

THE UNIVERSITY OF CALGARY

And women shall bring forth monsters;
Hermeneutic hope for teaching and the classroom

by

Susan Nettleton Marinucci

A THESIS

SUBMITTED TO THE FACULTY OF GRADUATE STUDIES
IN PARTIAL FULFILMENT OF THE REQUIREMENTS FOR THE
DEGREE OF MASTER OF ARTS

GRADUATE DIVISION OF EDUCATIONAL RESEARCH

Calgary, Alberta

March 5, 2001

© Susan Nettleton Marinucci 2001



**National Library
of Canada**

**Acquisitions and
Bibliographic Services**

**385 Wellington Street
Ottawa ON K1A 0N4
Canada**

**Bibliothèque nationale
du Canada**

**Acquisitions et
services bibliographiques**

**385, rue Wellington
Ottawa ON K1A 0N4
Canada**

Your file Votre référence

Our file Notre référence

The author has granted a non-exclusive licence allowing the National Library of Canada to reproduce, loan, distribute or sell copies of this thesis in microform, paper or electronic formats.

The author retains ownership of the copyright in this thesis. Neither the thesis nor substantial extracts from it may be printed or otherwise reproduced without the author's permission.

L'auteur a accordé une licence non exclusive permettant à la Bibliothèque nationale du Canada de reproduire, prêter, distribuer ou vendre des copies de cette thèse sous la forme de microfiche/film, de reproduction sur papier ou sur format électronique.

L'auteur conserve la propriété du droit d'auteur qui protège cette thèse. Ni la thèse ni des extraits substantiels de celle-ci ne doivent être imprimés ou autrement reproduits sans son autorisation.

0-612-64923-7

Canada

ABSTRACT

In this thesis, I explore how images of the monster manifests itself in ordinary classroom events and conversation. What follows is an interpretive investigation of these ordinary events that shows how images of the festival, ideas of performance and even chemical saponification help us understand how classrooms are far more troublesome and interesting than they might first appear. Thus the image of the monster appears herein as demonstration.

ACKNOWLEDGEMENTS

Though this thesis, by its very reflective nature, required a solitary inquiry, it has not been written in solitude or seclusion. It has required the attention, care, wisdom and energy of many to whom I remain grateful and indebted.

Thank you to the many students who shared with me their thoughts and dreams, their disgust and dismay. Their voice here has required the somewhat foreign-to-elementary-school task of sitting stone still, reaching reflectively inward and bravely putting these thoughts in writing. Though there is only space enough here for a small sample of recent students, these pages are laden with the spirit of many who, having long since left the wisdom of childhood, deeply inspire my teaching. Theirs is the poem, the writing, the song, which released the frustration of writer's block, and sent ideas flowing thick and fast off the end of my pen. You have freed the teacher from that which confines learning into *just* a classroom.

To David Jardine, my thesis supervisor. Thank you for the invitation to leave behind the simple harmonic motion of the city rumble-stop, the prairie washboard, and drive wide-eyed into the hermeneutic foothills of interpretive work. Your brilliance in mind, pen and word inspires the reflexive urge to deeply breathe life back into that which we call school.

To Pat Clifford, professor, teacher, mentor, editor and friend who generously encouraged me not *just* to watch, but opened up the classroom doors and supported my first steps into interpretive work. You could no more simply *sit on* a committee than *just* teach.

To Dr. Dianne Tapp, Brenda, Sharon, Lori, Carol, Caroline, and Wendy, midwives of the imagination and intellect, whose gift of time in conversation, question and wisdom have provoked and pushed me into considering new ideas, thought and vision. I thank you.

And mostly I acknowledge the gifts given in the too often taken-for-granted sacredness of family. My parents, Marilyn and Peter, whose unfaltering love and quiet example is in their *being* life-long learners. From the geography lessons of the sink while small hands washed, dried and sang, to lessons of voice learned from the loons of Sawyers Lake, to stand in awed hallowed silence of St. Mary's Nettleton, or know yours is the only university suitcase packed with books, clothes, and an electric drill, *because you just never know when a girl might need one*. These are the primary classrooms, the essential life lessons, and the very essence of who I am as a teacher. To Carlea Rose, my favorite daughter, who even as I write now fills my long hours of study with her gifted voice from horn and piano and unknowingly wove her threads of inspiration into this tapestry. To Nicholas, who came into this world with large build, character and the gift of monstrous voice. Tessitura here is not just in the questions given but in the very passion in which you undertake the world. To Frank, who thought this would never end. You have shown this girl-from-the-prairies, how to love the seas and scents of warm far-off places. Who, though the words never crossed his lips, was cast into a certain *aloneliness*; sequestered to the company of old movies, while I wrestled the monsters of writing this piece. You are my prod, my comfort and the sacred pleasure essential in a life long partnership.

DEDICATION

To courageous teachers everywhere who bravely step into what we know as school, dare to bring forth the monsters of change, and create generous imaginative classrooms of possibility for our children, the future.

TABLE OF CONTENTS

APPROVAL PAGE	ii
ABSTRACT	iii
ACKNOWLEDGEMENTS	iv
DEDICATION	vi
TABLE OF CONTENTS.....	vii
PREFACE	x

CHAPTER ONE

The Sea Shall Cast Out Its Fish.....	1
Elegance in Trouble	1
A Beginning at the River.....	2
They Have a Plan and You Ain't Going Back There.....	4
Selecting and Surfacing.....	6
Procedural Plunge	9
Locating a Craft.....	10
Mercury Signs Off.....	12
Testing the Waters.....	17
A Play on the Wickedness of Undone Sums.....	18

CHAPTER TWO

. . And Make a Noise in the Night.....	20
Part I: Monstrous Claim: A Festival of Lost Word and C(h)ord	20
Some New Field of Vision	21
Loss for Words	26
The Unkindest Cut	28
A Lost C(h)ord	29
Part II. The Festival Returns	32
Sounds Unnatural	33
Adjudicating Historical Space in the Festival	34

CHAPTER THREE

. . . There Shall Be Confusion Also in Many Places	40
Meeting Foremost in the Fields.....	40

CHAPTER FOUR

. . . And the Fire Shall Be Oft Sent Out Again	52
Spelling Space and the Importance of Being Ern/honest.....	52
Miss Sands	52
It Was Some New Damn Thing	55
A Finger Flogging from the Pharmacist.....	56

CHAPTER FIVE

. . . And the Wild Beasts Shall Change Their Places	62
Exothermia: A Monstrous Play in Lye(s)	62
Secondary Reactions	64
The Soapers	66
A Monstrous Pronouncement.....	69
The Monstrous Tale of Trefoil.....	70
Watching and Splashing.....	71
An Other Announcement	73
Teaching Focus	78
Surfacing Tension	80
Danse Macabre.....	83
Cooling the Heat.....	85
Exothermia: The Potential Heat in Patience	86
Pure Chemistry	88
Tracing the Splash of Recursion	88
Changing Places	89
First Batch	92

Chemistry Telling.....	94
The Monstrous Reduction	97
Demonstrating Caution	98
Calling Up the Monster	100
An Opening Invitation.....	103
A Report on Soap	105
 POSTSCRIPT.....	 109
 CHAPTER VI	
Finale	111
Necessary Difficulty.....	111
What's Missing	112
Where Go the Monsters?.....	112
Hope	113
 REFERENCES.....	 115

PREFACE

Apocrypha

***The Sea shall cast out its fish and make noise in the night.
There shall be confusion...and the fire shall oft be sent out gain;
and the wild beasts will change places;
and women shall bring forth monsters.***

(2 Esdras, chap V, 7-8)

Like the story and place into which I now invite you, the nasty little quote above presented, provoked and persisted its way through the writing life of this paper. “Why monsters?” my mother asked, “Why would you title your work women and monsters?” The answer is simple. It would not go away. There was a time when I thought that monsters were what composed my scholarly pursuit. And so it should not be remarkable that an odd little book, entitled *The History and Lore of Freaks*, (Thompson 1996) found in a used bookstore in no place British Columbia, should find its way into my reading. But in fact, it is remarkable. The naughty quote enclosed was actually missed, a *misquote*, hidden from sight as it were, the first time I read what appealed. Not ever the full gaze, nor some sole source of inspiration, rather it just presented one lonesome night reading. Or more correctly, it jumped off the page, full of its sassy boldness, its outrageous claim (as if only *women* can bring forth monsters) annoyed and demanded a persistent visiting and revisiting. There was some monstrous call in the words. Though I returned it firmly back to its family on the

shelf, it summoned me, and I recalled David Abram's (1996, 52) writing "... it beckon[ed] to my fingers, and ... call[ed] to me from the shelves, ... asking to be read more deeply." There was in this confusing chaos of fish, fire, beast and monster something substantial, something too good, too important to overlook or forget. Like many before me as it turned out, 2 Esdras V in Apocrypha, had staked an unmistakable claim; it had its way with me.

According to Webster's Third New International Dictionary, the word apocrypha has its roots in the Greek word *apokryptein*, "to hide away", and *apocryphus*, which means "secret or uncanonical". How intriguing; a book whose title announced hidden secret contents. No wonder it would not go away! Somewhere between 380-390 A.D., the good scribe, St. Jerome, set about translating the *Septuagint*, the commoner's bible written in Greek, into the *Vulgate* bible, which was to be written in Latin (Encyclopaedia Britannica, 2001; Catholic Encyclopaedia, 2001). Translating made St. Jerome the priest become the messenger, his work was the literal interpretative act. In doing so he bumped into important audacious bits that he knew were substantial. Too good to forget but unsure of what to do or where to keep them, St. Jerome collected and named the works Apocrypha, a place where works of dubious origin and questionable thought could be kept but not forgotten (Saltet, 2001). This got him into trouble and controversy, but that is another story.

The quote given, probably written in the first century A.D. (Rebold Benton & DiYanni, 1998, 212), was written by Esdras (or Ezra), another priest and scribe whose writings were considered so dubious and unsanctioned, that "they can hardly be relied upon, as they relate rather the legendary tales of later age." (Souvay, 2001).

Esdras questioned the approved doctrine and quarreled with the leading thinkers of the time; his writings were nothing less than controversial. There were jail terms, suspicious divine inspirations in the desert, and a highly contested composition of ninety-four sacred texts all from memory (Reid, 2001). Esdras assumed gigantic proportions in the minds of the people (Souvay, 2001).

But it gets better. Biblical interpreters, avoiding the uncontested definitions, the quick grab and flick of dictionary and encyclopaedia, have attempted to touch the other, locate the controversy glowing around the text. Apocrypha appears readily and liberally as (strangely enough) “hidden away,” in reference to what is commonly called “dubious” (Encyclopaedia Britannica, 2001), “contested” (Webster’s Third New International Dictionary, 1996), or of “pretended sacred books” (Reid, 2001). But in delving deeper, Souvay and Reid suggest the stories “were to be published openly, but the remaining were to be guarded in secret for the exclusive use of the wise” (Reid, 2001). Somehow “the exclusive use of the wise” has been taken up as *exclusivity*, to exclude, to mean a constrictive, reductive and monstrous thing. They were to sit and wait, awaiting invitation, waiting in all their secret hiddenness to be opened, read, to be taken up and brought forth.

Reid and Souvay suggest the apocrypha, when given the luxury of its relations and the generous historical space it deserves, was not unfavorable, but when

simply denoted, (it is) a composition which claimed a sacred origin, and was supposed to have been hidden for generations, either absolutely, awaiting the due time of its revelation, or relatively, inasmuch as knowledge of it was confined to a limited esoteric circle.
(Reid. 2001)

In tracking down the current local understandings of the quote, my Jewish orthodox friend, said “It *has* to be new testament, no rabbinical scholar of the Hebrew bible (old testament) would ever write such nasty outrageous things!” As it turns out, apocrypha is and is not in the bible, it depends on who interpreted what, on who got to say, on where you are in time and history. Or more correctly, when (the book of) apocrypha appears in bibles, it is (most often) found not just in the old, but hidden in between the old and new (testaments) (Souvay, 2001). It seems people just do not quite know what to do with it.

I could not help but remember and reread the course descriptors for my first Gadamer class. Hans-Georg Gadamer, the grandfather of contemporary hermeneutics, who is quick to point out the historical links (and criticism) of interpretation and biblical hermeneutics, (1998, 19, 181). It was as if Esdras’ words, laden with all its controversy and historicity, were becoming the example, a case for hermeneutics.

