs. The visual analogy (born from the IE-as-garden metaphor) that I consider as the best representation of the intricate relationships, is the **train and tail of a peacock**, where the KsU are represented by imagined concentric semicircles and the CTs are represented by the eye-spots or “ocelli” in the feathers. According to biology, each feather starts strong at the age of three and grows until the peacock reaches the age of six (I cannot help, but smile because of the analogy I imagine with the human brain’s

plasticity at the age of six). The scientist whose sketch I am using for this intricate representation is Ernest Thompson Seton (1896):

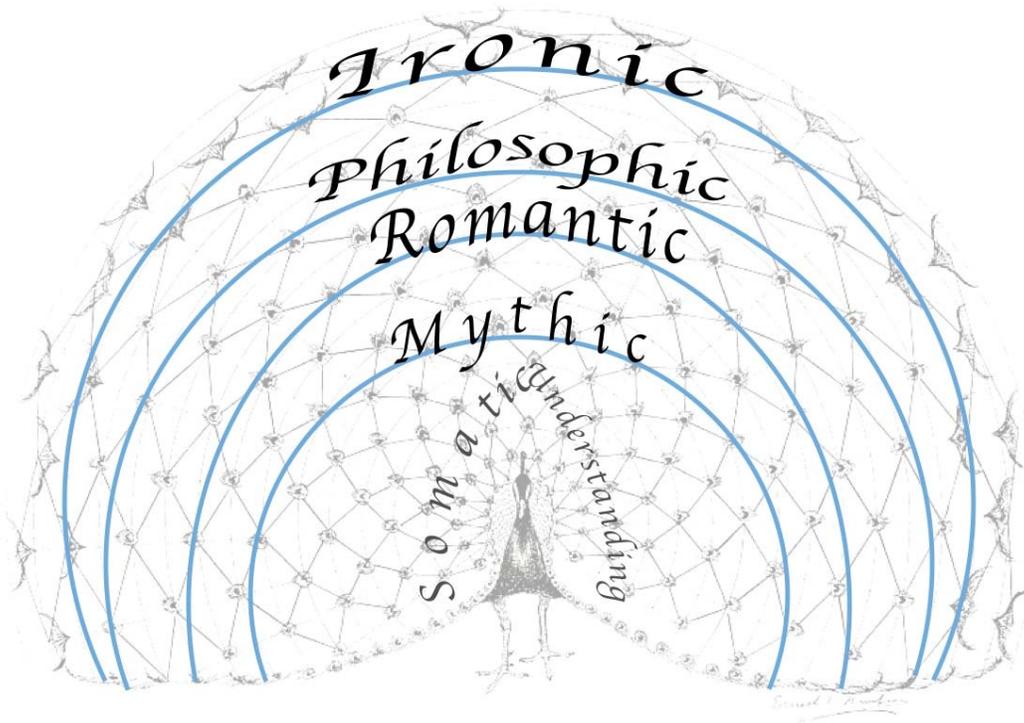


Figure 16. *The plan of a Peacock's Train* by Ernest Thompson Seton (August 14, 1860 – October 23, 1946) modified by adding of the five *Kinds of Understanding* of Egan. Original image retrieved from: <http://setonlegacyproject.blogspot.ca/2014/11/the-peacock-for-artists.html>

Egan created the CT sets with the belief that each set will grow into the next one, enriching the general learning capacities of children, but not without some losses of these capacities. I consider that if the conceptual relationship between the body's (Somatic) CTs and the oral (Mythic) CTs in theory and practice was stronger and more enduring, the loss of children's abilities and capabilities, experienced later, would not happen so profusely. One of the only efforts to untangle and reconnect the two sets of CT was made by Egan together with Chodakowski in the chapter entitled: "Emotion and Imagination in Teaching" (Egan & Chodakowski in Short & Kentel, 2008). This article starts by explaining how important the body's toolkit is:

We explore some of the fundamental tools that are available to us as we grow up, with the kinds of bodies we have, in a modern society. We examine the sense-making toolkit we have available in our bodies and how this toolkit remains important in our future intellectual education. We look also at the toolkit that is available to us when we learn an oral language, and explore how this toolkit is intimately tied to the first toolkit that comes with our bodies. We will also explore the ways we might educate children better by observing how our body's "toolkit" continues to be important during later schooling. (p. 3)

The main argument in favour of the body's toolkit and its importance in the process of understanding the world and developing the next KsU is the fact that a **human being does not "become" human only when it acquires language**. The human is human from the very beginning of its existence. Ignorance for the longest of times of the pivotal importance of early development might have come from previous scientific, pedagogical and/or philosophical viewpoints that considered children as viable learning and inter-relational beings only when they were able to use language to express themselves, and not solely their body and emotions:

Important for my argument is the fact that very young, pre-language-using children have an understanding of the world. This is not an "animal" perception; it is a distinctively human "take" on the world. It is constituted of how we first make sense with our distinctive human perceptions, our human brain and mind and heart and whatever else our bodies can deploy in orienting themselves. (Egan, 1997, p.166)

Egan & Chodakowski (2008) describe the process of language acquisition as an invasion of the body's tools by the oral language's tools and vice-versa: "language begins to invade our bodies and our bodies' tools reciprocally invade language" (p. 7). This two-way invasion has quite a negative connotation in my view. No invasion is a good invasion; this choice of terminology denotes Egan and Chodakowski's focus on the losses **by both sides** (not just on one side, as seen in many other writings), Somatic and Mythic.

The main advantage of a reconnection, or rather, a better linking of the Somatic KU to the Mythic KU is a perpetuation of the CT's of the later into the subsequent KsU: Romantic, Philosophic, and Ironic. In Egan's writings (1983-2010), the links, connections, transitions, transformations, and morphing of the CTs belonging to the Mythic all the way to the Ironic KsU are very well and in-depth discussed, defined, and analyzed. If I can relevantly add to what I consider to be the core and the feather (following my peacock

metaphor from above) to Egan's theory and pedagogy, then, Imaginative Education, as a genuine imaginative education practice may be more grounded, more naturally synched with a child's inner and outer rhythms of understanding the world. If this pedagogy were practiced, the losses would be minimalized and the peacock feathers (and children) would be welcomed through the spacious school door without need for trimming or swaddling, unlike the situation in the following metaphorical photo:

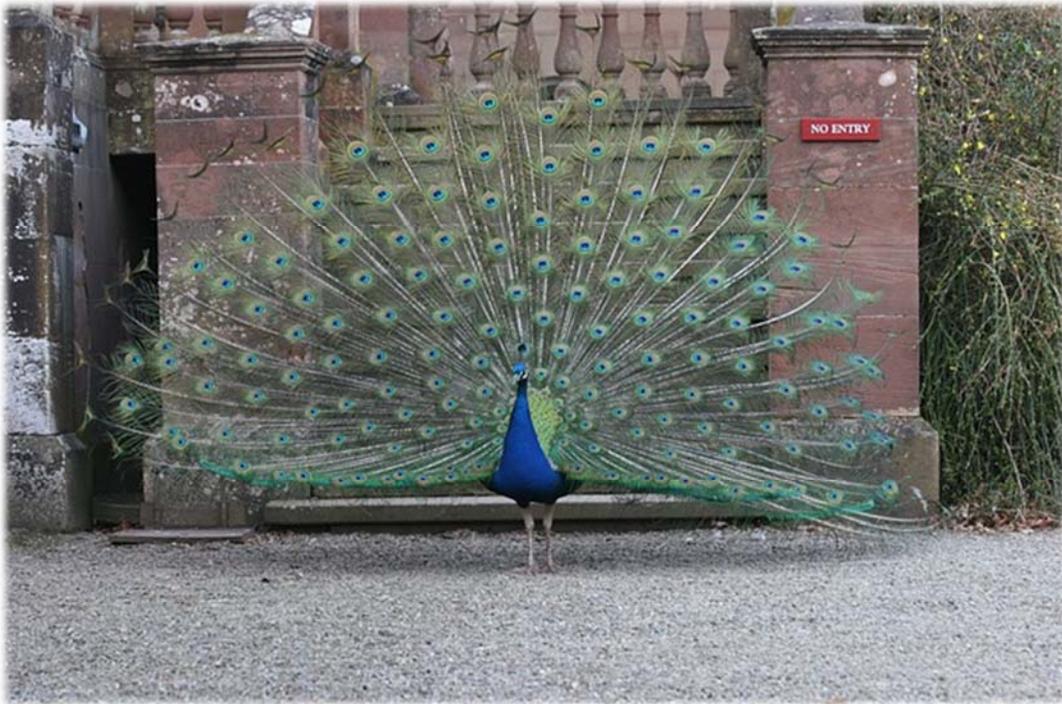


Figure 17. Peacock in front of *NO ENTRY* sign. Creative Commons²⁶.

Enchanted and excited by the image of the peacock and its resonance with the complexity of the theory of Imaginative Education, I continued my in-depth research of the life of peacocks. This research gifted me with the amazing discovery of a part of the peacock's body that I suspect not a lot of us know about: the tail. Yes, the peacock does not only have a train, but it also hides a strong, ready-at-birth, unembellished...tail.

²⁶ Retrieved from https://pixabay.com/static/uploads/photo/2013/05/03/22/28/peacocks-108735_640.jpg.

The tail is hidden behind the beautiful train. The “true tail” (containing 18-20 typical feathers) is the one that supports the opening and sustaining of the miraculous and complex fan (150-200 vividly coloured feathers). But bear with me for another look at the peacock, this time focused on the “somatic tail”:

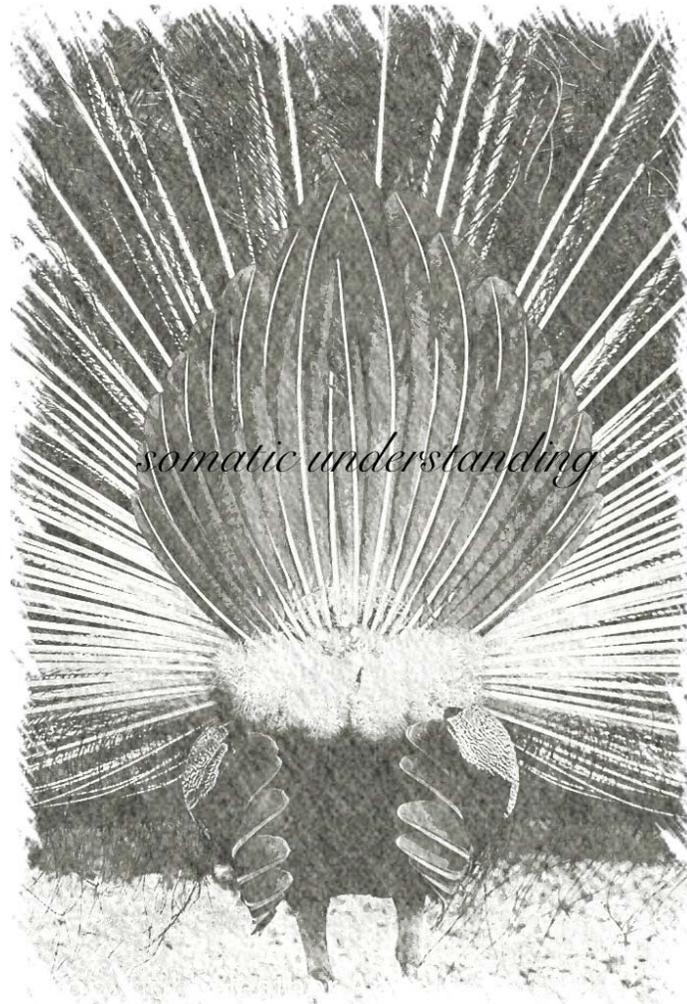


Figure 18. The hidden Somatic tail that supports the beautiful train of a peacock. Image based on original photograph by Heather Angel (2003)²⁷

If we compare the two views, of course we are more fascinated by the first, but, continuing the analogy, we should never forget that without the support (or foundation) of

²⁷ Retrieved from:
<http://www.naturalvisions.co.uk/imagedetail.aspx?tconid=1&bconid=10&photoID=64534>. Used with permission.

the Somatic CTs (ordinary feathers with extraordinary powers), the future development and beautifully cohesive messiness of growing and learning would not become a reality. What I am seeking to do here is “call back the body to a place of honour” (Snowber, 2007, p. 1451), calling attention back to the body, and back to the genuine beginnings of making meaning of the world.