Interpretation has an intimate relation to pedagogy: it is concerned with the relation between the old and the young, between the new and the established, between the intermixing of traditions that house us and the unique, individual voice, between the text(ures) of human life as a whole and the “fecundity of the individual case.” (Jardine, 1999)

Yet there they stand, two thousand years later, remarkably fertile, as ever in your face, even though generations have taken from, molded and added to its descent. Its persistent versions are still here, threading us back into our ancestors and at the same time poking new holes, monstrous space for threads of the future. Esdras pushed the limits, wrote outside the rules of his time. He, like his words, and those of the good translator, St. Jerome, opened things monstrous.

So monstrous were the original words of Esdras, that over the years many edited, tamed, and *reinterpreted* the original. In fact, the original quote reads, “and *menstruous* women shall bring forth monsters” (University of Michigan; 2001; Catholic Encyclopaedia, 2001). How audacious of Esdras, whose certain understanding of Jewish law would have furthered the outrage of writing such words. Menstruation stands as a taboo topic, yet it lives as another messy little secret that woman know and embody. Though secret and hidden away, menstruation returns full of all its fertile promise, its generativity.

How interesting that the author of *freaks and monsters* actually edited out, tamed down as it were, the Esdras quote. Thompson (1932/1996) too, by his very omission is now implicated, cast out from his comfortable sea of the English language and British culture, stung by the fiendish path of Herme’s arrow, caught red handed in a misquote, yet another *missed* quote of interpretative reduction. And so there is no choice, no other place for 2 Esdras V; it lies hidden in it’s ancient fertile promise, “prized, tolerated, and excluded” (Encyclopaedia Britannica, 2001), “awaiting its due time” sanitized though it may be, splashed in front of and threaded throughout this work.

I come back to my mother’s words. Why monsters? How awful to title something that has so consumed my pen and mind for such a long time. The answer is simple; it will not go away. However it is *not simply* that it will not go away. Esdras though secretive, hidden, and misquoted, is here in this paper. It is as Esdras says, about women bringing forth monsters. It is about the work of women, women’s work and what the women know.

As an elementary school teacher, mine is almost exclusively a woman's world, the work of women. I have gone for years in my career and never once worked, on a day-to-day basis with a man. Elementary school for the most part is women's work, and what follows are images of this woman's work, glimpses of Esdras, of the unintended, the hidden secret. What shows depends largely on what is brought forward, and what shall remain hidden, of monsters that have presented right in the middle of an elementary classroom. What follows are seemingly simple stories of a woman's work, from the eyes of the child, the teacher, the mother, working and remembering the monstrous *demonstrations* in subject, child, and task.

It is that first step inside that is monstrous. For once taken, there is no forgetting, no going back. You cannot *un-know* where you have been; backtracking is not the same as never accepting the invitation to step up, step inside. While there is a huge territory of images that could be generated, I have set out not to wrestle all monsters to the ground. Rather, I bring light to the subject of learning by selecting a few persistent stories, ones that simply will not go away.

In doing this, there is difference. As you will soon see, having previously conducted traditional statistical research, I know what these papers usually look like. Esdras has required a difference and there is no other option than to tell by conversation, by examples of this woman's work. Finding the work of Lorri Neilsen was a powerful demonstration of another way, of a difference between empirical and interpretive work.

If I am truly to be response-able, the most productive conversation ought to occur not only between me and other similarly-conflicted researchers, but among all of us collectively engaged in such research.

(Neilsen 1998,111)

In the front of each chapter, I attempt to show, to point to but not out, demonstrations of things monstrous. Though they may link us back to that which disturbs and unsettles, it is this very perturbation that frees and releases the possibilities of due time, of its revelation. As author, I too am implicated, engrossed not just in the unraveling, but a purposeful letting go of some things, so that others show their firm stance; charmed by the threads of what new space is opened. Given as Esdras found me it in it's current sanitized version, this paper is an open invitation of the secrets, a step inside the simple, messy and exothermic learning life, in a time as Esdras so bloody mindedly put it, "when menstruous women shall bring forth monsters."

CHAPTER ONE

The Sea Shall Cast Out Its Fish

What of a time when the very life giving stream, the sustainer, the life-giver not just releases or gives up its children, but rather boldly ejects them? Watch now what happens to the waters when the teacher is pushed to know-it-all, to plagiarism, and promoted out of their work.

Elegance in Trouble

*Through the fogs
of this distant vale,
we look back and upward
to the source of song---
whose crystal stream still ripples
in the clear atmosphere of the mountain side.*

(Henry David Thoreau, cited in Kullberg, 1993, 91)

This paper proposes a hermeneutic inquiry into the trouble surrounding teaching and learning in the twenty first century. It is an attempt to look at what is caught in a slice of time; current versions of the beauty and struggle inside the ancient art of teaching, with the subject of teaching and learning, of *being* teacher. The invitation of opening these images has come through hours of careful consideration of a few telling stories, narratives that refuse to leave. Stubborn, persistent stories that have unknowingly stuck to and become part of the teacher, parent, student, educator that I am.

While the tales look like they gather around notions of spelling, music, mathematics, and chemistry, “it” is not just about these anymore than a sharp pebble could just be about the insult it imparts on a bare sole. Rather, it is about the spaces opened when child, parent, student and teacher carefully open and step into the messy

fray which is left showing. A simultaneous peeling back to open up. Somehow the monstrous beauty and horrific elegance of the subject given are lost and forgotten. This paper opens a space for learning and teaching with all-aged students; an opportunity for the subject to open up, interrupt, take up, interpret and perform.

A Beginning at the River

For the past twenty years I have been an elementary school teacher. It has been a rich and colorful journey, a winding path through heart-wrenching low points, elevated moments of pure magic, dramatic turn-arounds and many a switch back. I knew very early in my teaching career, at my first professional evaluation to be exact, that I wanted to contemplatively explore what it meant to be teacher and learner. The two have been and are inseparable in my work. The frantic rush of teacher's college to force every cell to absorb "it" all in eight short months left me panicked and exhausted, yet strangely inspired. Only in the naive innocence of youth would one ever undertake the seemingly insurmountable expectation to stand and deliver-it-all, agreeing to lead the vibrant minds and energetic hands of thirty trusting souls. Never was there the time to look critically, to be critical. No time to look with careful eyes at the fruits of my teaching and learning. No time to write. It was survival.

As an energetic twenty-four year old, I was keen to push the professional boundaries of what teaching/learning looked like. My principal at the time confirmed what I had long suspected. Parameters of the profession seemed horizontal, with a kind of sealing that opened with the acquisition of numerous leadership development courses and the production of workshop, report and/or manual. Rarely was there talk

of the rich intimate contact of the front line, of where student, teacher and subject intersect. Professional development and leadership in education was a move away from students, where focus could be given either to curricular specialization or administration. Leadership was synonymous with “moving *up* the administrative ladder.” What was implied but of which few spoke, was that in the moving up there too lay a hideous separation, a severing. Moving up was really a motion away from the critical intersect of teacher, student and learning. A move that pulled teachers from the work that inspires, away from the young minds that feed, the subjects that nurture and an energy that encourages. The common promotional model in educational leadership, the system reward as it were, for excellence in teaching in public schools is to take those most successful in the classroom and sever them from the critical threads, the dynamic contact points between child, teacher and subject. The model then further immerses these select few in the work of office management, time tabling, scheduling, staff relations, financial planning and administrative.

It is like selecting the best grapes from the classroom vineyard, not to toast the promise of fine wine, the fruits of good teaching. Instead, the classroom’s finest, now strangely admired for little known characteristics of color, correct shape, and firmness, are placed in the show piece fruit bowl of the front office. The critical work, lost from the roots which feed and vines which support, start to look different, be called something else. The very fruit of classroom teaching withers away, neither teaching nor learning, and gets mashed into the fermenting pulp of report and budget, office management and staff evaluation. Though in service of the larger organization, nowhere could I see fertile ground to grow richer practise in teaching or learning. Not

wanting the other, I remained firmly rooted to the vine, to opening up the space, creating the image of teaching and learning in the constantly changing climate of the classroom.

Time has generously afforded a variety of diverse learning opportunities and circumstance with arms-length dabbling in both administration and curricular specialization. Never in my career have I felt my work more corrupt than in the promotion to *resource* teacher,¹ the work of which, were it not for the intervention of a creative administrator, could have consisted of the monotonous litany of standardized endurance test for impoverished readers in service of referral documentation for further (external) testing. Some suggested that *resource* was a venture into the other, an opportunity to view learning/teaching from new perspectives. Resource, a generative rebirth in practice. Nowhere in the work of testing could I locate the surging spring for scholarly pursuit in relationship with children and subject. Rather, resource work was a movement away, a necessary disruption. It was a professional caution and grave warning of places I knew I could not go for any length of time without doing damage.

They Have a Plan, and You Ain't Going Back There

The newest technology consultant arrives late to the invitation. He is a keen, ruddy-cheeked young man, armed with the latest cellular tools-of-the-palm. Absent-mindedly he strokes his plasticised self portrait clipped carefully to the jacket of his

¹ A learning support position which typically does not involve responsibility for one classroom of students.

administrative suit. Having not yet seen thirty, his spirit, like the belt that can't restrain his gut, bursts with the possibilities of being a handsome male educator in the Year 2001 "Watch him," they whisper, "He will go places." The blush of this recent promotion colors his youthful enthusiasm, excuses the lost thought, the verbose ideas and naivety. I invite him to tour our site, meet senior officials from Alberta Learning, visitors to our school. After tour and discussion with children, Ken says, "I miss the students. I really need to be with the students. You have no idea how good it is to be back working with kids, teaching. Today's visit has reminded me how much I can't wait to go back to the classroom." Silence sits thick amongst the young man's naïve words. The group looks to the senior visiting administrator. He looks down and gently scuffs the floor. Ever the diplomat, he offers he started teaching in 1965, some thirty-five years ago.

Given the current teacher shortage and scarcity of administrators, we know his teaching days are over. He will soon administer policy and program, staffing and budgets, improvement plans and deficit financing. In the rush to connect to wires, programs, partners and meetings, he may not notice that students have become further away from his daily work. Yet when standing right there in the middle of kids and questions and subject, he knows his loss, what has been lost. And the rest of us witness what is lost to the profession. His career of making a difference with children, as we all know it, is over. Promotion has cast him out of the seas of teaching.

Leadership in teaching seemed to speak of a strange power play where those who made a difference in the profession were actually encouraged or empowered with less opportunity to teach, less contact time. What I was told and what I imagined

back then as leadership in the profession, is very different than the inquiry I now embark some twenty years later. Leadership, no longer a premeditated *upward slide*, but rather a conscious inward exploration of the self I know as teacher.

Step into the same river twice, and its waters will be different.

*(Heraclitus, Greek Philosopher, 6 Century B.C., cited
by Margaret Visser, 2000, 10)*

This journey has been a path of stepping stones bathed in the current practice of student and teacher interaction. Those stones touched are lively with traces of the moment and simultaneously cleansed by the flow. The rushing brook, this life giving work of learning and teaching in relationship, buffs the edges of the rocks beneath, quietly changing, polishing, reducing the cornered stones. These stones invite questions around curriculum, leadership, praxis and procedure. The questions I now pose inside the educational current look very different than what I thought they would be back then. I wonder of the newly created spaces, of things passed over and unsaid, of monstrous waters we'd rather ignore, of the moments where water and stone collide.

Selecting and Surfacing

For we have all known the river by the breathless gasp as timid flesh braces the icy flow, the music in the lumpy grind of a pocketful of rocks, the shooting pang as the jagged bottom pierces a tender soul, the sensuous touch of pebble in palm. These are events that open the possibilities of knowing, unplanned and uninvited though they may be, and inform a subject.

In wonder, the temptation has been to pluck a lonely rock from the stream, pose a question, and examine it under the educational gaze. Yet there is peculiarity and dismay at that which surfaces. It is as if that which the knuckles clutch is never quite what you thought you thought you grasped. The very act of posing a question, of bringing something to the surface, is an act of isolation, an act of forgetting something else. Dislodged from the contextual foundation, it looks different because, in its isolated form, it lacks relations, informants. What I thought I saw while peering through the current, is never like that which is grasped, pulled out, held up. The very act of posing a question, therefore, begets an isolation and certain blindness. Like the questions that keep formulating, the rock in the river never resembles its dislodged likeness in hand.

This then becomes the venture. How to honor the river, to locate the questions, knowing that something must be forgotten so that something else fills the stage. It is a dynamic and recursive discovery. The questions, like the seemingly dull, colorless rock that the riverbed gives up, are meaningless without the flow of the river to color and inform them. We know, yet forget, that the rocks to which our eye is drawn on the riverbed, are *of* the riverbed. They are attractive and interesting because of their location, their relations to the other. We know, yet forget, that in their attractiveness they are also wet and slippery, cold and dull. The lens of the river becomes invisible, forgotten. We could not proceed without this necessary forgetting. In the forgetting there is permission to move, to purposefully immerse, to carefully grasp, to bring something forward with care. The opening of a question presents the unexpected simultaneously. There is the shock that to reach down, in fact, requires

the frigid plunge, the bodily feel of clinging sleeve, numbed parts, of being wet. There is satisfaction in the fumbling, gripping, locating and joy in the grasp, the catch. There is excitement in anticipating the opening, and often disappointment in not recognizing that which is held. Once dripping in hand, removed from the waters that inform it, the rock, like the question, has lost all memory of elegance. It is dull, colorless, and hard; not what you remembered, not what you thought you were getting. Yet there it is, full of memory and telling. This is the opportunity, the moment that new space is formed. The questions are meaningless without the flow of the river to color them; they are opportunities for openings.

Yet, close examination of treasure is revealing, the picking up of just one stone reveals more than it hides. Once taken, the riverbed is forever changed. Just as a passing conversation, a piece of writing, a glance, a flippant comment, a work of art, these are all a telling of a subject, a part of the river. It is in the immersion, the being there and available to openness that informs us.

This paper opens five tellings, events that over the course of my teaching life both persist and irritate. Over time some, like gum stuck to the sole of your shoe, have become flattened beyond recognition. Yet they persist and irritate, begging extraction, demanding examination. They are there, a part of who you are whether or not you willfully reach down and attend to what will surely be a sticky mess. I have not avoided the messy nasties, rather I have invited the irritants. The venture here is of opening the journey of a student, the education of a parent, the transformation of a teacher.

Procedural Plunge

Much of my journey these past three years has been finding a way in which to proceed, bringing a subject to life without dislocating it from the river, honoring it with the stories of those that sit inside and inform it. Accumulating not just a rock collection, but a few simple stories from the river of teaching and learning, which cause me to pause and consider carefully what is revealed.

In the midpoint of my career, that which is meaningful is not movement away from the grit of classroom learning or the creation of position or polished product. I intend to locate not necessarily the gems of the river, but a few telling pebbles which open and compose possibilities around the subject. These stories contain critical moments that stubbornly persist and are all too easily lost to the roaring gush of the stream. These are the milestones, the markers, the fish that the seas shall cast out.

*In deciphering and interpreting, a miracle takes place:
the transformation of something alien and dead
into total contemporaneity and familiarity.
This is like nothing else that comes down to us from the past.
The remnants of past life
—what is left of
buildings, tools, the content of graves—
are weather-beaten by the storms of time that have swept over them,
whereas a written tradition, once deciphered and read,
is to such an extent pure mind
that it speaks to us
as if
in
the present.*

Hans-Georg Gadamer 1998, 163

Locating a Craft

Over my sabbatical year I attended many interpretative inquiry classes and without exception, left each filled with a sense of awe and amazement. Despite confusion, bewilderment, and a distressing sense of perplexity, I remained intrigued, often overwhelmed with the thoughtful, elegant openings this invitation, this manner of proceeding, extends.

Much of the conversation amongst the graduate student is tinged with hints of the work inherent in the pursuit of a thesis. Graduate students introduce themselves inside the compacted frame of professional histories, and always follow by frantic inquiry “Have you started?”, “Who is your advisor?”, “Can you do this work?”, “Where are you in your research?”; the personal introductions mere warm-up formalities before the big questions probing the real work, the subject, the thesis.

Impatient and not entirely sure of the interpretative way of work, I captured an obviously convenient, very correct and available subject. With help from the text and teacher, I promptly pegged it down in the formal proposal format well within its deadlines. Yet the very preparation of the proposal, the stating of that which would sustain and consume my academic gaze for the upcoming years, dissolved before my eyes, strangulating any attempt at meeting the subject. My first snatch at the stream revealed little more than a soggy clump of leaves and fist full of water. What I grabbed in my impatience opened nothing but waste, not even a revealing pebble.

And so I withdrew from the current and retreated to those familiar places of *researching*; the bookstore, the library, the study group and yes, the world of

statistical analysis. I dusted off the vaguely familiar quantitative research method so dominant in my previous research life. The land of the null hypothesis, and Type I error, a tight narrowing down of variables, removal of history, trimming away possibility, and collecting that which did not even remotely resemble a rock, let alone a glimpse of river life. And like the behavior of nothingness, the work oozed its silly self out and slid like jelly nailed to a wall. The subject was not about deadlines, formats or that which is amiably malleable. No, this work demands the patient invitation from inside the work and arrival of something, which claims pause, and invokes careful thought and deep consideration.

“Can you do this work? Will you do this work? What if. . .” were questions that spun dreadful black holes, haunting my restless sleep. “Can you proceed in this fashion?” “This work is so difficult.” “Why not choose a subject in which you have expertise?” The questions continued and provoked my survival intuitions. I came to hate my stumblings, my inability to give the short answer to “What *is* your thesis about?”

And so it was, while enduring a three-hour seminar, a required review of statistical protocols, I found myself wondering what possibilities such contrived manipulations could evoke. What stories were being told and retold in their tidy, sheer impersonality? What mathematics was doing to this group of educated adults, what performance being played out? It was as if the interpretative way of living had set its roots down deeper than I knew, and I was in its clutches. It was mathematics that curled up, like the instinctive circling a nesting dog carves with its warm furry

body, a backbone establishing space, cleared in the middle of the graduate class of probability.

Mercury Signs-off

*If the sphere of the logos represents the sphere of the noetic
in the variety of its associations,
the word, just like number, becomes the mere sign
of a being that is well defined
and hence
preknown.*

(Gadamer, 1998, 412)

A week later, on a sunny afternoon, mathematics came bounding through the front door, ball capped and sneaker clad, wind blown and hungry, bright-eyed and firmly in the grasp of our eleven-year old son. "Here!" said he, awkwardly thrusting the freshly penned test into my face, "It's math!" A certain dismissal in the jaw, eyes averting mine, hiding perhaps disappointment and certain bewilderment. And then the pause, known only to those intimately attuned and experienced with the subject, that mere nanosecond filled with the lamentive sigh that tells all.

"I did bad Mom. Just sign here," eyes cast downward. "It's OK Mom because the class average was 70%," as if it were I who required a consolation. "Miz Hooper just didn't know what would be on the test. None of us knew the last page Mom. She forgot to tell us about 'n'. Mom. You know that 'n' Mom? Well none of us knew it. It's unknown. Miz Hooper said it was a surprise to her, even *she* didn't know it. None of us had ever heard of 'n'. None of us knew the unknown. . . *Sign here.*" sign off.

As that which demands the parental signature arrives home in thousands of North American homes each night, cloaked, though it may be, in the colors of other

circumstance, this event has acted itself out millions of times over. On this day, something was different, something caused me to pause and take heed. This was not just a mere snippet, part of the paper blizzard, another thing to sign-off, in the complex and busy life of a math student coming home to family, a child in a post-modern world. No, something addressed me, staking a claim. "None of us knew the unknown, that n ."

The incident struck me, something perturbed. Speechless at the way these words addressed me, my heart pounded and some invisible cinch tightened. I knew of that which he spoke; this feeling of being lost, this bewildering resignation with the unknown. There was pause with gasp, not of the horrific nature, but with deeply furrowed brow and scratchy muttering nods of "Yes, yes, I know that feeling". Woven with it the ominous comfort that evidently there were others, teachers and students, young and old alike that also knew of this being lost with an unknown, an " n ".

The incident repeated, not like onions from the salad, but in subtle permeation. Like hearing new music in old words, they are new when viewed from a new horizon. Though the topic given was mathematics, it could very well be spelling, art or music. The subject took on a life of its own, weaving its threads through many a conversation, an exasperation, a story, a look, a moment, an argument. I found my watching colored by this incident as I went off to school, talked at length with other students, listened to graduate colleagues, dialogued with other math teachers and attended parent meetings.

The arrival of this statement, this all too familiar vacant nodding, had tinted my seeing, splashed a faint mist of *something* unknown yet known to many, in the work that I undertook. The misted tint did not mute or obfuscate that which had arrived, on the contrary it was as if these other locations forced the ideas to take on a certain sheen, a messy brilliance, a new look, a new meaning.

It was as if this unknown, this bewildering “*n*,” needed both time and space to locate itself.

Something perturbed, this *unknown* began to fill my gaze the second my eyes relax from the dividing line on highway, played havoc with my quiet times, its versions fill my journal and my in-between sleep was not without performances of “*n*.” Some demanding *unknown* had arrived, taken grip and was clearing a space for itself. “*n*.” My quiet times became very full, laden with sorting, filtering and teasing out what this unknown was and was not about. There was so much enfolded in the words, so much happening. It was as if the complexity of this “*n*” of mathematics required a paring down, a reduction to expose clearer possibilities.

The teacher just did not know what was on that test Mom!

The interpretation was revealing where the emphasis lay. Was this perhaps about the difficulty in formalized testing?

The teacher just did not know what was on that test Mom!

Many a careful teacher has been brutally humbled by the text or structure of a prefabricated test. The sensuous allure of a “ready-to-go,” (probably) standardized, print perfectly spaced, groomed and culled, and (no doubt) content appropriate. Yet, there are times when this test, the instrument, contains more, knows more, demands

more than that which the subject (is it *just* mathematics?) or any of its participants can give. Howls of “We never did this!”, “That’s not how you showed us”, and the (now) familiar “Ms. So-and-So forgot to tell us (that, when, how to . . . etc)!” Anyone who has ever taught for any length of time knows only too well the dregs of self doubt and worthlessness at the bottom of that pit. The incident reminds us of the care necessary in the formulation, the composition, even the careful photocopying, necessary in such a menial task. For when it is ignored or minimized the unknown connects us to the consequences, the horror of being responsible for another unknown.

While some come to see this test performance as an opportunity to succeed, a measure of knowing, it is far too often that that which should celebrate the knowing, squeezes it out and chokes off any opportunity for the sharing of knowing with the world. Tests of this nature are full frontal encounters with not knowing.

Comme-on, just sign here Mom.

I knew only too well the basic necessity of making sure work was shared between home and school. The technique, the demand of having to have the test paper signed, archaic though it may be, turned the boy into messenger. It was as if Hermes² himself had hand delivered a mathematical message to our kitchen table. This dark haired Mercury,³ sandal clad with hat and lyre, this naughty roadside devil, presented a gem of a pebble and evoked a certain play.

² The youthful Greek god of shepherds, travellers, thieves and merchants who forever plays mischievous tricks and tells white lies. Though not the most honest of the Olympians, he was the chief messenger of the gods who interpreted events.

³ Mercury is the Roman name for Hermes.

I found myself turning to a well-read passage in Parker Palmer's, *The Courage to Teach*. In a poignant section on page 9, this skilful teacher/author/professor succumbs to the seductive edge of self-doubt. "Might it be possible, at my age, to find a new line of work, maybe even something I know *how* to do?" This written after a disheartening class in which, despite engaging the tried and true methods, no student spoke or participated. Is this not yet another encounter with "not knowing?"

Like the test, the class that bombs, or the room full of mute students, the unknown is not about the (content of the) bag of tricks that we accumulate, or the texts we use, or the tests we decided to photocopy. Is it not the endless fumbling around, this banging into things which stun momentarily, that this teaching life demands? It is about my "ability to connect with my students and to connect them with the subject, (which) depends less on the methods (or tests) I use than on the degree to which I know and trust my selfhood – and am willing to make it available and vulnerable in the service of learning" (Palmer, 1998, 9). The event opens the intimate vulnerability at the very space created where learner, teacher and event, be it a test or a class, connect.

It was as if the arrival of this test marked a passage, opened a portal. It had little to do with the actual paper displaying a textbook reproducible with scratches, check marks and passionate erasure that evidenced human encounter. Rather it was as if the return of this paper was a homecoming; some kind of *testament* to mathematics.

Testing the Waters

Test has relations to the word testament. It comes from the Greek word *testari*, to be a witness, with roots in *tres* or three, and the Latin *stare* to stand. It could be said the test was a kind of witness standing by as a third party. Or put another way, the test was voice to mathematics, a removed or third party witness, standing by and watching, and opening.

And the very event which disturbed and opened around the kitchen table, furthered a nasty little path of provocation. As I penned the draft of this event and shared it with fellow students during a graduate seminar, something was provoked, disrupted. My writing the “n” and its *being in the world* evoked more than the usual comments of polite interest and controlled curiosity from peers. There was the breath of some strange gnawing thread weaving a co-disturbance, a contiguous irritation. When I directly asked them about their reaction, they were hesitant and paused. The expectation of who’s going to say what first.