Swaddle or trim the feathers, make children fit through the tight doors, or feel unwelcome, and the result is colourless chicks barred from the magical garden with eyes down, instead of becoming magical peacocks that look around and up, and bring the garden to life.

I will “call back the body to a place of honour” by reshaping the set of Somatic Cognitive Tools, by adding the missing tail feathers (*Sense of Openness/Embodied Curiosity, Embodied Metaphor, and Embodied Conceptualization*), and by painting one feather (*Gesture and Communication*) in a new light (*Meaning Bearing Motility*).

Table 4. Reimagined sets of CTs: emphasis on the Sense of Openness

Somatic Cognitive Tools:	Mythic Cognitive Tools
Ⓢ Bodily senses	Ⓢ Generating vivid mental images
Ⓢ <i>Embodied conceptualization (Conceptual, linguistic, experiential generalizations)</i>	Ⓢ <i>Abstract opposites and mediation</i>
Ⓢ Emotion: attachments, responses	Ⓢ Affective meaning making
Ⓢ Humour	Ⓢ Jokes and humour
Ⓢ Playfulness	Ⓢ Play
Ⓢ Musicality	Ⓢ Story
Ⓢ Rhythm	Ⓢ Rhyme and rhythm in language
Ⓢ <i>Patterns & Incongruities (the unexpected)</i>	Ⓢ Patterns in language, numbers, images
Ⓢ <i>Sense of openness/Embodied curiosity</i>	Ⓢ Sense of mystery/magic and puzzles
Ⓢ <i>Meaning bearing motility (Gesture and communication)</i>	Ⓢ <i>Role play, Story play/telling</i>
Ⓢ <i>Embodied metaphor</i>	Ⓢ Metaphor

The sense of openness

Do not train a child to learn by force or harshness; but direct them to it by what amuses their minds, so that you may be better able to discover with accuracy the peculiar bent of the genius of each.

— Plato

Not very long ago, I surprised Professor Egan with a proposal in the office of our research group (IERG). I was then working on the concept of wonder, trying to translate some of my work written in Romanian on the topic. This idea came to me after realizing that my then literature review had not found enough sources that discuss the sense of wonder within the large umbrella of education at all levels. So, my proposal sounded like: “What about editing and writing together a book about wonder and pedagogy from early childhood to university?” Professor Egan looked at me shortly with his usual look toward me that says “another crazy idea, duh...”, but then, the wonder happened and he expressed through words the following intricate answer: “Ok, let’s do it! But, it means a lot of work....”

I didn’t hear the last part because I was out the door working on it already.

The result of this short encounter and months of hard work was the book entitled: *Wonder-full Education: The Centrality of Wonder in Teaching and Learning across the Curriculum* (Egan, Cant & Judson, 2014). This book was designed to be of use for teachers by triggering long-forgotten internal buttons that we all have and neglect to push due to a myriad of different reasons: lack of time, adult and/or professional seriousness, curriculum requirements, the “not-yet pedagogy”. These virtual buttons are the ones in charge of loosening the swaddles around our sense of wonder. What is this sense of wonder and what does wonder have to do with us, all serious adults? I will answer with Egan’s words from the afore mentioned book (2014):

[Wonder] is a quality connected with love, and it is when our experience is infused with this emotion that we most understand what it means to have a love of life. It is what stimulates us sometimes to dance rather than to walk, to sing

rather than to talk. And it is something we feel must be a central component of what we communicate to children in any educational program worthy of the name. (2014, p.151)

The sense of wonder appears as a CT in Egan's theory in the *Romantic* KU's toolkit (the Understanding that comes along with written language) and a transformed sense of magic and mystery from the *Mythic Kind of Understanding*. Surprisingly, this CT has no visible roots, no acknowledgement nor presence in the very first KU: The *Somatic*. Egan explains that, "[wonder] is a successor to the Mythic sense of magic. Wonder is magic constrained by considerations of reality. How then can the same sense of wonder be present prior to Mythic?" (Personal communication, Nov. 2013) The possibility of projecting a sense of reality onto infants seems to Egan, quite a leap into a space that makes no sense to him. We can hear him say quite often that "everything is wonderful - if only you know enough about it". (Egan, 2010, 2011)

My questions to his assertions are: What about a world we know nothing about? How can we not feel delight and wonder at something we encounter for the first time?

Let us think of populated planets. How many of us wonder and imagine those worlds, knowing nothing about them? A baby can be seen the same way, as a dreamer of a not-yet-known reality. Everything a baby experiences is new and wonderful, exciting, or scary, frightening. Everything, every encounter, and every experience triggers a certain kind of emotion projected into our limbic system's Amygdala; how can we imagine life in those first years without an openness to wonder, an embodied curiosity that leads us to new learning? These questions remind me of a video that I used as my signature in my outgoing emails. I have saved it under the title: *Don't forget to wonder!* The video is a raw footage, recorded by a mother, of her little 15-month-old's first encounter with rain: Kayden+Rain. The footage is powerful. I suggest that you forget for a moment whatever reason you have to read this thesis, click away and watch the video: <https://vimeo.com/84802749>. The video will explain, without words why I consider that the *Somatic* KU deserves a new cognitive tool: *openness* to all experience or *openness* to the world, an *embodied curiosity* that engages a child deeply in his or her interaction with the world and all things encountered. If you watched the video, you surely will have noticed the following memorable aspects: the amazement of the mother (she is hardly using any words but sounds), the shaking of the camera, the doubting whether she should leave the

little girl in the rain, the search for an umbrella, and her decision to give in and taste the pure delight experienced by her daughter. Here are a few screenshots (used with permission) that describe my intentions much better than words could ever do:



Figure 19. Kayden+ Rain (used with permission)

Edith Cobb in *The Ecology of Imagination* (1977), quoting Misch's analysis of the sense of wonder, argues that the presence of wonder in early childhood represents a quintessential factor in the building of "true acts of genesis" of a personal image of the world. Children need the ability to see and feel wonder in order to grow and paint, for themselves, an image of the world around them using the filter-like lens of their complex senses. This is how the "wordless dialectic between self and world" (Cobb, 1977, p. 31) takes place in the early years. The little girl in the video tastes the rain with her whole

body, she wants to walk in it, she drinks the rain, and she opens up her arms into the sky, almost like wanting to feel the rain with the wholeness of her physical and emotional being. This child's *openness* and *embodied curiosity* in learning about the world, the natural use of her body in meaning-making, and her mother's caring guidance and delight are the basis of a non-swaddling pedagogy. In Gopnik's (2010) view, children take in information from multiple places at the same time and creatively and critically engage with what they do not yet know. This complex aptitude is created by the brain's neuroplasticity; neurotransmitters are extremely active in children's brains, a fact that allows for a fast and multilateral learning. This process is also aided by the absence of inhibitors (social, cultural and educational) that are not yet developed in early childhood (Gopnik, 2011).

A glimpse of this child-like thinking may be experienced through improvisation. Concerning the inhibitors, it is well known that one of the unique opportunities for adults to disconnect their self-censoring inhibitors in the brain is during improvisation (Donnay Rankin, Lopez-Gonzalez, Jiradejvong, & Limb, 2014; Limb & Braun, 2008; Liu Chow, Xu, Erkkinen, Swelt, Eagle & Braun, 2012; McPherson & Limb, 2013; Bengtsson, Csíkszentmihályi, & Ullén, 2007; Berkowitz & Ansari, 2008; Howard-Jones, Blakemore & Samuel, 2005, Limb & Braun, 2008) in art, music, writing, and other artistic endeavours. Basically, while creating something new, adults need to reset parts of the brain to a "child-like" state:

"When I start improvising, I definitely feel like I'm 'going into a zone,' so to speak, getting to a place where I'm not actively thinking about notes and rhythm but rather just taking in what's around me."

(Michael Formanek, professor of Jazz Studies – in Zagorski 2008)

The initial ways of thinking and understanding need to be further supported and developed through enriching pedagogical exploration rather than shut down in favour of the "sterile preoccupation with things that are artificial" (Carson, 1965).

Egan (2014) appears to agree with the fact that having the sense of magic during the *Mythic* KU, then wondering during the *Romantic* KU, and then the sense of deep

awe during the *Philosophic* KU, all mean that this particular CT in each KU needs strong pedagogical support from the very beginning:

To be without a sense of awe is to lack a capacity that can transfigure mundane experience into something rich and strange. But to be without awe is not a result of our simply lacking some genetic element that some have and some do not; it can be developed in anyone by application of the appropriate teaching techniques. (Egan, 2014, p. 152)

The most acute difference between Egan's present and past interpretations of the role of wonder in learning, and my interpretation of the pedagogical role of acknowledging young children's capacity to learn and understand the world through the lens of a powerful and culturally inherited embodied sense of openness, is most visible in the following quote:

Learning to see anything in this way is a technique that can be learned. The artistry of teaching is expressed in being able to make evident to students some sense of what is wonderful about whatever material is being dealt with. (Egan, 2014, p. 153)

Here, Egan proposes unswaddling learning strategies that teach students how to sense the world with love and wonder. What I propose is a non-swaddling pedagogy, that acknowledges the presence of this capacity of very young children (and the other capacities I propose in this thesis), and the need to create practices and strategies for sustaining, cherishing, and developing them.