“Its just that hermeneutics stuff, that spell you talk about. I don’t know. I could never write like that.”

“Oh I recognize the subject of unknowns from somewhere. Was it Gadamer? It is, isn’t it?”

And when fully pressed, and further addressed:

“Well, oh, this sounds just like David Jardine’s [my thesis advisor] piece we read in a class I took last year. You’re starting to think like him; “it’s sorta Jardinian.”

“Yah Susan, you told the same story as him, his story.”

Turning scarlet in the moment, my blush was a burning reminder of what was being presented. Aghast at my own incompetence, I was suddenly cast into the heated innuendo of plagiarism. There was somewhere, already a version of another telling, “unknown,” they had called it. Gadamer’s (1998, 457) discourse with *aletheia*⁴ came to mind as I wrote and rewrote this, about not just presenting a word, a truth, but the agony of opening up.

I went home and thumbed through the great pile of articles on my desk, in my drawers, filed away. And there in all its beauty, third from the bottom of the articles “To Read” box, lay a wicked little paper. “You can’t possibly read it all anymore than you can know-it-all,”-consoled a classmate. Like Hermes himself, little x slipped out the keyhole like mist in the autumn air meeting perhaps on the desks of other students, in the discourse of other teachers and on the lips of other parents.

A Play on the Wickedness of Undone Sums⁵.

“Oh just go write another story,” was one classmate’s advice.

“Don’t even go there” was another’s.

Tempted by the path of least resistance, taunted with how easy it would simply be to just press delete, I longed to turn my back on the disturbance and pretend this strange fluke never happened. Yet how does one ever get started if you don’t edge out? look over, cast out, give up your fish; versions of nothing will be opened. And they had.

⁴ Aletheia, from the Greek word meaning truth, of when a word presents as being itself.

⁵ Jardine D. & Friesen S. (1997).

The events were not the strange coincidence of sons with unknowns, returned, not to their respective authors but, as James Hillman (1994) says they are, *returned to the Gods that made them*. This is the hermeneutic working out of things, the agony of understanding by furthering the event, by opening up, not deleting the discourse .

CHAPTER TWO

. . . And Make a Noise in the Night

Imagine someone offhandedly using the word “castrati” almost to name one of our children? If “*the [music] Festival exists only to be celebrated,*” (Gadamer, 1998, 124), what then of this gut that writhes and pukes?

Part 1: Monstrous Claim: A Festival of Lost Word and C(h)ord

I arrived early at the Mathematics workshop, thankful to be alone in my misery. Held not in a familiar school classroom, this conversation was being conducted in a fine but very foreign business boardroom. With wobbly legs now firmly seated in a soft upholstered chair, I pondered the speed required to prophalatically reach the lavatory. Protesting something far greater than a hurried black coffee or lack of nourishment, my gut was afire, aflame with revolt. Scanning the plush boardroom for receptacles, which may suffice in short notice; where would businesses hide their waste I wondered? So readily obvious in every classroom, schools were evidently more comfortable with garbage. Grateful to be alone in my misery, I rested my eyes, praying leave of this burning gut and contemplated the others arriving at this mathematics meeting. Fervently wishing them lost day timers, snarled traffic, no place to park, or dead watch batteries. “I am,” I decided, “sickened.” In the unsteady stillness, my burning eyes and feeble gut wafted back to the morning’s events; a pause, reimmersion from one gut reaction to another.

Some New Field of Vision

Some “fifteen thousand individual participants,” boasts the local newspaper, “mostly school aged children and teenagers, will participate in the city Music Festival.”⁶ Veritable feasts of piano, strings, voice, choir, guitar, speech, percussion, woodwinds, and orchestral musical merriment.

Annually, in February’s wintry dry cold, festival invitations appear in schools all over the province. The full packet of forms sits in my mailbox, summoning the Music/Artistic Director. As music teacher, classroom generalist and school resource, their arrival never really personally addressed me, and so annually they would sit there untouched, lost in the blur of paper blizzard and frantic pace of school life. The festival, a competition in teaching and music circles, carried with it much chatter, gossip, a certain allure and (what I had come to know as) a kind of folklore⁷ of the festival. Some talked of the politics, of whom you knew, of rubbing shoulders, kissing butt and stabbing backs. Never having the time or the interest to venture into the fray, to tease out the myth or unravel the truths, I went about my music-making aware of but without this gathering, this festival. Yet, the headline today addressed me, in some different way. Not just as artistic director or music teacher but as an open, intriguing invitation. Taken as such, I ventured with the given sabbatical gift of

⁶ Kiwanis Music Festival is held annually in most major Canadian cities

⁷ Folklore: used here as traditional sayings preserved orally and unreflectively amongst a group of people, teachers in this case. A widely held and largely unsupported body of notions

time away from the classroom, as a student/teacher/parent/researcher, into this festival, in search of the performance.

And so it was I found myself this cool April morning, a moist dusting of prairie snow in my hair, the promise of spring in my step, sitting in the darkened concert hall waiting; awaiting the class known as musical theatre. My eyes adjusted to some new field of vision; looking visibly changed.

The theatre hall filled not just with child and adult, prop and pasquinade, but a certain stillness. A stillness that shuddered with swells of nervous waiting, patches of stone silence, flares of festive *awaiting*. With the house dimly lit, the stage became afire with light on bright pine beams, alive with quickened murmurs, the flash of sequins, rags, and boas, in spirited support. A smattering of a dozen young artists scattered throughout the space known as audience, each cloaked in the care of teacher, coach, accompanist, and family; practicing, primping, prompting, pacing. Quick whispered reminders, laughs laced with nervous quiver, white faced, wide-eyed festivity. Awaiting performance, the arrival of celebration in this agora of the arts.

A seemingly endless waiting. Awaiting *the* performance was indeed a performance, a version of the competition. In *Ceremonies and Festive Celebration in the School*, Otto Bollnow writes

In the festive celebration, time comes to a standstill, not just in the sense of a rest or in the sense of a makeshift pause to catch one's breath, but rather in the deeper sense of an immediately experienced reimmersion into a timeless existence. (1989, 71)

And one by one they stepped forward, they *took* the stage. Young children barely a decade on this earth carving the cavernous space. Sculpting the hall with note and gesture, song and wink, into pet shop, ballpark, dressing room, banquet hall, stage coach, and even a castle on a cloud. And some were painful, a blessed relief as the final bow was taken, others scampered on and off the stage, shyly playing with voice and presence. Yet each performance renovated the space of the last. Some a roughly hewn carving, others a gleeful sparkling play, some with adulterous imitations, others a careful sculpting. Revealing not merely sound, color and image, but an inviting relief, a transformed etching of space.

No one knows beforehand what will "hit home" and what will have no impact. Every performance is an event, but not one in any way separate from the work – the work itself is what "takes place: (erreignet: also, comes into its own) in the event. (Ereignis) of performance. To be occasional is essential to it: the occasion of the performance makes it speak and bring out what is in it.
(Gadamer, 1998, 147)

There was the one performance, one celebration by the tiniest child, wrapped not in glitter or gabardine, but in a simple drab nightdress, that took the patrons and moved the audience. There was more than the mere space on the stage that was given. The whole audience, one hacking, hand wringing, dozing and nodding being, quieted by the tiny child's graceful invitation to come be with her beasts. It was as if we (all) got up and moved to witness the intimate play with the creatures. We were reduced to one peeking soul, relocated to the playful bedside imagination of a pet shop menagerie. And while petting the curly haired lamb, the puppy jumped hoops, the escaped rabbit penned and with nose pressed to the glass aquarium, we were all there

watching, *being watched*. Her tiny chords resonating a thin sweet aria, her voice some melodious harp; the child took us fully into the landscape of fish and fur and feathers.

I pondered long and hard about what happened, what went on, what changed. The persistence of this event was something far greater than just recollection or a memory. It was an instance of something far greater than just a mere performance. It was during a graduate class of interpretive inquiry that I learned of Gadamer's philosophic sacral communion. I read and reread the section over and over. I knew of what he talked, the margins of the text filled themselves with accounts of this festival, her performance. Sacral communion cannot be opened up without understanding *theoros*; the participant, the spectator whose work it is just to be there, to be present. Theoros, as Gadamer so elegantly points out, holds familial relations to the ancient Greek word *theorem*; which means to look at, to behold, to participate with contemplation and consideration. Here the spectator is not necessarily active; it is not catching oneself cheering or clapping for the play, but something receptive. "Being totally involved in and carried away by what one sees" (124). Theoria is passive, the pathos, the pathetic.

Artistic presentation, by its nature, exists for someone, even if there is no one there who merely listens or watches (Gadamer, 1998, 110). The audience was not simply watching and listening, but moved, breathless with the allure of the performance. The hall, overcome with silence, yet I strained over the unruly pulse of my pounding heart. I was "hard-of-hearing," my heartbeat a deafening intrusion to intimacy of performance. With a sense of timelessness, the audience romped with the puppies and was touched by her wide eyes on the cool glass aquarium in this place of

play. The heart of the performance, exposed in its throbbing simplicity, opened a doorway into the imagination, claimed its audience. Deafened, speechless, stunned and awed, the performance disabled, struck the audience.

Without so much as a timid smile, she took her petite bow. The audience hesitated. It happened too fast, too quick, disbelief that it could be over. Perhaps by resisting applause, the spell of such play could be retained, maintained. She stared long and hard, deeply lost in her audience. It was over, the frolic with beast, sounds spectacular and an end to voice. Her dark eyes, like those of the startled fawn stunned in the headlight, wide reflecting pools of what she witnessed. It was as if in all our attraction to the sound and frolic of this celebration, she reminded us of the *theorem*: to behold with contemplation. These young dark eyes reflected the audience back into itself, back into the darkened concert hall of squeaky seats and stifled coughs. A reminder of where we were, who we are, the ending of a performance and a certain loss of space. As audience we were finished, dumped back into the dark reality of cavernous hall. None of us could have known the full interruption of the spell without first fully surrendering to its invocation and authority. The fragile hesitant bow, the haunting glimpse, and (then the disruption of) thunderous applause shattered the spell as coach and parent clapped vigorously, jumped to their feet. The stage changed, the audience and space would never be the same. We were changed, it seemed, and shattered.

Loss for Words

Adjudicate (Latin: adjudicare), to settle finally on the merits of issues raised, to pass judgment on, to award or grant judicially in a case of controversy.

(Webster's Third New International Dictionary, 1996)

And there was not a soul there who would want the job of judging, awarding merit, translating, adjudicating the event. Highlighted from her distant spot on the stage, the adjudication became the interpretation of the performance festival.

“And so . . .” the adjudicator began gingerly, “ahh . . . your mime was *so so convincing*,” the words hung dull and lifeless, there was not a soul there that required convincing. Words failed us all, failed to expose the space. She pushed on cautiously, taking another stab at, touching, remembering the very heart of the performance.

“But of course, it is *not* mime,” she thoughtfully self-corrected, “for mime can only be without sound . . . and you were singing!” she gulped as if adjudicating the very difficulty given in her own words. The peculiar comment made to vocalist and audience reflected no incompetence, for as translator of the event, it was her job to highlight, to help remember the moment past, to capture the very essences in the banality of language. “The translator is often painfully aware of his inevitable distance from the original.” (Gadamer, 1998, 386)

“You are,” she spoke slowly as if by picking her words carefully she might gain clarity, yet her words further flattened the original event (Gadamer, 386). “You are acting.” There was a hollow silence.

The words sunk helplessly into the murky abyss of language. At best all language could do now was provide a sparse version, a flimsy unsatisfactory way to remember child, beasts, and the very voice of performance. Adjudication here was not the mere awarding of merit for that was the simple work.

Controversy lurked in the telling, the translating, and the remembering of where we had all just been. With it came some terrible reduction and settling of the discrepancies long lost to language. Words, the very tools of adjudication, were the nasty little monsters that reduced the performance to nothing, *non-sense*. Yet they serviced scholarship, the awarding of points, and the very rules of festival. Their very presence flattened the memory so there was nothing remotely recognizable left of the performance. She could not follow the gift of the child.

And as they were given there came a certain sitting-up, an awakening, a reacting, and certain shattering of the spell. Duty bound, she continued her account, a monotonous bar-by-bar interpretation, and graphite drivel, reducing the golden places we had known in the performance into an 8 ½ X 11 scribbled piece complete with the gold seal of the festival.

Though she concluded with accolades of “best I’ve ever heard,” the controversy of adjudication here was not the mere awarding of merit but an ancient tension inherent in language. The words failed monstrously. Shuffling papers, sighs and whispered noise of the night dulled the failure of words. This was no show, there was no mime, this was not an act. No gold seal could ever replace, remember the fact that we had, everyone of us, been *in* performance.

The Unkindest Cut

Lastly there came a lad large of stature and smile, a pudgy pubescent Charlie Brown, pensive and bumbling. With a nod to the shiny black grand and a few melodic introductions, the hall again was alive, transformed now into the dusty baseball field, afire with the tension of would he?, could he?, hit the homerun? And the sound that carried us was given like none we had heard before; pure, sweet, strong, a clear high. It was as if this crystal clear sound mediated the forgotten line, forgave the gawky dance and knocked prop. There were moments of questioned intentionality. Charlie bumped into things that this perfectly pitched sound made us forget. Intently, the crowd followed the pure heights his freshly belted ball would take, gasped as Lucy caught it, and laughed as he drooled over his dreamy redhead girl. And though we were not still mesmerized by the previous, we were caught again, drugged now in the spectacular sounds of the ballpark, watching, waiting, listening. The virulent allure here was the messy, dusty field where game gets worked out in the midst of performance. Lines made to fit the call and gesture, steps not rethought but re made to play the perfectly pitched vocal performance amidst the amateur game of theatrical ball. Where were we *again*? This was the celebration of performance and with it came much festivity. A visible quiver on his lip marked his gentle bow. His arching form mixed playful good humor with respect, thanks, and the certain salutation of last chord and final appearance.

A Lost C(h)ord

Adjudicate (Latin: adjudicare), Roman: a decree awarding ownership, Scots law: an attachment of heritable estate, archaic: to sentence, condemn to some punishment.

(Webster's Third New International Dictionary, 1996)

And something struck deeply as the adjudicator's wrestled words to describe the tune filled fields in which we had been. She was struck, it seemed, by some disability to define the given. There was contradiction; a playful pubescent fumbling coupled with this crystalline pitch of perfect voice. She was tongue-tied at the dissonance. And the more she attempted to recall and gather an account, the words she found were of the bumped and bungled wanderings of the performance, and somewhere deep in the darkened hall an ugly monster shook, roused in provocation of words.

They sing like nightingales, they make you lose your balance, and take your breath away.

Abbott L. Raguenet 1702 (cited in Hodges 1993, 84)

"This voice is so sweet, and so pure yet, yet what will happen . . .," a breathless incitement she left dangling before the audience. "Why this is the kind of voice we love to hear, we want to keep . . . forever," she spoke to the darkened concert hall. There was an awkward shifting in seats as if anticipating some mammoth proclamation, some way to preserve the vocal strains. Teachers sat upright, a certain strain in their listening, parents attentive, men stole sideways glances to their partners, and then back to the naïvely boyish performer; change imminent not only in

the youngster, but the audience and festivity. “When we hear a voice like this,” nervously she began the morbid proclamation, “we better understand the place in history for castrati.”

The word sliced some unkind cut. The hall gasped, breathless. The audience sat deadly silent. The words given gashed life from the very darkness that was us. In shock, the silence stood painfully still.

“Oh God!” groaned a male voice in disgust, “Don’t go there” whispered another member shrinking into his seat. “What?” a maternal voice gasped deep from the darkness of audience. I gripped the chair. The performance began to act out the agency of the words. The repulsive suggestion roused disruption, the ugly monster of emasculation groaned, as the adjudication was no longer about a young boy, the portrayal of his character, nor this marvelous voice. Adjudication was indeed living out its most archaic version of punishment, and condemnation. The words again become the monster.

There stood in front of us an opening, the edgy ancient suggestion that to “cut to pieces” could possibly preserve a certain voice. The suggestion that castrati was synonymous with preservation and eternal youth. At the same time she presented all the culture and history of monstrous detachment and lost c(h)ords. Was this the unspoken folklore of the festival that the others sensed and whispered but could not articulate? Had the intrigue of the invitation and this gift of time actually afforded the opening of something too horrible to speak? Were some things best left unsaid?

Interpretive work is about the striking incidents which make claim on us, those that open up and reveal something to us about our lives together. The incident

requires understanding, (and this one) aroused and generated a new and fresh understanding of something already understood. (Something we already knew about changing voice, the change of voice, and the place of voice.) It opened up something that seemed “over and done with.” This is the juncture that the true fecundity of the instance comes into play (Jardine, 1992).

With the words, a man got up in disgust and left. Two coaches fervently disputed the suggestion while the innocent child stood naively unaware of what was given and being given in suggestion. The festivity collapsed into the performance business, evaluation, scholarship, and award. With more throat clearings, niceties, scratchings, and one final tear as written evaluation is ripped off the judicial pad and handed off to the innocent. The lofty traces of dusty place and soaring sphere given up in perfect-pitched chords were lost.

And I, like some weathered warrior, a survivor of the festival myth, I too stood to leave. With burning gut and wobbly legs I left, disturbed, sickened at the festival.

Enroute to the workshop, I pondered what to do, how to take care of that which I had been witness and a part. It was not enough to merely go back and ask the adjudicator what she meant by telling the little girl her performance was a mere act. A letter written as one educator to another or mother to mother, appealing not to judicial nature of the performance but to question the place for care that such young talent and malleable gift requires. Where was the reference to the golden spell and the space to play with her beasts? Where was the careful delivery of care in the adjudication? Had she forgotten that postmodern society, preserved in the comforts of Viagra and

steroid, choked at the thought of slicing (spermatic) cords, and removing parts of the boy's performance? Where was the recalled space, the survival of golden sounds? What polemy was really being adjudicated? It was enough to set your guts on fire.

Part II: The Festival Returns

It is in the nature of periodic festivals, at least to be repeated. We call that the return of the festival. But the festival that comes round again is neither another festival nor a mere remembrance of the one that was originally celebrated.

(Gadamer, 1998, 123)

No, it was too late for all this. Though I tried to forget, true to its fullest nature, the festival repeated in my sleep, at the symphony, around the stillness of the campfire, in school assemblies, and at the festival the following year. In worming its way inward, certain attention burned, demanding understanding, an instance of something.

On the cusp of the 21st century, castrati was enough to make grown men get up and leave a child's adjudication in disgust, make professional coaches dispute some highly contested point, charm a judge and burn holes in mothers' stomachs. What was given and being given all at once? At a children's festival of music, the suggestion of castrati presented some kind of "tuneful monster" (Cervantes, 1998).

"Castrati! I thought you were writing about the lifeworld in school and classrooms and students," nagged a colleague as, compelled, I beetled off to the library yet again. "You'll never get that chapter done if you keep reading! I thought you were writing!" whined another as I spent days in the lavish grip of 16th century Pavarottis, strangely referred to now as *contra* (in opposition, opposed to the) *tenors*,

on the edge of some controversy in a place of being horrified yet strangely attracted to this pubescent slice in history.

Sounds Unnatural

The phenomena were referred to as everything from *belo canto*, celebrated warblers of neither sex, *semivirs*, capon, eunuch and of course, *castrati*. Friends, filled with the awkward reluctance avoided engagement in my wonderings, finding it easier to hand me a copy of Anne Rice's novel, *Cry to Heaven*, a fictional story about the very different lives of two castrated male sopranos in eighteenth century Italy. "That's it!" they told me, "This is what it's about, isn't it?" The book, though dutifully brought home, lay unopened for weeks. The first chapter was full of repulsive detailed dismemberment of boys; ordeal by hot bath and opium in a time of no analgesia or sepsis. Opening the book (and the details of orchiectomy) was not the same as opening the topic. It brought me not closer to, but further away from, the space that had been opened at the festival.

Though there is surprisingly little literature available, soon other texts found their way into my inquiry. Opera lover and physician, Sol London writes in a fashionable 1950s British opera magazine suggesting *castrati* as "being in a time when singing was a monster's art." Though he writes of the wonderful voice, the *castrati* he describes are guileless clowns, "its" in testosterone deprivation with knock knees, barrel chests and petit form. Indeed a questionable account given the fact that many writers refer to *castrati* as being unusually tall. As photographs didn't come into commercial use until the late 1800s, images of *castrati* are portraits in the fullest sense

of the word. Works of art, versions of the artist's brush funded (and colored by) the purse of royalty and wealthy operatic patrons. There is virtually one pathetic audio recording of castrati. All traces of the sound, voices of which reportedly brought orchestras to a halt (Hodges, 1993), made crowds swoon and reduced fellow artists to tears, bound to the flattened space of ink and oil and scratched plastic. Both Burney (1789, cited in Hodges, 1993), and London (1958) also note the ominous lack of writing around the subject. Patrick Barbier (1998) sees male castration in terms of a physiological disruption being in service to the history of an extraordinary operatic phenomenon, of eternal youth. Though we continue to be titillated by the ecstasy of sounds castrati, the reluctance to write is paralyzed by the atrocities of the praxis, this gelding of the lambs as it were. Moreover what did it say of a society that mutilated its innocents in the lust for sound, at an age when they could not possibly have any understanding of the immediate and long term implication. The memory of drugged mutilation of impoverished young boys was enough to make us grab our cold shriveled parts and storm out of our seats in disgust. I had sat long with this dread and on the edge of this controversy, this hapless condition of being breathless, wordless. It would perhaps have been easier to join the ranks and simply write nothing.

Adjudicating Historical Space in the Festival

The adjudicator's call to castrati was what remains of an ancient fascination and allure to purity of high vocal tessituras. The survival of voice. Castrati adjudicated a withered ancient space that was far more than just pure adulation for the sweet sound of the male soprano. The very word embroidered greed and social

extravagance that described the select survivors, the virtuosi. Not only did these young boys have to survive the horrid procedures, and recovery; the preserved voice had to still survive puberty, the abuses of the art and old age. The many failed versions of the often-fatal attraction were societal “cast offs.” Many voices changed anyways at puberty, many voices though high were unpleasant, many sweet high-toned voices lacked the physical agility to be anything more than common chorus. These nasty little failures were the [*cast off*] castrati, sentenced to the solitary life of poverty, unemployment or monastery (Hodges, 1993; Rice, 1997).

The rare voice that survived was a monstrous success. Theirs became a life of unspeakable success, wealth and fame, the toast of the opera house, music school or benefactor. Therein lie glimpses of the other. Castrati were the cause of much envy and division of society. Not unlike their modern Hollywood counterparts, castrati were isolated, not just for huge ego or talent but because of their great accumulation of wealth in a time of relatively poor means. Successful castrati commanded three times the wage of composers such as Haydn and ten times the wage of the librettist (Hodges, 1993) and their fellow performers in the operatic company. They were monstrously rich in a time of widespread poverty. Theirs was not just a performance, but a show of voice, an insatiable display of vanity, arrogance and vocal agility. Some castrati were known to repeat favorite arias three and fourfold in mid performance, a show of ego and vocal aerobatics. These tall, beardless, florid performers became tune-filled sterile monsters. And the audience, the masses, hungry to bathe in the coveted sound, cannot over time be anything else but monstrous.

The audience; priest, parent, pedagogue and patron was fully implicated, swept by the perverse and fashionable attraction, a false taste as it were, for this love of the (unnatural) voice of the child. Castrati opened an unsettling definition of sexuality. Though eunuchs had been around since the time of the ancient Greek as protectors of the harem, infertiles of the renaissance were subject to much comedic scorn and shame (Hodges, 1993). Castrati critics adopted a moral, social and nationalistic stance, and laughed at the (engendered) “monsters” (Cervantes, 1998). The moral argument included a nationalistic flavor as the introduction of the predominantly Italian castrati to Britain in the early 1700s was seen by some music critics as a plot of the Catholic church to infiltrate Protestantism and corrupt the Church of England (Hodges 1993).

Let us now visit (the castrato) Mr. Senesino, and we shall find him neither better nor worse than Jesuit in disguise, and an immediate Emissary of the Whore of Babylon; his singing alas! Is but a mere Pretence to blind us; he is as cunning as the Devil, and no more an Eunuch than Sir Robert Walpole; nay I am told. . . . this Eunuch is in her Ladyship's Favour; they that makes 'em cringe, that induces 'em to untie their Purse-Strings, and under Colour of making a Present, they contribute to the Building and Support of Mass Houses and Monasteries abroad.

Roberts, 1737 cited in Hodges 1993

While asceticism (Hodges, 1993) and self denial were commendable religious ideals for men, selectively castrating children was contrary to the moral conscience; a shame-filled and desperate act. The business of castration went undercover and covert, servicing the fashionable taste for the child-like voice, the (feminine) soprano.