To not swaddle a child's learning from the beginning of his or her pedagogical journey would mean to allow emotion into education from the very start; "once emotions have been aroused – a sense of the beautiful, the excitement of the new and the unknown, a feeling of sympathy, pity, admiration, or love" (Carson, 1965, p. 45) will emerge and thus, learning might happen in a more attuned and effortless way. This kind of teaching and learning does not need a set of strategies for awakening student's sense of wonder, magic, or awe; such a pedagogy only requires a deeper connection between the teacher and students (the unswaddling aspect of *Relationship*), a connection that respects the present and does not worry (too much) about the future. If the IE practice and pedagogy embraced the presence of the sense of openness within the Somatic KU,

it would begin to eliminate many of the struggles of IE implementation experienced by teachers of very young children.

Egan's words that relate to the intellectual tools of Mythic KU can speak to the Somatic KU as well:

The development of these skills is not intrinsically difficult if we bear in mind the intellectual tools the Mythic child brings to them. Ignoring those tools, on the other hand, sets us back on the path of the largely meaningless accumulation of little understood external algorithms that buries for most children any sense of the ingenuity and wonder of even elementary mathematics. (1997, p. 216)

Thus, ignoring the presence of the capacity of children to learn through a sense of openness and embodied curiosity toward all experience in the early years, and failing to enhance this openness of learning through Mythic CTs, would lead to an education without emotion, without a genuine pedagogical relationship, and without a vibrant life.

Connections with other cognitive tools

The connections between this CT and the others in the tool kit are intricate and spread not only within the Mythic CTs, but also other Somatic CTs.

The sense of openness (or the embodied curiosity) is one of the core triggers of learning and teaching (and parenting). To be able to support and avoid swaddling of this complex sense, the educator adult needs to be a reflective teacher, able to identify his/her own sense of wonder (the unswaddling aspect of *Identity*). A reflective practice that embraces openness and embodied curiosity in young children will help teachers see value in slowing down and taking the time to genuinely understand children and share with them (with or without articulated words) the delight of being in a pedagogical relationship. The teaching and learning process will unfold reciprocally and will always be an invitation for the unexpected, the unusual, the wonderful, and the messy.

In such a non-swaddling pedagogical practice transitions to orality and the next layers of understanding will not be rushed; each connection will be tasted fully by both student and educator like the bridge described by Aoki: "But on this bridge, we are in no

hurry to cross over; in fact, such bridges lure us to linger” (2005, p. 438). Learning needs lingering; understanding the world needs pause and reflection.

If the CT of the *Sense of Openness* is recognized within the Somatic KU and nourished, it will logically and fluidly connect to Egan’s *Mythic Sense of Magic/Mystery* - and will not need to be rediscovered nor reignited by certain teaching techniques:

The technique, and general principle underlying the work of the IERG, is that it is not so much a matter of adding wonder to the curriculum as it is a process of uncovering the wonder and awe that exist there already. (Egan et al. 2014, p. 161)

Again, if the trust in the existence and pivotal role of this innate *Sense of Openness* is transformed into a non-swaddling pedagogy, those that practice such pedagogy will through their engagement with children transform this Somatic CT into the *Magic, Wonder, and Awe* of later KsU. The learning that takes place in the home and in early childhood educational centres that practice an unswaddled pedagogy would continue in an effortless, humanly accepted rhythm. Children would not experience the enormous jump/disconnect of a conventional schooling that swaddles the previous ways and the knowledge about the world that children bring with them through the tight doors from the magical garden of their imaginations:

Somehow the natural, universal, or intuitive learning that takes place in one’s home or immediate surroundings during the first years of life seems of an entirely different order from the school learning that is now required throughout the literate world. (Gardner, 1991, p. 2)

The reasons for this disconnect are explained by both thinkers: Egan and Gardner, in two different, yet matching ways. Their explanations do not contradict but complement each other. Egan focuses on his concept of the “educated mind” and identifies the disconnect in the conflicting purposes of today’s education:

That we must shape the young to the current norms and conventions of adult society, that we must teach them the knowledge that will ensure their thinking conforms with what is real and true about the world, and that we must encourage the development of each student’s individual potential. (Egan, 1997, p.3)

Gardner adds to these reasons the one missing from Egan's theory – what he calls, the “unschooled” initial mind that children bring to school, stating:

It is my belief that, until recently, those of us involved in education have not appreciated the strength of the initial conceptions, stereotypes, and “scripts” that students bring to their school learning not the difficulty of refashioning or eradicating them. We have failed to appreciate that *in nearly every student there is a five-year-old ‘unschooled’ mind struggling to get out and express itself.* (Gardner, 1991, p. 5)

The *Sense of Openness*, in company with all the other *Somatic* cognitive tools, is the way young children form an understanding of the world; they come to school with a well-documented inner theory about their lives and relationships in the world; they have experienced, hypothesised, discovered, and researched life already (Gopnik, 2010). A child's treasure of abilities and tools that come with a self-written list of “instructions to use” needs to be the first focus of teachers. Such a focus requires a change of position within the pedagogical relationship, a pedagogical position and relationship of shared learning and companionship that does not disrupt the emergent ways of learning of children; but augments and encourages. A caring, listening pedagogical relationship that suggests *being with* and *being among* students during the process of meaning-making remind us of Pestalozzi's care and kindness and Freire's courageous dream for co-creating knowledge with the students: “to teach is not *to transfer knowledge* but to create the possibilities for the production or construction of knowledge” (Freire, 1994, p. 30). They both believed in respecting what the child knows and is able to do.

This way of pedagogical *being* is not only a metaphor for explaining a different kind of teaching; it is also a literal proposal I have for all teachers to not physically, emotionally or imaginatively distance themselves from their students because that distance will be felt in their learning. Here is a pedagogical experience with my adult students that illustrates such a pedagogical way of being is possible at all levels of schooling:

I have always been an educator. I have always been surrounded by students. I have always been one of them. Today, as well as in my pedagogical past, I am unable to teach from the “podium”. With very young children I always sat on the ground because that was the only way I felt I am understood. That was the only way for me to be able to engage children in learning. That was the only way I could feel their sense of delight and thirst for knowing more about the world.

Years pass. I am a university instructor now and this is what has happened a few times already.

I am teaching. Students are completing my sentences. Learning is happening everywhere in the classroom. I am excited, proud, and connected to the students. All 35 of them.

The classroom's door open. Three girls walk in with their laptops. They look around for a minute and decide to find a place in the already crowded classroom and study (or Facebook?).

We start noticing them. We stop the learning. We wonder. Who are they? Why are they here?

Some of my students recover from the surprise and whisper to the "trespassers":

"We are in class now, the teacher is here".

The intruding students are puzzled. They look around with more careful eyes and see the old one in the crowd. Yes, the one that is not 18 anymore.

I was there. I was teaching. I was sitting with my students... on a desk... with my feet on a chair. Comfortable. Close. Connected.

If the sense of openness is acknowledged, modeled, flourished, and practiced, the educational environment itself opens up; the pedagogical relationship is authentic and defined by trust. If we, as teachers, succeed at being open to the unusual, to the unexpected, and the unplanned, our experience in the classroom will become harmonious, accepting, and thoughtfully responsive to the ebbs and flows that every classroom experiences. A shared *Sense of Openness* does not only nurture the mind-body of students, but also of us, teachers.

This summer I was invited to hold a keynote presentation at the 10th international conference on imagination. The topic of my keynote was "Wonder from early childhood to early adulthood." One of the main purposes of my talk was to convince the audience that serious learning happens beautifully in non-serious settings. One of the courses I was teaching this summer was a six-hour course on a Friday. You can imagine how this unfortunate scheduling of class just before the weekend sounded to me and to my students. I held the first class indoors and all the rest in a park (location was chosen by my students). I cannot even describe in words how much more I could do with students in that setting. One of the usual moments of those Fridays was playing childhood games. I had video

recorded some of playing episodes and decided to play the videos during my keynote speech but without image. The audience could hear the laughter, the fun, and the excitement of my students. Then I asked them to describe the image that they mentally constructed while hearing the sounds of my recording.

Almost everyone imagined a group of very young children!

My story denotes the stereotypes we have formed over the years, about what “serious learning” is. If there is laughter, there must be a group of young children having fun. Why? Why are we in our image and practice of education, at all levels, so swaddled? My invitation is to reimagine education through embracing Somatic Understanding at all levels of education, by reintroducing play, fun, movement, rhythm, and genuine re-scripting and sharing of our mental images of “serious learning”. *Somatic Understanding* allows us to **communicate through our bodies**, a capacity that characterizes us from the very beginnings of life.

In the following section I will present this capacity of meaning bearing motility, with the intention to add it to the toolkit of *Somatic KU*.

Table 5. Reimagined sets of CTs – emphasis on *Meaning bearing Motility*

Somatic Cognitive Tools:	Mythic Cognitive Tools
☉ Bodily senses	☉ Generating vivid mental images
☉ <i>Embodied conceptualization (Conceptual, linguistic, experiential generalizations)</i>	☉ <i>Abstract opposites and mediation</i>
☉ Emotion: attachments, responses	☉ Affective meaning making
☉ Humour	☉ Jokes and humour
☉ Playfulness	☉ Play
☉ Musicality	☉ Story
☉ Rhythm	☉ Rhyme and rhythm in language
☉ <i>Patterns & Incongruities (the unexpected)</i>	☉ Patterns in language, numbers, images
☉ <i>Sense of openness/Embodied curiosity</i>	☉ Sense of mystery/magic and puzzles
☉ <i>Meaning bearing motility (Gesture and communication)</i>	☉ <i>Role play, Story play/telling</i>
☉ <i>Embodied metaphor</i>	☉ Metaphor

The meaning bearing motility

Here, the spirit of the world is ourselves as soon as we know to move ourselves and look, these simple acts already enclose the secret of expressive action.

Merleau-Ponty (1964, p. 66)

As illustrated in the renewed list of Somatic and Mythic cognitive tools, I replaced the one called *Gesture and Communication* with *Meaning Bearing Motility*. I borrow this terminology from Kleinberg-Levin (1985) whose ideas contains multiple elements that complete Egan's depiction of the Somatic cognitive tools. *Gesture and Communication* tends to trick us into considering the body's ability to communicate with the world with an external tool rather than as an internal or holistic communicative quality. Kleinberg-Levin (1985) emphasizes the body's quality for mobility as being **meaning bearing**. Every movement, gesture, position, stance, is meaningful to ourselves and to others, "their meaningfulness characteristically gathers up the body in its physiognomic wholeness" (1985, p. 45). This body of ours, not only bears meaning, but it is genetically and culturally pre-coded. Kleinberg-Levin (1985) calls it an "ancient" body due to its complex inheritance both from the cultures of our ancestors and from nature. He continues his argument by mentioning the fact that the infant's body is endowed with "meaningful orchestrations of movement: orchestrations which originate in the field of motility as a whole" (p. 45).