So where were the sopranos? Where were the women? There was a virtual sound barrier for women (Ellison, 1992) and an absence of true female voice. Women were sexual beings, not to be trusted, and banned from religious and therefore musical and operatic life. They were bawdy, luscious, prolific and were sure to have sex at the precise site of the unkindest cut. So in this deprivation of female voice, men carved up little boys so that perhaps the survivors would eventually be able to sing the female text. Could it be that the ear of society was ripe, lusting not just the child's voice but desperately listening for balance? Searching for the feminine sound in a time lost of the soprano, the woman's voice? The procured [neutered] soprano was what was remembered, what remained of the feminine tessitura. This was not just a changed voice, but also a changed ear, the other, the in lieu of voice, the lost voice; a sound unnatural.

The Roman Catholic Church officially condemned the practice of castration, the voice of castrati seduced much interpretation. Pope Clement XIII decided orchiectomy was admissible so long as it was in service of church choirs and to the glory of God.

(Hodges, 1993, 84).

It was a time of huge moral tension for parents, with large families and poor means, and the glorious comforts provided by the religious conscience. Theologians accepted castrated children into their music schools and choirs when the requisite "injury" was the result of an accident. So young boys were presented to the prestigious Italian music school, conservatory and church. The castrating incidents were strangely reported as animal bites, the results of falls or country accidents. The boys became survivors of things monstrous. And what of a society who at risk of

death, gelded its young in the name of God and music, to satisfy an insatiable appetite for the sounds of a child? The rav(ag)e of the middle ages not opium or ecstasy, but ecstasy *was* in the (s)addictive rave to high vocal tessituras.

The sounds of monstrous voice. The high pitched screams wail out the atrocities of the slicing knife. The high pitched screams as the pleased audience bolts to their feet, drugged in the sounds, swept away in the dark performance halls lost to trill and ornamentation. Voices of the high-pitched performer, survivors of insatiable ego, arrogance, vocal display and monstrous talent. Indeed they are sounds monstrous, all given in the twenty-first century, with one small word, *castrati*.

We too were lost in the performance, enticed by the ancients, swept up and away still by young talent. There lies somewhere within a deep attraction to high, crystalline sound, screams of the child. Like the bird dog attending to the unheard pitch of the master's whistle, we were there, listening, lured, allured. Survivors of the spectacle, this adjudication, full with all its textured threads of history embroidered inside note and line. We had, all of us been *in* performance. Adjudication was indeed living out its most archaic version of punishment, condemnation and sounds unnatural. The words again become the monster.

The performer is in the text of music and the text is given voice. Gadamer (1998) likens this to the playing of a game, where the player plays the game and is being played by the game at the same time.

Though games (like performances) have rules and realities, they cannot determine the actual meaning of the game. It is only the playing of the game that can do that (Sumara, 1993, 294). Just as it is in the getting lost at and surviving the

festival, something else is opened, recovered and found, something new emerges from the *being in* performance.

And months later, about the time the tidy festival packets were assembling again in mailboxes and teachers' pigeon holes across the province, the young lad approached his mother after a pensive walk home from his voice lesson. "Remember that *cast-off* thing the adjudicator talked about at the festival last year? I want it. Could you get it for me? I really like my voice the way it sounds and I don't want to lose it. Call Dr. Watson. We could go do it tomorrow after school."

And my gut retches in the striking ordinariness of his request, as now he too pines for what is about to change, what will be lost. Not *just* an innocent wish for preservation but a messy repeat, as true to form, the festival repeats, *re* presents, sounds unnatural.

CHAPTER THREE

. . . There Shall Be Confusion Also in Many Places

It seems strangely curious that I have yet to find a dictionary with a dedication; I always read the dedication. I am, it seems, attracted to dedication. Here there be tales of missing dedications and mis-dedications, work that isn't really read.

new: 1) having been seen or known but a short time although perhaps existing before; 2) beginning or appearing as the recurrence, resumption, or repetition of a previous act or thing; 3) unfamiliar; 4) novel, markedly out of the ordinary to the point of seeming strange or startling.

(Webster's Third New International Dictionary, 1996)

Meeting Foremost in the Fields

For all the exhilaration, interest and diversity a change of circumstance offers, there is a certain terror in *being* new. Perhaps that explained the confusing mixture of inspiration, ambivalence, and sheer terror when a letter from the school board arrived congratulating me on my Professional Improvement Fellowship (P.I.F). I knew somehow I was opening way more than just an official looking envelope. I was now, it informed me, a student, the *new* student. I was opening up, being open, releasing. How odd that such a letter could somehow reorient me in my work as teacher and learner and return me to a place I never knew I left; to the life of a student. And accompanying it were forms releasing me from the work that I loved. The letter had opened new space.

Being a graduate student demanded a certain abandonment of teaching as I knew it. I was to become the listener, the questioner, the recipient of assignment not the giver.

What was I thinking? Why would I turn my back on the very work that sustains, inspires, and exhausts? While I was, it seemed, stepping away from the essence of my very being, signing the release line was a casting off, off into the world of *becoming*; graduate student, researcher, writer, reader, acquiescing to certain initiation into the seas of academia.

Earlier on I accepted the invitation to proceed in what to me was a very foreign way of researching. It was it seemed crossing the bridge from pure sciences into the unfamiliar landscape of the arts, the human sciences and interpretive work. The coursework and tutorial marathon of long ago was now the writing of a thesis. "You better be able to write!" a technology professor warned me as I pondered the thesis route. Being a teacher, I hadn't really entertained the idea of *not* being able to write. Would the cosmos finally seek revenge for all the "artsy" jokes hurled so long ago? And what of this project, this research by interpretive inquiry filled with difficult words and the awkward data of life.

Awards: The pen nervously tapped out six letters on the section for Intent of Professional Development Plan. There was the forty-six dollar award a social agency gave Betty-Jo's family, recently arrived and "on the run" with nothing but the shirts on their backs, so they could purchase eyeglasses. Would her glasses be considered an award worthy of the line? And what of the award from the Chinese operetta we wrote together in class? Tara had presented me one delicate handmade fan, bent and grimy from the sweaty grip of little hands quivering proudly through six performances. How would the award in having Garret "make it" two consecutive

days in his classroom without a door-slamming storm of superlative rage, ever fit on the line?

Professional Development Objectives: I fantasized the honest version, “I intend to study art of the Renaissance Masters, Greek and Roman mythology, and learn to paint with watercolor. In the name of fitness I shall take my Bronze Medallion, walk my son to school each day, and ponder the serenity of being home in daylight.” Instead I meticulously filled in “Completion of Intermediate Word Workshop (anything to do with technology, my colleagues advised), Interpretive Discourse 634.54 (whatever that was), Teacher as Researcher 675.09.” Released or not, political correctness was paramount even on exit papers.

Current Professional Readings: began the next line. I glanced around, my desk littered with provincial curriculum handbooks, inventory manuals, instructional guides and shelves upon shelves of beautiful children’s picture books. Would it be honest or cheeky to write down *The Storytellers* by Ted Lewin? As a staff we had talked about committing to a professional reading group but the Art Fair, Technology Steering Committee, Parent Teacher Interviews and Professional Development Committee meetings prevented all of us from ever sitting down together and conversing. I filled in *The Tone of Teaching* by Max van Manen, a yet untouched fifty page Scholastic publication given me by a colleague. I could, I suspected have it read in an evening in case the P.I.F Police inquired. Signed and sealed, and so it was, my exit into newness made.

Ahh time, Yes it was ninety-eight minus, now let's see, ninety-eight minus; now we moved out here, when was it?

"Susan, Denzel Fields here."

The digital counter glowed a ruby seven as the professor's voice boomed over my answering machine and filled the kitchen.

"Returning your call. I'll be here until four." Click.

Lost and unsure of where I was in the coursework, I took up the prof's invitation to book an appointment to discuss reading and writing-in-progress. It was a kind of demonstration of commitment to working in strangely foreign but compelling ways with my subject. Relief filled me as the secretary told me

"No, Dr. Fields is not in, leave your number and he'll call you."

Thankfully, there were still a few extra hours to review the *n*th draft of this, my first graduate school paper.

Why was tending to this final paper of research inquiry so uncomfortable and awkward? I figured my angst and reluctance had mostly to do with my naïve inexperience. This considerable stumbling, of going round in circles on my word processor, with the subject of interpretive inquiry.

Interpretive work was just that—work, revealing a painfully honest invitation to expose. There was something authentic; an honoring of the possibilities for new space and an apparent simplicity that this inquiry demanded. Yet the events and milestones which led me to what I thought was the very basis of research, interrupted my study, my work. Despite what my science friends told me, interpretive inquiry demanded hard work from even harder data. My work over the past three months was

a kind of stripping away of highly traditional, empirical model of research that had been drilled into my very existence for the past twenty years.

“Method cannot save those who undertake this kind of research,” he had said. “There is no ‘one right way’ or pure discipline for doing qualitative research, but it is very possible to do the work badly.” This exfoliation had taken its toll. The expectation now was to write, not just the story, but chisel at the edges of awareness at some critical phenomenon. This care-filled clarity of the work I had read now did not just beckon me inwards, it demanded my attention. While classmates shook their head and walked from the work, I had no choice. I was in the very grip of interpretive work. There was no other way, no option for my research. I was *in* the works and the work had already begun. Yet now, at the end of the course, I had lost perspective and had no idea how to know if I was just another ‘doing it badly,’ or not. How was one to know? I was lost.

My toe was moist as it rubbed against the end of these sensibly worn, well-heeled shoes. It could, I reasoned, be sweat; toes sweat when they are nervous. There was trouble in these shoes. Head down as I brushed past classmates half my age, I pushed the button up towards the appointment, our meeting of inquiry. I silently thanked the architect for including elevators in the floor plan; eight flights were too many for sore feet. There was no such lift twenty years ago. And seconds later I cursed the elevated time tunnel whisk into old foreign territory, it was too fast, too abrupt. Tired feet aside, stairs afford time to think, to ponder and prepare, to sort things out. My professional improvement was not the only thing suffering vertigo.

Eighty-one was the wedding, eighty, no seventy-nine, yes, that's it, seventy-nine, so let's see, ninety-eight minus seventy . . .

"I'm tidying up," said he, gazing thoughtfully at a volume, transferring it onto another precarious pile. I was early, anxious, awkward. Without looking, he caught me gazing at his office landscape, a veritable foothills of text, and essay, book and journal.

"They're all my piles," he said.

I knew this filing system well. I had only just left the sanctuary of my own piles; books, journals, papers, laundry, dishes, friends. Reshaping was good, as if the exchange between piles was a sort of cleansing, a reacquaintance, a remembering of what was contained, of what lay therein.

In schools, the great gesture of hospitality is caffeine, academia's version is the offering of a book or paper. I fully remembered this gesture as someone's years of toil and labor, now reduced to one hundred pages, firmly bound and covered in a sensible blue jacket, was pressed into my hand. My toe was now soaked and throbbed while tales of Rwanda, Papua New Guinea and the problem of principals and language unfolded. My eyes glanced down, a crimson smear tinted the leather, obviously this Band-Aid wasn't working. I'd definitely bumped up against something.

. . . eight, carry the one less nine leaves you . . .

"Phenomenology is what you are doing, excessive combing, interpreting not betraying life, but evoking moments; not capturing them, being attentive to the space opened not the theoretical invention, be conversant, demonstrate memory, and newness" The voice fortissimo, and the very subject tweaked and shook itself

awake, an energy given life and released. The brisk pace of a subject so frequently revisited, the unapprised would label it a soapbox rehearsal or "patter." Judging by the creased forehead and graying temples, he'd said this before, probably thousands of times before. The baton of Husserl, Heidegger, Merleau-Ponty and Gadamer passed on to hundreds who sat here before me in this jungle of piles and papers. And lulled by some ancient fiery rhythms here in the present, the memory wandered out the window, off the seventh floor and out into the other.

Openings: The past changes the pressure of the present; possibilities of the future.

When I was eleven I silently committed myself to a career in medicine, a dream I shared only with the mirror and Marcus Welby. After secretly staying up late nights with the good doctor, it struck me in the green glow of cooling tubes as I twisted to the off position, that I had been called. I was passionately interested in the science of health, I adored biology and quietly followed my passion by selecting the maths and sciences. During a stint in a rural high school, a principal seeing my love of the subject allowed me to complete independent studies in anatomy and physiology. I spent hours pouring over the thin transparencies of organ and muscle in the physiology text. The layers intrigued me. I was struck by the possibility of solving problems by opening things up, of peeling away layers to create something new. While the other kids went green and pasty when our class dissected earthworms, I was fascinated. The careful peeling away of one rosy moist tissue after another revealing a maze! It was as if the scalpel, like watching the work of Marcus, sliced open a whole new world of possibility.