In order to convince us of the power of this argument, Kleinberg-Levin invites us to consider the "pre-given" abilities of infants to: turn to a face that engages with them, rotating their body, taking a stand, flexibility, directional attitudes, uprightness, unconscious favouring of the right or left, the ability to be aware of what is before and behind, etc. (p. 45). Infants' ability for motility, Kleinberg-Levin, continues, is "without an ego-logical subject or agent" (p. 50). He argues that this beginning body of new-borns belongs to history, belongs to a primordial territory and that instead of being ephemeral is perpetual all through life:

The infant's body, and a fortiori the 'sublimated' body of the child which we still carry around with us in the course of our normal adulthood, belong to,

and are charged by, their primordial attunement to the worldhood of the motility-field as a whole. By *grace of this topological belonging and attunement* (Zugehörigkeit, italics mine), the body of motility exists in the world with a pre-ontological understanding of its own most way of being. (1985, p. 50)

The “silence” of some of the Somatic cognitive tools, according to Egan and Chodakowski, is due to the babies’ inability to articulate them (2008, p. 9). I would like to amend their assertion by adding the word “verbally” before the “articulate”. Indeed, babies cannot verbally articulate their feelings and their delight, but they can surely express and even voice them in many other complex ways. Such a general lack of acknowledgment of the multi-faceted communication system of the very young (see previous chapter where I discussed the capacities of intersubjectivity and intersynchrony of the very young) could be one of the reasons for possible disconnects between the *unschooled mind* (to use Gardner’s expression) and the *schooled mind*: by focusing school education mostly on literacy, we are not sustaining and supporting young children’s capacity for *Meaning Bearing Motility*.

The neglect of this cognitive tool: *the Meaning Bearing Motility*, can blind the educational relationship of the theorist towards the infant and the educator’s towards the young student. Kleinberg-Levin (1985) argues for a need to “undo” our forgetfulness of the primordial inheritance of the body because, without it, we will not find the wisdom and our genuine selves. One channel for “unknowing” and deepening the distance between personhood and consciousness could be considered to be language itself. Both Egan (1997) and Kleinberg-Levin (1985) admit that through the acquisition of language there is the danger of losing touch with oneself, with consciousness, and with nature: “Each of us is born with a unique consciousness, with a unique “take” on reality. Language is a conventional, shared, limiting shaper of our consciousness.” (Egan, 1997, p. 67)

Come with me and imagine a well-focused architect who planned the most amazing self-sustaining building to be built in the desert. The weather is harsh and the winds are strong as hurricanes. The architect is so consumed by his wonderful design that he neglects the weather conditions and, most importantly the existing strong rocky formation. Instead of researching in depth the area and taking in consideration the help of the possible cliff before creating the design of his dream construction, our architect

finishes his work and the building is built by a team of talented builders. The building is beautiful, state of the art, but, unfortunately, during the first sand storm, it loses its roof and with the second storm, the house collapses.

You can extract the moral and easily transfer it into education. If we are blind to the ability of our young students to communicate, express, create, and imagine through movement of their whole bodies through gaze or gesture, through a rhythmical attunement with the environment, we will be building an isolated, shaky, and ungrounded “masterpiece”.

And prior to and during the period of first-word onset, infants practice meaning making in action: they play with, manipulate and act on toys in progressively more specific ways; and, via gestural ‘naming’, they assign progressively more specific meanings to referents and extend common meanings across a variety of referents. All of these new forms of action – which are closely related to the emergence of early language milestones – are dependent on advances in motor skill. (Iverson, 2010, p. 19)

The *Meaning Bearing Motility* CT has the power to rebuild connections that have been there since the beginning of humanity. Infants are living beings, making meaning, and taking control of the world around them. They are able to somehow attach the right emotion to the right expression of their bodies very early on; imitating the surrounding adults is proven to be a complex and deep connection builder between the infant and the social environment (Gopnik, 2009). Much more than a simple reflex, sticking out the tongue in response to the mother’s same action is an intentional reaction that builds an “innate empathic link” (Gopnik, 2009, p. 205) between the two: “babies are born knowing that particular facial expressions reflect particular kinesthetic feelings” (Gopnik, 2009, p. 2015).

So, how might we support this type of thinking? How might schools and education in general support children in not losing touch with “the bodily felt truth” (Kleinberg-Levin, 1985, p. 55)? How might we keep a visible, sensible balance between the body’s power to recollect primordial aspects of being and the present “narrowing, restraining, and self-limiting experience of motility that is characteristic of the ego-logical adult in our modern technological world” (p. 55)? Similar to the intention of this thesis, Kleinberg-Levin (1985) argues that his goal is not to have people recollecting and attuning to a primordial

orchestra; but, rather, have people reading and planning a different future due to the lessons they learn from this orchestra. If our educational system and way of being continue to restrict our bodies' need for motility, the end result could be quite alarming, as Kleinberg-Levin warns: "Is there no possibility of relief from the obsessive, compulsive, disjointed patterns of motility, which seem to drive us – all of us – ever more rapidly and ever more blindly on the way to our madness and collective annihilation?" (p. 55).

In many educational institutions, indeed the body seems to be forgotten; in most educational venues, there appears to be limited time to move the body, teach the body, and enjoy the freedom of the body. What Kleinberg-Levin (1985) proposes is a reinterpretation of the role of the body in understanding the world. The process of interpretation is compared to a literary one:

Since the symbolism of the primordial is appropriate in telling the story of our genealogy, our psychogenesis as onto-logical beings, I would like to suggest that the body of motility is rather like a text that is very much in need of existential, ontological interpretation. (p. 55)

The motility suggested here by Kleinberg-Levin, is defined by its essential power for "communicativeness". It is a fluid communication, back and forth, from history to the present and then to the future.

Connections with other cognitive tools

I consider the most flowing sequential and overlaying relationship of this CT to be to a Mythic CT which has not yet been discussed by Egan: the ability of young children to create engage and make meaning through embodied storytelling and imagination. Future research should engage with children's ability not only to understand and make meaning through *Stories*, but also to tell, play and imagine the stories. I tentatively call this CT: *Role Playing and Story Telling/Playing*. Children's power to tell stories through their whole body during the period of Somatic Understanding continues vivaciously during the period of acquisition of oral language through living and imagining the stories and communicating them to others. Interestingly, Fels and Beliveau (2008), in discussing Gardner's Multiple Intelligences, propose adding "performative-imagination" to the list, in recognition of children's ability to tell stories, create plays, imagine the unknown, or other ways of being in the world.

The *Meaning Bearing Motility* also connects with the *Mythic Affective Meaning Making*. Emotions are part of our bodies and babies are able to link them to certain physical expressions; they read and share emotions through their motility. Thus, part of the non-swaddling pedagogy is teachers' awareness of young children's ability to read and express emotions, as well as understand the feelings of others. This quality is extremely important during the Mythic KU when stories are communicating information using a complexity of emotions. Also, for children to be able to *Generate Vivid Mental Images* of the characters and events in a story (another pivotal Mythic CT), they need to keep their embodied ability to empathize alive. Remaining with the topic of empathy created through *Meaning Bearing Motility*, we cannot neglect the very surprising results of a recent study on children's ability to attune physical rhythm with emotional empathy:

The development of musical behaviors during infancy has been described previously, but the social implications of such behaviors in infancy have been little studied. In Experiment 1, each of 48 14-month-old infants was held by an assistant and gently bounced to music while facing the experimenter, who bounced either in synchrony or out-of-synchrony with the way the infant was bounced. The infants were then placed in a situation in which they had the opportunity to help the experimenter by handing objects to her that she had 'accidentally' dropped. We found that 14-month-old infants were more likely to engage in altruistic behavior and help the experimenter after having been bounced to music in synchrony with her, compared to infants who were bounced to music asynchronously with her. (Cirelli, Einarson, K. M. & Trainor 2014, p. 1003)

Knowing that literally and metaphorically attuning rhythms with our students could potentially encourage them to be more emotionally engaged and empathic, could teach us a new kind a pedagogy, and whatever the name, a non-unswaddling one. Also, this study inspires another connector: the link between *Meaning Bearing Motility* and the Mythic CT that comes with *Rhythm and Rhyme* during the oral language layer of understanding.

New research (de Hevia, Izard, Coubart, Spelke, & Streri, 2014; Buchsbaum, Gopnik, Griffiths & Shafto, 2010; Peña, Mehle, & Nespor, 2011) shows that very young children (not only the ones who have acquired oral language) are able to think and understand through abstract concepts. The most surprising element in these discoveries seems to me the fact that infants are not only able to distinguish patterns in their physical settings, but they are also able to "work with" conceptual patterns in space, time, and numbers (de

Hevia et al, 2014). These complex abilities demonstrate a clear connection between the development of the *Meaning Bearing Motility* and *Abstract Binary Opposition* (Mythic CT) that is described as the capacity of young children to make meaning of experiences, stories, or events through identifying their core binary opposite: fear/courage; good/bad, cold/hot. This CT offers children the power to identify and then mediate these core opposites in order to imaginatively make sense of the world. There are, as well, some obvious connections between this Somatic CT and other CTs from the Mythic KU that I will not discuss in depth here: with *Play*, *Jokes*, and *Humour*. We can easily imagine how *Meaning Bearing Motility* for whole-body movement has a role in these wonderful and playful abilities of students. Even if this relationship among the CTs is theoretically obvious, practically it does not appear often in curriculum documents.

Table 6. Reimagined sets of CTs – emphasis on *Embodied Metaphor*

Somatic Cognitive Tools:	Mythic Cognitive Tools
☉ Bodily senses	☉ Generating vivid mental images
☉ <i>Embodied conceptualization (Conceptual, linguistic, experiential generalizations)</i>	☉ <i>Abstract opposites and mediation</i>
☉ Emotion: attachments, responses	☉ Affective meaning making
☉ Humour	☉ Jokes and humour
☉ Playfulness	☉ Play
☉ Musicality	☉ Story
☉ Rhythm	☉ Rhyme and rhythm in language
☉ <i>Patterns & Incongruities (the unexpected)</i>	☉ Patterns in language, numbers, images
☉ <i>Sense of openness/Embodied curiosity</i>	☉ Sense of mystery/magic and puzzles
☉ <i>Meaning bearing motility (Gesture and communication)</i>	☉ <i>Role play, Story play/telling</i>
☉ <i>Embodied metaphor</i>	☉ Metaphor

Embodied metaphor

I could not understand until one morning she arrived late and we chatted together as she hung up her coat. I commented to her, "So, you spent some time with your dad on the weekend, and now you'll be spending some time with your mom." She replied, with her head tilting sideways, back and forth, "First with Mom, then with Dad, then with Mom, then with Dad." "Well," I said, "it's nice that you share each other." She looked at me directly with one arm brought close to wrap herself around her waist, and replied, "It's like you're being torn apart." I looked at her, in silence that held thought still for just the moment of a breath, the still sense of surprise. Through such a small space of stillness, meaning became visible. I could say no more than "Oh." It was just a breath. As she turned and walked away from me I followed her with my eyes. Now I understood. I saw her, in her fragmented space, with her arms around herself, trying to hold the pieces of her being together with the energy of her life. A few words, a few gestures, fragments of meaning. An arm wrapped around herself, her head tilting back and forth. Her eyes. That gaze. Just a moment passed as I watched her walk away. Familiar fragments. That word, "torn." I know that word! **I know that wrapping arm!** "Torn," the sound connected with the image of Rebecca's arm wrapped around herself, her head tilting. I stood there, remembering fragments, my own and Rebecca's. I was unable to say more. Images overwhelmed language. For a moment, surprise offered the way to understanding.

Ann Hill (1994, p. 343)

But the child, like the poet, in his own instrument and uses his whole body as a mental tool.

Edith Cobb (1961)

The poetic value and the communicative expressiveness of metaphoric language partly arises from its roots in people's ordinary, felt sensations of their bodies in action.

Gibbs, Costa Lima, Francozo (2004)

The *Embodied Metaphor* deserves a place in the Somatic toolkit because it beautifully describes Being. Being is, in essence, finding ways for *envisaged possibilities*, to use Green's (1995) wording. During the unrolling of the Somatic KU our bodies are our vehicles and tools of understanding, communicating, experiencing, and feeling the world. Every movement of our bodies can be considered metaphor: walking in a certain rhythm, moving to music, curling up in a ball while in pain, opening up our arms to hug, or dancing in the rain - all are manifestations of our inner feelings and/or responses in our encounter with others. These types of feelings don't need words to be

expressed; words will augment the feeling, but not represent it. If I say “let me hug you really hard” while I am opening up my arms to you, I am not translating my gesture or explaining it to you; I am adding voice, intonation, and preparation to my hug. These types of embodied metaphors are present in us from birth, from the moments when as babies we pinch our mother’s cheek and laugh at her reaction – to the moments when we repeat the same gesture to our partner of life and then to our children... The metaphors survive all our so-called “stages of development” or “developmental milestones”; our embodied metaphors live in us and with us.

In Egan’s IE theory, the *Metaphor* CT is **linguistic** and it is part of the Mythic tool kit. Egan’s metaphor is born from and into language. He recognized and admires the power of metaphors for generativity: a metaphor creates a similarity, instead of being inspired by one:

Metaphor in its grossest appearance involves talking about something in terms derived from something quite different.... [The metaphor] establishes a new relationship between heterogeneous ideas in a way that adds something to, or throws new light on, the thing talked about. Metaphors do not so much work by recognizing similarities between things; rather ‘it would be more illuminating ... to say that metaphor creates the similarity than to say it formulates some similarity antecedently existing.’ (Black, 1962, p. 83 in Egan, 1997, p. 55)

He considers that the ability to form and use metaphors along with the one of abstract cognition start with the body and the human’s power to mediate knowledge:

Our bodies are our primary "mediators" of meaning, and some of the earliest discriminations we make are in terms of our bodies - so "wet" means wetter than my body and "dry" means drier than my body, "hard" means harder than my body and "soft" means softer than my body, "big" means bigger, "small" means smaller, and so on. These concepts are mediated in a literal dimension when children learn additional modifiers or comparisons - squishy, soft as a pillow, pretty soft, really soft, flabby, tender, cottony. They are also extended beyond the body by metaphor into other dimensions, so in/out may be extended from the body to a room or a house; big/little may be extended by recognition that a small tree is often bigger than a big person. (pp. 40-41)

Maybe this is the reason why, as Egan puts it, “We can program computers to deal with the most sophisticated logical operations, but cannot make much progress at all in programming them to recognize or deal with metaphors” (1986, p. 22).

Egan defends beautifully the trust in the metaphorical thinking of children and suggests that the power of children for generating metaphors should be at the centre of planning, teaching, and learning. He offers a multitude of practical strategies as to how to use metaphors in order to develop the mythical thinking of children. Several times in his writing he shares his surprise and others’ to the easy grasp of metaphorical content and the effortless generating of metaphors by very young children: “There is in metaphor a logic that eludes our analytic grasp” (1986, p. 22).

I consider that, by adding this new (to the IE theory) cognitive tool to the Somatic KU, the practice of Egan’s theory would become more grounded and authentic by means of considering the young child **able to live the metaphors** before translating them into language. Mythic Understanding is not the beginning, as the acquisition of language is not the beginning either, just as kindergarten is not the beginning of education... Learning and understanding pivotal aspects of how the world works starts in early infancy as research indicates (Gibbs, 1994; Lakoff, 1987; Lakoff and Johnson, 1980, 1999; Lakoff and Turner, 1989; Johnson, 1987; Sweetser, 1990; Turner, 1996). Thus, to transform the IE practice from an unswaddling pedagogy to a non-swaddling one, we need to consider the Somatic precursors of all subsequent cognitive tools.

According to Merleau-Ponty (1962), human knowledge springs from the body’s experience of the world; the realities, stories, and feelings of the world around us are filtered into our consciousness by our body. Once we see the body in this new light, we will realize that *Embodied Metaphors* are a real possibility in human cognition and understanding. In the view of Lakoff (1993), “the locus of metaphor is not language at all, but in the way we conceptualize one mental domain in terms of another,”(p. 203), thus perception goes hand-in-hand with metaphorical cognition even in the very young child. As Egan (1997) noticed, social constructionists also consider the importance of little or no initial correspondence between the metaphor and its “target” (Jacobs & Heracleous 2006), “thereby emphasizing the inherently creative dimension of metaphor rather than

viewing it as something that can merely reveal an antecedently existing similarity” (Jacobs & Heracleous, 2006, p. 210).

What surprises me on a constant basis is that the awareness of the “hidden” aspects of humanity has been identified in the field of human resources and communications. For example, several team-building exercises and project creating activities recognize the ability and eloquence of participants’ embodied, interpretations and semantics²⁸ created through the creation and exploration of embodied metaphors.

All these approaches exemplify and acknowledge the relevance of conceptual, creative metaphors and extend the generally accepted semantic-cognitive dimension of metaphorical reasoning by viewing constructed physical objects as occasions for shared sensemaking. In this process, participants are actively involved in constructing or sculpting metaphorical symbols. Size, spatial relatedness, variety of materials, and haptic and tactile aspects of the social construction process all contribute to the recursive process of sense-making, involving the dynamic interpretation and reading of these embodied metaphors while constructing them. Even though these approaches draw from diverse theoretical underpinnings, they all share an attempt to surface participants’ pre-reflexive knowledge, assumptions and experience to develop shared sets of metaphors and shared interpretations.

(Jacobs & Heracleous 2006, p. 215)

Children come to the school doors with a powerful embodied performative knowledge, ready to be expressed, lived, and relived inside the classroom. A non-swaddling pedagogy would embrace this beautiful bouquet of capacities and possibilities and would build an authentic education **onto, through, and with** those capacities.

When a 2-year-old raises a wooden block into the air and moves it with an engine sound, that wooden block becomes a plane. A world seen this way is a rich world; a world that allows difference, creativity, and individuality; a world full of lived stories and imagined versions of it. During the Mythic layer of understanding, teachers can enjoy and benefit from what children are already able to do. As mentioned before, building a stronger link between the Somatic CTs to the Mythic ones is extremely important for the creation and practice of non-swaddling pedagogy.

²⁸ See some examples at Trainer’s Bubble: <http://www.trainerbubble.com/>, and Jacobs at al., 2006.

Recent research engages with the link between embodied cognition and the development of creativity (Stanciu, 2014). One such study takes one aspect of creativity: its fluidity (the ability to think in a flowing/smooth way of multiple possibilities and directions), and connects it back to the body's interpretation of fluidity. The study was inspired by influential models of cognition that assert that abstract thinking is grounded in the body (Lakoff & Johnson, 1980, 1999; Barsalou, 1999, 2008; Williams & Bargh, 2008, 2009) and tries to build a stronger link between embodied cognition and three qualities of creative thought: creative generation, cognitive flexibility, and remote associations. One experiment tested whether or not a physical fluid movement of the hand would increase creative generation. The results were convincing: "participants who made fluid movements demonstrated greater fluency and originality than did those who made non-fluid movements" (Slepian & Ambady, 2012, p. 626) and "Embodying fluidity, relative to nonfluidity, led to an enhanced ability to connect remotely associated concepts Bodily movement can influence cognitive processing, with fluid movement leading to fluid thinking" (p.628).

A comprehensive review of what is known about *embodied metaphors* and the neural system, is explored by Lakoff (2014, 2015). He explains the process of discovery and understanding, of how metaphors are formed and how, in fact, all languages create metaphors through very similar processes in the brain. He gives the example of anger. He mentions Paul Ekman who discovered that when a person is angry, the skin temperature and blood pressure rise, and there are also effects on the accurate visual perception and fine-motor control (Ekman, Levenson & Friesen, 1983 in Lakoff, 2014). These physical happenings are the actual source of metaphorical expressions such as "boiling mad", "blind with rage", "hopping mad", and "he exploded of anger" (Lakoff, 2014, p. 4). When Lakoff summarizes a new theory of metaphor that was born from a combination of the theory of conceptual metaphor (conceptual metaphor conceptualizing the abstract in terms of the concrete) and the neural metaphor theory (neural circuitry linked to other neural circuitry), some of his results are the following:

- Simple metaphorical thought is learned prior to, and independent of language, and plays an important role in the shaping of grammatical form.
- The compositional properties of language, not surprisingly, lead to an unbounded range of complex metaphorical thought expressed linguistically.

- The compositional properties of language allow for an even greater unbounded range of complex metaphorical thought but still understood via embodied primitive concepts and primary metaphors (p. 5).

Lakoff (2014) also explains what the primary metaphors are, and how neural activation happens on existing paths between a so-called **source** to a so-called **target**. When these pathways are used and reused, they become stronger and stronger. After many tries, neurons will pick the shortest path and form this way a circuit formed by connecting two nodes. This newly created circuit is the actual metaphor; the activation within this metaphor will follow the path from source to target, which will be stronger than the way from target to source. What determines the directions is exactly the side that is busiest firing neurons (p. 6). He offers a few examples that provide evidence: More is Up, Less is Down (turn the radio down) where verticality, he specifies, is the Source because the brain is mostly computing verticality and not always quantity (in his 2015 talk, Lakoff mentions the baby who keeps on seeing that the water in the glass is “going up” the more liquid is added to it, so he/she will connect this verticality with the quantity). Another example is “affection is warm; disaffection is cold” (He’s a warm person. She’s cold as ice), where the Source is temperature and the Target is affection (2014, p. 6).

The main lesson I have learned from all the research Lakoff (2014) brings forward is that “there are hundreds, if not thousands, of primary metaphors structuring our conceptual systems. They are learned via neural learning mechanisms early in life, usually before language, just by functioning in the everyday world” (p. 6).