All interpretive work is violent; something is silenced while something is submitted.

My dream came crashing down one February morning in my last year of high school. I still don't know why I was sitting beside Jack Silvermen, who had not finished the algebra homework to the satisfaction of Mr. Hissett. I never sat with Jack. A careless incorrect answer hurled Hissett into a ranting rage, which went on for what seemed like twenty minutes. The enraged mathematics teacher picked up a student desk and hurled it across the room. My injured classmate, clipped in the face by the low-flying leg of the desk, never said a word. Neither did any of the other students. Heads bowed low into the text of our cold portable, we were a class paralyzed in a crash, in the unspoken space of unfinished algebra and lost right-answer-giving. The silence, like the event, reduced us. We wrote entrance examinations two weeks later and many students, mostly girls, decided the course was just too hard, not for them, and dropped mathematics.

For most it was the end of mathematics. Dropping mathematics was sure exclusion from many degree programs, and certain excommunication from many careers. An exodus of the confused and frightened ensued. And though not a casualty in the exodus, my math marks nose-dived. Too terrified to ask questions, silenced from any kind of honest probe, I too was paralyzed. Though my homework was strictly completed, and the correct answer always at-the-ready, marks now knew that medicine was never a possibility. The opening of a possibility was violated by the terror of a teacher and with it a subject forever closed. And I, even at eighteen, was forever grateful that only Marcus and the mirror knew the torment in a strangulated dream.

. . . *nineteen!* *Yes it was nineteen years ago in my last year of B.Sc. . . .*

The last such academic space was named Foremost, strangely another descriptor for place. It was not the Foremost, anymore than these piles were Fields. Although alike in their disheveled towers of concrete slabs and academic passion, there were no windows of possibility and no landscapes to situate the meaning. The final research paper was the cold hard data of statistical analysis. That was the work. Opportunity in pure science was measured by the stacked piles of computer cards awaiting statistical interpretation, where only a computer printout could be the giver of meaning, and begged an exposition. An ever-ticking pressure of time and grant money and publication smothered the passion of youthful investigation and so with it went the people. Survival was only in the third person neutral, no emotion, no attention to gut and lots of footnotes. Foremost, yes, Adam Foremost, there sits his name nested right here in Denzel's Fields after all these years.

And periodically the yellow tiles of colleagues shoes go clicking by; his eyes glance upward just over my left shoulder, a knowing nod and the grin of pilgrims.

When I was twenty I nodded a lot, not necessarily to affirm comprehension but to shake away the haze; a sort of Windex for the scholarly blur that was conveniently sprayed on the naïve, the uninitiated. A nod was the acceptable emotional jolt. It was the traditional, empirical version of my self-awaking. And *did* Band-Aids work better back then or did I know I was being had?

There was so much neutrality, theoretical concrete, and simply no windows for story or the life as it was being lived.

"But the students have a story," I had suggested. "Perhaps there is a relationship in the tellings, a pattern, a model [he was listening now] why they smoke."

I watched as he manned the red ink, extracting all possibility of anything personal in the statistical analysis.

"Science demands you dislodge the emotive story, all that is locatable, personal or null. You'll learn the work by practicing the procedure and write only in the third person neutral." It was the removal of self, a final detachment, that was the last I remember, the very end of the *me* in my work.

And when the published project found me years later on the other side of the country, I lovingly poured wide-eyed over the bound results. I was speechless that another research team from the same institution had pursued exactly the same question, using precisely the same procedure, employing such familiar technique, question and language.

Then, as if some ancient Band-Aid were suddenly yanked off, realization exposed the tender flesh of naivety, of academic casualty. The sweet innocence of a statistically improbable reunion of researcher and work stung with distaste. Apparently it belonged *only* to the Foremost. Like the sterile, statistically neutral tenseless knowing bound within a dictionary, there was no acknowledgment, no dedication.

"I was tough on your paper" he had said at the beginning of last class, the first few margins filled with fiery thought. Unpacking a long lost dream was not just an ominous venture in retrospective writing, but rather a kind of opening into the space

of the possible. Interpretation carves an opening, a showing, a performance of what the journey of careful pursuit can be. The class was the offering of a craft and procedure, the paper and the play.

No one could have prepared me for the powerful reaction, of reading the “I” and recognizing self in work. It changed things and relationships. Colleagues cautioned me of identifiability, highlighting the need to soften the edges, a kind of repacking the academic event. They insisted I bury names to blur the lines. The statistical probability of the best in the field reading this was no different than me finding a piece of my work then or locating a craft now. I already knew the rules and consequences of living empirical correctness, of being neutral and writing the self out my work. They forgot I had already been there. Perhaps they didn’t actually read it all, the last pages.

And the final pages of my term paper were strangely blank and untouched, the sterile margins full of what couldn’t be said or recognized. Or was being unmarked the silent evidence of not knowing what to say when one recognizes another not doing it well?

The only mark on the final page was not a stylized 80%, an interpretation provided by my own school aged children, but simply the word “so.” Was the paper so deficient it left the marker speechless? Or was this the case, an example of teachers being so busy, so frantic, that they lose their place, forget what they were doing. How would I ever know? Is this what he meant by being “hard”? Or perhaps this paper was so markedly out of the ordinary that it paralyzed all comment. It would take more than a nod to rid the blurry feel of scholarly haze.

The nature of qualitative work is deliberately ambiguous and controversial.

“She’s changed, something’s different,” a colleague whispered to another on the first day back.

“Oh a classroom of kids will bring her back down to earth, you’ll see!” smirked another with a knowing glance.

“You’re going to feel *so* smart,” my new principal warned me during a classroom consultation. “You’ll begin to think everyone around you is stupid,” she cautioned. I seriously doubted this.

The freshly developed teacher windswept in the seas of academia, on the fair craft *fellow ship*, is nothing until lines are dropped again to mark, not the days away or the water’s depth, but to ponder the spaces that have and haven’t been. It’s not until the backward glimpse converges with possibilities of the future that the seas part and a new pedagogical possibility emerges. The graduate journey in knowing places not just for what could have been or seeing with fresh eyes that which was foremost in the fields. As unfamiliar as it was, the graduate experience cast me a full bodied, disoriented, dripping wet navigator into the waters of wonder and the seas of new educational possibility. Make no doubt, I was a new.

new: 1) having been seen or known but a short time although perhaps existing before; 2) beginning or appearing as the recurrence, resumption, or repetition of a previous act or thing; 3) unfamiliar; 4) novel, markedly out of the ordinary to the point of seeming strange or startling

(Webster’s Third New International Dictionary, 1996)

CHAPTER FOUR

. . . And the Fire Shall Be Oft Sent Out Again

And now for *a new* which for some reason is all too scarce and rare in the profession. It was almost 30 years before I discovered that one of the wisest and most impressionable teachers I remember, was in fact new to the profession, nubile, one stroke past being a student teacher. Her work was novel, strangely out of the ordinary. She transformed me. Was the power of working with this woman her way of being with child and subject, or was it perhaps that the profession had not yet beat her up, and squelched the fires of creativity? Even in my discovering this fact some thirty years later, she carried still a reputation, wore the badge of tall poppy, of being different.

Spelling Space and the Importance of Being Ern/honest

The good news is very good, but the bad news is daunting. If identity and integrity are more fundamental to good teaching than technique . . . we must do something alien to academic culture: we must talk to each other about our inner lives—risky stuff in a profession that fears the personal and seeks safety in the technical, the distant, the abstract.

(Palmer, 1998, 12)

Miss Sands

It was I am sure, my first dance with infatuation. Even at the tender age of ten, I knew what it was to be in love. I knew I loved Miss Sands. Though somewhat annoying that just about everyone in my grade five/six class reported the same, I truly believed it was *I* who was her very special student. Even the hairy Kevin Corrigan, class bully and purported sex pervert, adored Miss Sands. Learning cavorted in a space where wonder and amazement met serious pursuit and Miss Sands seemed to invite it into our class. While we could be sure of the afternoon story, the Friday poetry sharing, we just never knew what would present each day. My adoration

quickly taught me the cost of being tagged teacher's pet. And while taunts of "goodie-goodie" and muffled snicker were a price some peers considered too steep, I hardly noticed. While they pointed and whispered, I lived a new way of learning in grade 5 and 6; of being invited to an edge which always opened a hunger to know of something more. I had so much learning I wanted to do and was so invigorated by doing it *with* Miss Sands. At ten, I knew she did school differently than the others. There was, it seemed, nothing I could not learn with Miss Sands. The difference she made some thirty years ago is a vital part of the teacher I am today.

She wanted all thirty-six of us, even Kevin Corrigan, who cussed like the devil and regularly peeked up Michelle Allen's shirt during class, for two consecutive years. The principal was dumbfounded and spent many parent teacher interviews mediating the outrageous organization. Our class picture presses me back to the 60s, her heavily charcoal-lined eyes, tiny impossibly-white *sneakers* carefully laced before each gym class. Even her long thin fingers sparkled with Yardley Slicker nail polish, clicking on the piano keys and picking ukulele strings. She believed my bread making project in the school staff room was a worthy pioneer social studies project.

All the fertile areas of this planet have at least once passed through the bodies of earthworms.

Charles Darwin

Instead of memorizing life cycles of the earthworm, Miss Sands unwrapped a brown bag of freshly dug *Eisenia fetida* and invited us to dissect them (something only high schools were permitted to do at the time). She pretended not to notice when Kevin, so engrossed as he made the first incision, caught his saliva in a mid-air drool

of concentration. She insisted full costume, makeup and scenery be made before the play I took two weeks of class time to write, was presented to the whole school. She was the only one I ever told I wanted to be a doctor, and so in our year-end performance she scripted me in, complete with hypodermic, as Doctor Sue.

School was a magical time. Miss Sands didn't just do magic tricks, she performed them. Contrary to the magicians' code of ethics, she *showed* us and we learned magic in school time. Magic was important in school. She took us everywhere with her words—she was a collector of words, with words on walls, on the board, on the windows and our desks. She invited us to memorize Highwaymen, Christmas tales and poems of trees with bird's nests hair. She read novels *to* us, of children who escaped in white schooners and impossibly large families whose work it was to use time efficiently. Miss Sands' nose dripped bright red as we all (except for Kevin) sobbed when one hero died on the toilet or laughed ourselves into silly abandonment when the next was forgotten at the beach. Field trips to the Humane Society were not just to pat the puppies, but to learn the atrocities of pregnant mare's urine, sign petitions, write letters and join the societies of concerned animal lovers.

The other teachers called us the loud class, a wild and rambunctious group and many parents were sure it was because of Kevin. And it seemed perfectly normal that, despite more adult whispers and tut-tutting, she invite all thirty-six of us to her wedding that December. It was my first wedding and I was mildly disappointed the groom was short, fat, and balding; not of the princely stuff we had come to know in the storybook tales she read us. Yet, no one forgot the wet eyed sparkle and blush our elegant teacher-bride smiled as she located her wiggling, whispering brood in the

church pews. She adored us. After the service I wondered why the little old ladies fussed and thought it lovely we would attend our teacher's wedding. "We're on a wedding field trip," we told them, just another day in the life world of grade 5 and 6. They didn't know how Miss Sands loved field trips, and words, poetry, science books and fanciful stories. But most of all, we knew she loved us.

It Was Some New Damn Thing

My mother always said the problem was that I took Miss Sands far too literally when she told me that spelling didn't count. It was some new damn thing, my mother said, *inventive spelling* she called it, and because of it, she was sure, I never learned to spell. If anyone had ever asked me then, and they didn't, I would have probably said spelling just didn't matter, whether it ended in "ient" or "aient," it was just so unimportant at that particular point in my grade six life. Words were there to service my growing imagination and fuel the memory of things discovered. There was an abundant and rich selection to choose and much encouragement to do so. Words on a page allowed my characters to sing, and gave life to my story, poem and thought. Conventions of the letters and particulars for their ordered appearance had little importance, no impact on my being in grade six. The work was to select the best, use the most vivid and delicious words to show what you dreamed. Miss Sands was right, to me it didn't really matter, it didn't count, I loved words but I didn't care about the spelling.