The evidence that shows the close connection between primary and conceptual metaphors and the body is remarkable.

Why does this happen? Conceptual metaphors are asymmetrical physical circuits in the brain allowing the consequences of source domain activation to apply in the cases of target domain activation. Those consequences can be a sense of filth after immoral behavior, inferences affecting crime policy, feelings of pain in empathy with a loved one, leaning forward physically, judgments of importance or temperature, and so on. (Lakoff, 2014, p. 7)

In this light, the Mythic capacity of children of constructing mental images that “eludes our analytic grasp” (Egan, 1986, p. 22) is not surprising or unusual and thus ought not to be considered only as a “curious consequence of the development of language” (Egan,

1997, p. 60). Being able to use metaphorical examples to bring evidence, joy, and wonder to curricular content would support overall learning because students might understand concepts better and connect topics easily to real life experience.

Embodied memories themselves become ways of acting and reacting in the world that are based on previous experiences and their emotional and affective accompaniments, developed in response to both external exigencies and individual bodily constraints and abilities. (LeMesurier, 2014, p. 376)

Connections with other cognitive tools

Embodied metaphor generation can be considered one of the precursors of *Vivid Image Generation* (Mythic CT). This Mythic CT is considered by Egan (1997) to be “one curious consequence of the development of language” with the help of which “words can be used to evoke images in the minds of their hearers, and these images can have as powerful an emotional effect as the real events themselves” (p. 60). As many times before, a slight doubt is visible in Egan’s tone and his use of the word “curious”, denoting to me an element of surprise in front of the “sudden” appearance of this quality in children. My thesis is focused on showing that these Mythic capacities do not appear suddenly; they have strong roots in the Somatic KU. Interestingly, my best help is Professor Egan himself. In the following quote, he consciously attaches the CT of *Vivid Mental Imagery* to the acquisition and existence of oral language, but, (and this might be a very subjective way of seeing it), seemingly aware of the pre-existence of this ability in the Somatic child. In the practical examples he uses to explain what mental imagery means, Egan (1997) uses a strong example that takes students back to abilities that belong to the body (I have bolded the occurrences):

When teaching about the earthworm, for example, the instructor can augment the facts about its senses and structure by evoking for students images of what it would be like to **slither** and **push** through the soil, hesitantly exploring in one direction then another, **looking** for easier passages, **contracting** and **expanding our sequence of muscles** segment by segment, and **sensing moisture, scents, grubs, or whatever**. As we learn about the anatomy of earthworms we can also **feel something of their existence by means of images that evoke analogs of their senses**; it is not so much a matter of seeing the earthworm in terms of our senses as performing the imaginative act of **recognizing**

earthwormness in ourselves. The task is imaginatively to incorporate the world rather than simply learn facts about something "out there." Similarly, when teaching about flowers, one could imagine **emerging** from the **cold ground**, **pushing** toward the light, **bursting** with a kind of ecstasy in the **warmer air**, **turning with passion** toward the sun, **feeling the rush of sap**, then experiencing the horror of the **returning cold**, and **shriveling** back underground. Constantly bringing to mind affective images helps to make the content memorable and, relatedly, meaningful in terms with which children are familiar.... Affective images do not need to reduce the content being taught; rather, they provide a means for the child to **"incorporate"** it. (pp. 61-62)

I think this is another beautiful example of Egan's acknowledgment of the complex cognition and imagination that children have before the acquisition of language. From my perspective, this acknowledgement wells out of his use of the word "incorporate". If we look at the etymology of the word "incorporate," we find the following somatic roots of the word:

Incorporate (v.) late 14c., "to put (something) into the body or substance of (something else)," from Late Latin incorporatus, past participle of incorporare "unite into one body," from Latin in- "into, in, on, upon" (see in-(2)) + corpus (genitive corporis) "body" (see corporeal). Meaning "to legally form a body politic" is from 1460s.
(<http://www.etymonline.com/index.php?term=incorporate>)

Mental imagery such as: slither; push through the soil; contracting and extending; sensing moisture, scents, grubs; us as earthworms; pushing toward the light; bursting, shrivelling; etc. is all created and projected from the experience of being in the world.

This CT also connects to the other Mythic CT such as: *Play, Story, Humour, Affective Meaning Making* because these all require children's ability to embody a role: play has pretend characters who act differently than the child would; stories, likewise; humour is triggered by the visceral love for laughter and happiness; affective meaning-making, as discussed previously, is only possible if the body and mind are one complex whole because emotions are generated by bodily states and senses in response to encounters with others and or to the environment, and/or to one's own presence in the world.

Table 7. Reimagined sets of CTs – emphasis on Embodied Conceptualization

Somatic Cognitive Tools:	Mythic Cognitive Tools
Ⓢ Bodily senses	Ⓢ Generating vivid mental images
Ⓢ <i>Embodied conceptualization (Conceptual, linguistic, experiential generalizations)</i>	Ⓢ <i>Abstract opposites and mediation</i>
Ⓢ Emotion: attachments, responses	Ⓢ Affective meaning making
Ⓢ Humour	Ⓢ Jokes and humour
Ⓢ Playfulness	Ⓢ Play
Ⓢ Musicality	Ⓢ Story
Ⓢ Rhythm	Ⓢ Rhyme and rhythm in language
Ⓢ <i>Patterns & Incongruities (the unexpected)</i>	Ⓢ Patterns in language, numbers, images
Ⓢ <i>Sense of openness/Embodied curiosity</i>	Ⓢ Sense of mystery/magic and puzzles
Ⓢ <i>Meaning bearing motility (Gesture and communication)</i>	Ⓢ <i>Role play, Story play/telling</i>
Ⓢ <i>Embodied metaphor</i>	Ⓢ Metaphor

Embodied conceptualization

Recent studies are underway to prove the existence of an infant's ability to conceive concepts *before* articulated language. These studies emerge from a century that has been dominated by Piaget's theory that clearly states that infants are not able to develop any conceptual thought before the age of two and their reactions to object disappearance or their recognition of objects are simply automatic responses that copy a previous reaction they have had (Piaget, 1954). Other studies that slowed down the consideration of children's complexities (Madole & Oakes, 1999; Quinn & Eimas, 1997; Eimas, 1994; Mervis & Rosch, 1981) argued that the act of researching infants' capacities to distinguish concepts and categories is parsimonious (Mandler, 200, p. 5). Also, Haith and Benson (1998) stated that infants are too young to develop conceptual categories and that they must solely rely on perceptual processes (in Mandler, 2000).

In contradiction with such a history, I, among others, would argue that infants are more complex than once thought, due to the cultural inheritance of their genomic identity and their emotional readiness (Damasio, 1996; Trevarthen, 1988, 1992; Neisser, 1994; Cicchetti & Beegly, 1990; Brownell & Kopp, 2007; 1991; Bruner, 1986). What they are not equipped for is the current social-cultural environment they are born into; they need to grow **with** this context and **not into** it. The milieu is fluid, unstable, multi-colored and ever-changing: babies connect their innate power for rhythm to the rhythms of life around them. As Wallon (1945) explains,

Thus, assailed from all sides by his/her intellectual, moral, and material surroundings, a child has no alternative but to adopt the corresponding system of thought. If he deviates from it, it is because this adoption is hindered by a different order of facts. The first opposition observed in a child's intellectual development is the one between tasks imposed by his environment and his own mental capacities. (Wallon, 1945, section *Problems In The Origins Of Thought*, para. 4)

I have had multiple conversations with families of the children in my care about the wonderful opportunities they could create to engage their children in exploration, discovery and art. Some of the families were convinced that they had to withhold or delay certain materials, activities, or experiences until their children were older. Their views were sometimes so unshakable that, when I shared with them the abilities their children were endowed with, they could not believe me. These were the moments

where, with their permission I video-recorded whole days and shared the footage with the astonished parents (or caregivers in the case of the orphan children). Those recordings changed the perspective of parents and supported them to build a new image of their children, an image that shows them capable, thoughtful, and able to make meaning of the world.

Considering the fact that very young children are capable of conceptualizing the world around them, is a pivotal factor in augmenting the toolkit of the Somatic KU. This addition of this new CT tool – *Embodied Conceptualization* – would offer educators a new, more complex view on young children’s “ready-to-use” abilities and would allow for a more relevant pedagogical engagement between educator and child in the process of co-constructing an understanding of the world. In the following short section, I will present a few studies that discuss and research some of the aspects of *Embodied Conceptualization* that are considered extremely salient for the pedagogical image of the capable proto-lingual child:

- ④ Recognition of patterns and concepts;
- ④ Understanding and building correlations with time, number, and space dimensions;
- ④ Ability to selectively imitate the environmental input;
- ④ Association of abstract concepts with some physical properties of speech;
- ④ Speed and quality of learning;
- ④ Ability to distinguish pragmatic vocalisations from mathetical²⁹ ones (see below for explanation).

A recent study (de Hevia, Maria Dolores, Izard, Coubart, Spelke & Streri, 2014) that sheds light on neonates’ ability to distinguish and recognize patterns and concepts was performed at the Sorbonne laboratories of the University of Paris-Descartes by a group of researchers led by de Hevia. This research study concluded that: “representations of space, time, and number are systematically interrelated at the start of

²⁹ Halliday (1975), as I describe below, make the distinction between *pragmatic* vocalizations of infants (that require a social response from adults) and *mathetic* vocalizations (that do not require social responses).

postnatal life, before acquisition of language and cultural metaphors, and before extensive experience with the natural correlations between these dimensions.” (de Hevia et al., 2014, p. 4809) The research indicates that newborns are not only able to form arbitrary visual-auditory pairings, as previous research indicated (Slater, 1999), but they are also able to “build an expectation of congruency between magnitude-related changes in *number, time, and space*, from familiarization to test The human mind thus may be predisposed to relate these three fundamental dimensions before extensive experience with the natural correlations between numbers of objects, spatial extents, and temporal durations (p. 4809).

Another study (Buchsbaum, Gopnik, Griffiths & Shafto, 2010) shows how infants are able to selectively imitate actions from their environment and they don't stop there. After choosing what to imitate and when, they “rationally combine multiple sources of information about which actions are necessary to cause a particular outcome” (p. 331). The experiments provided even more surprising results that show that “children will decide whether to imitate part or all of an action sequence based on both the pattern of statistical evidence and the demonstrator's pedagogical stance” (p. 331)

So, do infants have an early ability to conceptualize abstract ideas – a so-called *embodied conceptualizing operating system* (that decodes, organises and interprets abstract data) before they acquire language? Let us examine another recent study (Peña, Mehler & Nespor, 2011) that sheds some light on the matter. This study, *The Role of Audio-Visual Processing in Early Conceptual Development*, is considered to be the very first to demonstrate that very early on, abstract concepts are associated with some physical properties of speech, in the case of this particular study the concepts are: *larger and smaller*. The study was performed with 28 four-month-old babies who had to gaze at shapes with different sizes while hearing different syllables, some with A and O, others with I and E. Almost 100% of the time, the babies gazed first and longer at the smaller items when they heard I or E, and to the bigger ones when they hear O and A. "We don't know if this is something we are born with or something we have to learn – but it is a very early capacity," says Peña. She states that "the baby is not learning the word – bigger, smaller, ball, and triangle – itself." Rather, she or he is "exploiting the physical properties of a sound to help categorize another [abstract] property of the environment" (Association for Psychological Science, 2011).

Another possible response to the question of the existence of an embodied operating system before the acquisition of language is offered by a review-study (Snow & Balog, 2002) that engages with the role of intonations before the acquisition of language. This study starts by presenting Halliday's (1975) report that states that infants are able to make a distinction between *pragmatic vocalizations* that require a response or an action from the adult (social purpose utterances such as: cry for food or more food, laughter for social engagement, sounds of asking for objects, cry to attract attention to a certain pain or unusual feeling) and *mathetic vocalizations* that require no response or action (such as vocal reactions to images or actions in the environment, shouts of joy, cries of defeat, or loud expressions of wonder). The researchers continue with Leopold's (1946) findings which concluded that some of the infant's utterances *conveyed wishes* (similar to Halliday's *pragmatic* category) while others were "declarative" *without a wish element* (similar to *mathetic*).

An interesting concluding argument of this study talks about the existence of a regressional state at the age of 9-10 months while the infant starts using his/her first word. This state of regression manifests itself by children not using the same vocal associations as before; they seem to live a period of reorganization that ends with the one-word stage (Snow & Balog, 2002). Children start using the form-meaning associations (associations between intonations and their intended functions) again, after this short pause. The researchers seem surprised that the studies they have reviewed do not mention this occurrence. Interestingly, Egan specifies in his writings (1997, 2008), that the acquisition of language comes with some losses and that "inadequate Somatic development leaves one susceptible to difficulties constructing meaning and seeing patterns and rhythms in events" (Egan, 1997, p. 202) later on, during the Mythic KU. Is this short transitional and reorganizational period the beginning of those losses?

An additional commonly recognized feature of infants' *embodied operating system* is the speed of learning of infants. Researchers (Xu & Kushnir, 2013) have studied this aspect and concluded that incredible speed or ability to learn quickly owes itself to the existence of thinking processes that involve abstract concepts and categorizations. The study argues for the image of the child:

[The child is] a rational constructive learner, and it sees early learning as rational, statistical, and inferential. Empirical evidence for this approach has been accumulating rapidly, and a set of domain-general statistical and inferential mechanisms have been uncovered to explain why infants and young children learn so fast and so well. (Xu & Kushnir, 2013, p. 28)

The authors of the study promote a new kind of cognitive development – “rational constructivism”. Gopnik’s (2012) research concurs with the abovementioned descriptions of the complex abstract thinking capacities of the very young:

During the 1980s and 1990s, researchers discovered that very young children have abstract, structured, coherent, causal representations of the world around them - representations that are similar to scientific theories. They use those representations to make wide-ranging new predictions. These representations appear to be in place even in infancy, but it is particularly clear that preschoolers have intuitive theories of the physical, biological, psychological, and social world. (Gopnik, 2012, p. 1623)

The CT of *Embodied Conceptualization* offers educators and primary teachers a new outlook on the young children (0 to 5 year-olds); these children are capable of forming theories, have already performed several experiments and extracted data from them. According to research, these young children are abstract thinkers (before the time predicted by Egan – after the acquisition of articulated oral language) for a while, consequently, they are able to ask questions that augment their thinking, even if the connections are invisible to the “adult eye”. Infants and young children understand concepts and are able to use them in new contexts; they have thinking tools similar to scientists, but their thinking is not limited to those tools. Infants and young children can think in abstract categories, and language is not a necessity for this ability. They are able to create the “theory theory” concept described by Gopnik in the following way:

The basic idea is that children develop their everyday knowledge of the world by using the same cognitive devices that adults use in science. In particular, children develop abstract, coherent, systems of entities and rules, particularly causal entities and rules. That is, they develop theories. These theories enable children to make predictions about new evidence, to interpret evidence, and to explain evidence. Children actively experiment with and explore the world, testing the predictions of the theory and gathering relevant evidence. Some counter-evidence to the theory is simply reinterpreted in terms of the theory. Eventually, however, when many predictions of the theory are falsified, the child begins to seek alternative theories. If the alternative does a better job of predicting and explaining the evidence it replaces the existing theory. (Gopnik, 2003)

In the same way, Egan (1997) defends the capacity of young children to think in an abstract way against thinkers that only admit the existence of an ability once the person is aware of it:

The formation of abstract concepts, then, is not the outcome of some conscious process but rather the discovery of something that already has guided the mind's operations. So the absence of awareness of abstractions in young children, or their lack of articulation of, or ability to manipulate, abstractions, is not a sign that abstractions are not at work in their thinking any less than in the typical adult's. The absence signifies only that they have not reflected on their thinking, or are not aware of their thinking in such a way that they consciously deal with the abstractions they use all the time. So the later appearance of abstractions in our language development is not a result of [their] genetically following the concrete but represents discoveries of our long active mental operations by reflection on them. (p. 48)

With new evidence in mind, we could continue his argument and say that the lack of oral articulation of the abstract concepts is not a sign of their absence from the thinking toolkits of young children. Egan continues his argument with another case against the Piagetian influence that was once uncritically accepted by most Western educational systems, and tries to revive the trust in children's complex abilities in order to adapt curricula to this more complex and able view of the young student:

Children's patent deployment of powerful abstractions calls aloud for us to reconsider claims about the concreteness of children's thinking and to reconsider the influence such claims have had on teaching and curricula for young children. The belief that young children are generally concrete thinkers has meant shunning content that seems to involve abstractions, instead focusing on "active doing" and practical manipulation that has made the typical elementary classroom less intellectually rich than it should be. (p. 50)

Connections with other cognitive tools

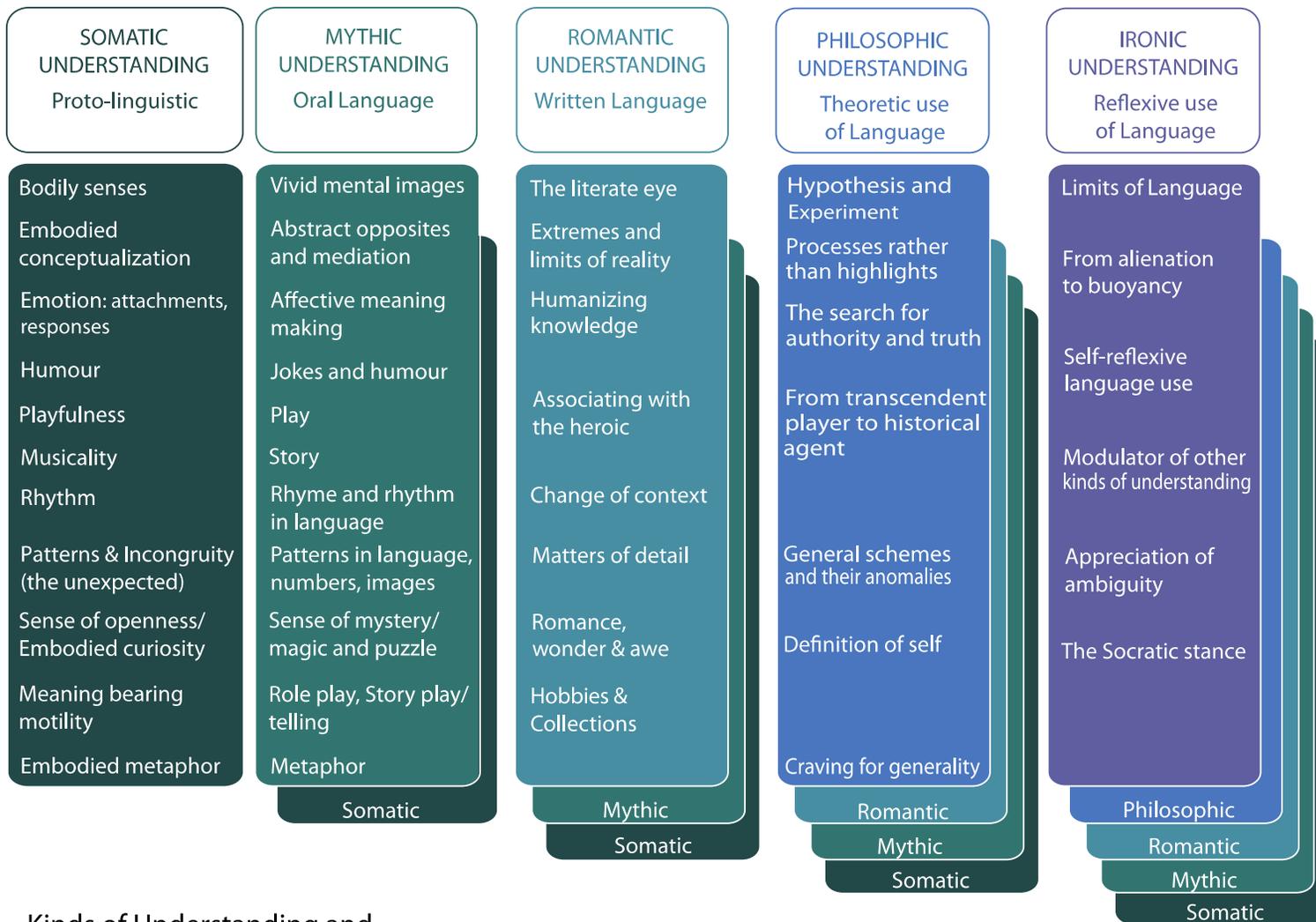
Young children's ability to think abstractly and understand concepts and processes that involve or not the presence of language skills, connect to more than one Mythic CTs. The analogy used by Egan and Chodakowski (2008) while describing the relationship between the first two KsU considers the Somatic KU as the "template" for the next, more complex Mythic KU. In my view, this analogy provokes a mental image of the Somatic being an empty template (trace) that will be filled up by the Mythic augmentations. I

consider the relationship as being far more complex. The CT of *Embodied Conceptualization* grows into multiple Mythic tools such as the *Affective Meaning Making* tool that develops from the body's emotional responses to experiences and self-constructed mediations.

The relationship between this CT and the ability of children to understand and build knowledge upon *Abstract Opposites and Mediation* (Mythic CT) is quite obvious, but not as simple as it might seem. I consider that the binary aspect of abstract thinking is just one small part of the initial capacities of the young child. In this view the Mythic ability will not be a “surprise” occurrence in the sudden oral mind.

This complex cognitive tool of *Embodied Conceptualization* can be considered the birth place of a multitude of subsequent or concurrent cognitive tools: *Emotion: Attachments and Responses* (e.g. ability to form emotional connections and responses to the environmental influences); *Rhythm sense* (e.g. early ability to recognize patterns in sounds); *Sense of Openness* (e.g. explorations and discoveries and their “data analysis”); *Embodied Metaphor* and *Meaning Bearing Motility* (e.g. ability to express abstract meanings whole-bodily and later, conscious understanding and producing of linguistic metaphors); *Generating Vivid Mental images* (e.g. ability to internalize and then externalize experiences, imaginations, and thoughts); *Affective Meaning Making* (ability to discern realities according to feelings, intonations, and expressions of others); and the list could continue.

The image of the connections illustrated on the peacock train analogy is becoming more and more visible and intriguing with every new link discovered. The web is intricate yet organised, busy yet ordered. I hope to have augmented the train with some of the “ocelli” that seemed missing in my image of the complexity of the five Kinds of Understanding and my experience with children. By adding some new cognitive tools to the Somatic Understanding, by modifying some of the ordering, and by replacing terminology, I hope to have built a more comprehensive pedagogical image of the beginnings of being and learning in the world as conceptualized by Professor Kieran Egan. The following image shows the renewed sets of CTs within the layered model of Imaginative Education:



Kinds of Understanding and Some Cognitive Tools – Kieran Egan

Design and perspective by Annabella Cant - 2016

Figure 20 Egan's Kinds of Understanding with reimagined sets of cognitive tools by Annabella Cant

A look back into the present

This theory that became my own practice (starting in 1999), has through the years offered me a platform for personal and professional growth. From the moment when I first glimpsed upon Egan's *Primary Understanding*, my own educational philosophy started to take shape like a silhouette emerging from the mist: I started to believe in myself and my seedling ideas and I started to materialize my dream of opening my own school.

My journey had to start with my own process of unswaddling. As I described in chapter 1, my personal and educational history placed some strong, restricting swaddles upon me that needed to be unravelled before my first steps into my dream.

I unswaddled myself through reflection.

Through this self-reflective exploration, I discovered and identified six fundamental unswaddling themes that define who I am today and also embody my pedagogical practice with young children and adult-students alike: *openness, movement, relationship, trust, identity, and affect*. These very themes seemed to naturally thread through this dissertation guiding my research and analysis toward the genesis of an *Unswaddling Pedagogy*.

In Chapter 2, I invited my readers on a short historical tour of the lives and thoughts of some of the educationalists who mostly influenced my own ways of being and thinking of education. The tour included Pestalozzi, Steiner, Montessori, and Malaguzzi, however, the main "touristic attraction" that I was guiding my readers toward, was Professor Kieran Egan and his theory of education. Chapter 3, starts with a glimpse of Egan's life and continues with a metaphorical introduction of the theory of Imaginative Education and its five *Gardens of Understanding*: Somatic, Mythic, Romantic, Philosophic, and Ironic.

Egan, by creating the IE theory, has provided the educational world with a valuable resource for teachers, teacher trainers, and curriculum designers. In chapter 4, I have taken up his invitation to me, to conceptualize and further elaborate the theory's first Kind of Understanding: *Somatic Understanding*, and the *Cognitive Tools* inherent in order to assure a smoother pedagogical transition of young children from the proto-lingual period

(*Somatic*) to the oral language period (*Mythic*). In Chapter 5, I engage with the *Mythic Kind of Understanding* to build my argument around the need of a more flowing transition from Somatic to Mythic and to support that transition through the reconnection of some of the “orphan” *Mythic Cognitive Tools* to the *Somatic* ones.

In chapter 6, I take on the responsibility of proposing an *Unswaddling Pedagogy*.. I do so by showing the *Somatic Kind of Understanding* in a new, clearer light, by elaborating on existing CTs as introduced by Egan, and by adding my own *Somatic Cognitive Tools* to include *embodied metaphor, embodied conceptualization, openness, and meaning making motility*, in order to emphasize how critical the body is to learning, from the first moments of life throughout a child’s education. I consider that by augmenting the Somatic framework I have re-embodied this first layer of understanding into the wholeness of the Imaginative Education theory. I trust that I have successfully called a careful attention to the rich meaning-making tools already embodied in proto-linguist children when they arrive in early childhood centers, preschools, and kindergartens. I also hope that, by presenting and making visible these embodied emergent capacities of the child, I will contribute to a pedagogical practice that will not look at the early childhood student through a lens of deficit, but through a lens of richness, trust, and endless possibilities.

I trust I have successfully accomplished two key points in my thesis: reimagining the value and the components (cognitive tools) of the first two Kinds of Understanding within the theory of Imaginative Education and conceptualizing and articulating what I call an *Unswaddling Pedagogy*, which is simply a stance, a way of being pedagogically in the presence of children and in one’s own practice.

The first is as illustrated in the table below, where I have inserted and/or reframed new cognitive tools within Somatic Understanding and Mythic Understanding that respect the embodied intelligence, imagination, abilities, and capacities of young children to enact their own learning in the presence of and through the reciprocal loving and caring engagement of educators and parents. I have, in this thesis, sought to respond to Professor Egan’s invitation to speak to the gaps, the ruptures, the absences, that existed between the first two Kinds of Understanding, and in so doing, have come, yet again, to

recognize Imaginative Education as a vibrant, living model of how an unswaddling/non-swaddling pedagogical way of being in the world might be seen as praxis.

Table 8 Reimagined cognitive tools within Somatic Understanding and Mythic Understanding.

Somatic Cognitive Tools:	Mythic Cognitive Tools
☉ Bodily senses	☉ Generating vivid mental images
☉ <i>Embodied conceptualization (Conceptual, linguistic, experiential generalizations)</i>	☉ <i>Abstract opposites and mediation</i>
☉ Emotion: attachments, responses	☉ Affective meaning making
☉ Humour	☉ Jokes and humour
☉ Playfulness	☉ Play
☉ Musicality	☉ Story
☉ Rhythm	☉ Rhyme and rhythm in language
☉ <i>Patterns & Incongruities (the unexpected)</i>	☉ Patterns in language, numbers, images
☉ <i>Sense of openness/Embodied curiosity</i>	☉ Sense of mystery/magic and puzzles
☉ <i>Meaning bearing motility (Gesture and communication)</i>	☉ <i>Role play, Story play/telling</i>
☉ <i>Embodied metaphor</i>	☉ Metaphor

After discussing the proposed additions (cognitive tools) to the Theory of *Imaginative Education*, with the intention of providing scientific and experiential evidence to the complexity of very young children at the moment of entering institutional education, my hope is that I succeeded to enrich the reader's understanding of *Imaginative Education* and its unswaddling pedagogical features.

For the second point, I have traveled back in time and extracted the lessons that I have learned from my two professional passions: early childhood care and education and university education. I took those lessons and unpacked them, one by one, searching for strong evidence in research and through reflection to support what was and continues to be intuitive, experiential, embodied, relational, emergent practice of learning. All through this process, I have been proposing a possible new kind of pedagogy that can take on infinity of various pedagogical forms and shapes: *An Unswaddling Pedagogy*. This kind of pedagogy (as practiced by Pestalozzi, Steiner, Montessori, Malaguzzi and conceptualized by Egan) introduces teachers to new conceptual and practical territories that are meant to release the tensions that define today's Western education (tensions analysed and explained by Egan [1997] as seen in chapter 3). If our models of Education consider each individual child in his/her wholeness, as a complex being who embodies the world: environment, community, humanity, justice, fears, dreams, life stories, care, wonder, and all the rest that brings us into presence, then educators, in their practice will learn to co-imagine and co-create meanings of the world with their students. .By proposing an unswaddling pedagogy, I seek to unswaddle the wings of educators and students alike.

In writing this thesis, I confess that did not release the swaddles in an organized way. I have written my thesis in an a-rhythmical way, because some aspects I sought to understand had 100 loops of swaddling bands to unwrap while others might have had a single loop, but one that began to unravel all that I once thought I knew. Time. I needed time to write what I have come to know so deeply in my heart and through my practice.

Imagining a new beginning to the practice of Imaginative Education has led me to this moment here now. As illustrated in my stories, and through the sharing of my experiences, and my learning through this journey, I can speak to the meaning and practice of an *Unswaddling Pedagogy* through six fundamental unswaddling themes that I have identified; ways of being present with children that I would like to share with all teachers, experienced, and newly arriving in our midst:

Openness to possibilities, potentials, and invisible capacities of infants and very young children; be open for thinking and acting in myriad of different ways;

Movement as an embodied part of all curricula;

Relationship as critical to engaging children and yourself in pedagogical explorations; less weight given to knowledge transmission and regurgitation;

Trust in yourself as a teacher, trust in the infinite potential of all students; show your trust through creating an unswaddled environment that does not fetter the embodied curiosity and sense of wonder in young students;

Identity is critical to understanding who we are as individuals, as educators. Allow your pedagogy to support self-reflection and shared reflection in order to guide students' search for their own identity; allow your identity as an educator, as a fellow traveler to shift with the ones of your students, so that all are welcome and encouraged on a journey of learning;

Affect as source and wellspring of a deep effect on your pedagogy; all learning requires emotions: your own as well as those of your students.

I will not let myself forget the swaddles that started my journey.

I will not let myself ignore their scars – my healing reminders.

I will continue to unwrap myself.

I will continue to practice an Unswaddling Pedagogy to support my students' beautifully colourful fans of feathers.

I will enlarge the doors of my teaching and create an imaginative garden within my classrooms.

I will cherish my students' uniqueness and their complex becomings.

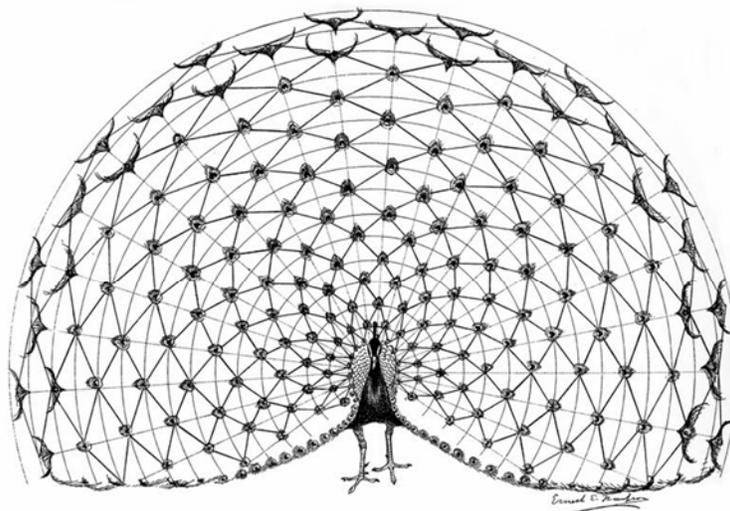


PLATE XLIX. THE PLAN OF A PEACOCK'S TRAIN.
To show the Arrangement when each Feather is present in perfect condition. The plate is $\frac{1}{2}$ of life size.

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