A Finger Flogging from the Pharmacist

"Such. . . efforts can all too easily be premised on the implicit assumption that there is no deep narrative-interpretive structure to these transitions, and that every difficulty confronted is somehow avoidable, that every pain points to a pathological condition—a disease requiring a cure."
(Jardine, 1994, 122)

Some twenty-one years later it looked quite different. I cared. I cared so desperately about spelling I was ill. I cared so much that in fact I was willing to self diagnose a spelling disability; "ordered-letter-anxiety preponderance," semantic placement dysphasia, orthographically challenged, or something.

To my horror, the mother of one of my grade five students had quietly pointed out that I had sent home a spelling list with a misspell on it. "It's definitely, not definitely. You forgot the 'e'," she pointed out, wagging a finger at me. "It's a test and they have been learning it wrong." My knotted stomach nose-dived into the ugly error pit somewhere deep in my being, blood surging from gut to flushed cheeks. I heard my voice mechanically reciting the "thank-you-so-much-for-pointing-that-out-to me Mrs. LaRose" with as much gracious tact musterable in the moment. While I wanted nothing more than to slink off to lick my wounded professional pride, Mrs. LaRose talked. Rehearsal schedules, would the principal stay another year, and did I think Amy had the ability for late immersion. Still as we parted, something deep was left bared, something more than a heinous insufficiency quivered in light of the exposure. I'd been discovered, unmasked, revealed! Teacher infallibility. The importance of teacher humanness. I felt sure this was leading somewhere.

That night I painfully relived the encounter as if stuck on some terrible replay. While the rest of the world slept, I imagined the potentially deadly consequences if she, a local pharmacist, had filled a prescription as *sulfite* instead of *sulfate*. Spelling did count. I silently cursed the sixties with its inventive spelling and the spelling bees of later years where I always checked out by excusing myself to the bathroom. Spelling was a killer. I was not the teacher they thought I was, and perhaps more importantly, not the teacher to which I aspired.

Under pressure of a well-meaning parent council, it was decided some months later that in the name of common curriculum, all students would take home a weekly spelling list, completed with a test on the same, every Friday. This was the council's attempt at supporting subject streamlining. Visions of all two hundred of us reading page 47 because it was January twelfth flashed across my brain. A calmer voice reasoned it was perhaps an opportunity to recover all the grade five and six spelling tests I had never written. Perhaps here in my forties, I would finally *get* spelling. The prescribed lists thrust me into the learner space, a place where typically I teach best. Not the lonely sage or repository of all that is correct and right knowledge but another fellow learner, humbled along the road of a learning community.

Admittedly, I was a reluctant participant in this school-wide spelling list initiative. There was, it seemed, so precious little time to pursue all the spaces my students wanted to go. From what would I "take" an additional 15 minutes a day. I found it difficult to even compose the spelling lists, let alone send them home for further interrogation. To most, they were nothing more than a neat sampling of twenty some (plus the obligatory challenge words for the bonus) lonely words

carefully chosen from the fray of the life world of our class. In the staff room and at interviews I would talk to the research and professional readings I had come upon when asked about spelling. From what I had read and the wisdom gleaned from years with these shorter teachers, spelling lists made little difference in how letters conducted and arranged themselves daily in words. The literature and our learning community showed little evidence of transfer from correctly spelling words on a test to the correct appearance of the same in daily writing, even if the words were rich and presented meaningfully in the classroom. I learned quickly if I spoke too much of the literature, I became somewhat of a target. In staff meetings the principal would nod knowingly, and my colleagues gray down and eventually glare me into silence. I had been there before, the scent of Miss Sands wafted by, as the clucking began again.

On a deeply personal level, required spelling lists were potentially a vehicle for exposure waiting-to-happen. By all accounts, it was quite unbelievable I was able to make it this far in education without being exposed; many years of dictionary clutching and painful letter-by-letter “looking up of words.” For years there was the pure anguish of the quarterly preparation of handwritten report cards where the fault could be skillfully navigated by a patient husband-for-editor, the quick swish of a bottle of white-out and worst of all, the dreaded yellow sticky from the principal. “Susan, shouldn’t this read *rehearsal* not *rehersal*.”

To teach is to learn twice

A fortune cookie.

My personal mark on the school-wide spelling event was to insist my lists be handwritten; children didn't always see much cursive handwriting in their daily work. They saw lots of machine-generated text, perfectly shaped and standardized characters, sanitized for correct grammar and spelling, but not nearly enough of the human touch of lovely penmanship. Could Johann Gutenberg have imagined the implications of losing the human touch by producing movable type on a printing press? Word processing obliterated the messy traces of human encounter, the possibility for error. The letter by letter tap on the keyboard generated a vile and sterile version of the life quickening behind Sarah's curly scrawl, of David's undecipherable abrasions, or Darren's attempt of loveliness as he shared his learning log. Keyboard and screen collectively bared us from ever really touching or holding the letters of our words. What we got was the standardized processed Cheesewhiz version of print.

Handwriting the spelling lists recruited the human factor that called each of us to be present in ways far greater than ever imagined in that deep shame of the moment. The consequence for insisting there be traces of ink driven by the messy hand of human touch, was in fact just that—humanity; my humanity, complete with the sensuous lure of color and form, ink and smear, and the error.

To err is to be human, the old saying goes, and yet somewhere we perpetuate the belief that to not err is to teach.

The twenty-nine bright, nubile, impressionable minds, survivors of the spelling-list-at-home event complete with orthographic error, bounded in Friday morning. With much attention and pointed correction to the fatal error earlier in the

week, they were, they told me, ready to do the test. I could never have imagined the power that drove the class that day.

“Number seven...Definitely. The ancient Greeks definitely cultivated the love of the arts. Definitely.” I paused, watching their heads bob up and down, pencils poised and erasers flying. Pause. “Number eight . . .”

“My Mom says you can’t spell,” chirped a cheeky voice, a modern day version of Kevin Corrigan, as if all spelling phantoms of the past were suddenly called to attention here in 1997. There were giggles, guffaws and gasps. And again the monstrous gastric knot of imperfection. “My Mom thought that too,” mused my inner voice.

Where to begin? How to open the space? A momentary vision of gruff-toned, stick-wielding pedagogue, ending such insolence with a smack, or perhaps some haughty explanation of American and English spelling, dance nimbly across the video screen of my mind’s eye. Is this what Parker Palmer meant when he called it “The *courage* to teach?” What would Miss Sands do? How easy it would be to squash the rogue with louder, taller, older tongue, or to ignore, go on and say “Number nine . . .” My ancestors would have sent him to the corner, the hall, or the office, and I prayed for inspiration. As I had silently predicted, it had not been enough to simply have the children correct my error on their spelling list. “There *is* a mistake on number 8,” I had said, “Cross out the ‘a’ and put in an ‘i’. Does everybody have this?”

Being disciplined by the discipline and silence becomes the opener. Together, in the grip of error we stepped into the risky waters of humanity, immersed bodies of water, me in my humility and they with their eleven year old wisdom of life, another

life lesson unfolding. Conversation guided by the fires of Miss Sands and the Kevin Corrigan that are us, by the discipline of perfect spelling texts, and spell checkers. There is much inner courage required to pause and attend. It is not just being at the edge of joy or embarrassment or error in this profession; it is the step, the plunge into that which is opened that changes us.

“I never learned to spell.” I tell them. “Spelling is hard.”

Some years later returning to the city I grew up in, I inquired as to the whereabouts of the now Mrs. Broadly. My current classroom was laden with gentle reminders of delicious words posted everywhere, of the necessity of magic lessons, of not just a report on rabbits but having rabbits in the classroom and the pith of having a dissecting kit at-the-ready. I often wondered where she was.

The school board secretary peered upward through bifocals chain linked around her neck.

“Yes,” she knew exactly who she is and where she was. “You’re not the first to look her up,” she smirked. Elaine Broadly is *still* thought of in the division as some kind of kooky, off-the-wall-teacher. She told me these words as she picked address off her screen and polish off crimson fingernails.

“She was always a little different.” And though the building is now an IBM training center, Snowcrest Elementary was her first school, and at the tender age of twenty-three, together we were her very first class.

CHAPTER FIVE

. . . And the Wild Beasts Shall Change Their Places

There lies a certain tension in the idea of a subject consuming you. Big ideas are sometimes so powerful they won't let go, they become all consuming. Good idea but what when the subject itself actually eats away?

Soap and education are not as sudden as a massacre, but they are more deadly in the long run . . .

(Mark Twain, cited in Mohr, 1979, 5)

Exothermia: A Monstrous Play in Lye(s)

At the time, I deeply regretted answering the phone. It rang just as I was worrying and wondering about chemistry with nine and ten year olds. Or to be more exact, how an inquiry into the discipline of chemistry had evolved into something called *Kitchen Chemistry* (Topic 5C from the Alberta Science Elementary Curriculum). The many teacher's guides and texts, which filled the shelves of the professional development section of our library, seemed laden with cute collections of things edible; salad dressing, soda bread, bubble and recipes for muck. Cooking had somehow blended it's way into chemistry, with Teacher Manual names like Chemical Cooks, Stir, Stir, Pop 'til you Drop and Fluffy Foam, the end result looking like a mish-mash-mess of nothing that remotely resembled chemistry. What happened to the elegance of the discipline? Where went the pure chemistry, I wondered?

Then the phone rang. The phone call, uncomfortable as it was, transformed not just the breath and depth of our inquiry, it changed the chemistry of our class.

“You’re a teacher!” whined my neighbor with that certain accusatory edge that is loaded with something yet to come. “So why do our high school kids just *hate* Chem 20? I’m *sure* it’s the teacher.”

I stare blankly, wondering if I am wearing some invisible “kick me” sign or if she was just as likely to ring up her mailmen complaining about postage increases.

“He never *explains* the answers to their questions. He just *gives* the answer or says look in the book. I’ve phoned him twice. And the textbooks are terrible . . .”

Though a strong advocate for her disinterested son, and a huge supporter of the discipline, she was on a tear, every teacher’s nightmare.

“And then there’s the homework. I just can’t get Doug to do the homework. He doesn’t care. He hates it. The *teachers* should make him do it! Did you try that one on page 67 they had to do? It’s ridiculous you have to pay for a tutor Susan. I just phone the teacher. The answer is wrong, dead wrong. You know that one about balanced equations with the exothermic (heat producing or generating) reactions.”

The brutal honesty and simplistic rant on public education ignites a burning rage and I seethe at my helplessness, my speechless paralysis.

“Ya know, and here I am selling my hand made soap at the craft sale tonight. And its all right there in every little bar—sodium hydroxide,⁸ saponification,⁹ caustic soda,¹⁰ and the exothermic reactions of real life chemistry! Soap is just teaming with chemistry, and ya know what? Doug could care less.”

⁸ NaOH (sodium hydroxide)

⁹ The chemical reaction which occurs when a caustic alkali (NaOH) is diluted with water and added to an acid (fats/oils) producing the salt known as soap.

¹⁰ Sodium hydroxide (NaOH)

I didn't doubt it for a minute.

This conversation haunted me; oozing its way into that space between sleep and wakefulness, oil and essence lathering my way to school, soapy episodes of lye and disaster on the way back home. *Exothermic*—the evolution of heat, tweaked some long faded knee jerk reaction, a certain bristling of neck hairs and sweating palms. A rousing reaction! How odd my own sixteen-year-old daughter finds chemistry dead boring, and my ten year old students can't get enough, want more. My work had taken on the look of a cognitive prod, carving out a worthy and meaningful space for young children to construct, not *just* jujubes and bubbles, but the possibility for real work and new knowledge inside the discipline of chemistry. Planning a chemistry exploration through the exothermic haze of magic mud,¹¹ chem tutors, and soap making, like the heat producing reaction, made me sweat out, not essential oils, but essential questions, big questions.

What goes so dead wrong I wonder? What happens to the heated inquiry and passion for a discipline? How does the elementary learner's interest and passion for a subject get so lost, forfeited as it were, to the textbook of secondary learning?

Secondary Reactions

The secondary student quickly learns that success is measured (or reduced as it were) to the pencil and paper tasks of balancing equations, calculating molecular weights and the dissociation of ions. Twelve weeks into her first year of chemistry

¹¹ A mixture of cornstarch and water used in classrooms to demonstrate the behaviour of (non Newtonian) fluids

and my daughter knows she has *done* two experiments, but can't tell anyone what she did or why. She has not really touched things chemical and more importantly, chemistry has not touched her. Most secondary students that I knew who could afford it, receive private tutoring. A kind of chemistry coaching, the focus of which is assignment and test navigation, not a wondrous marauding with the discipline. High school chemistry has lost its relations (Jardine & Friesen, 1997), its threads to the beauty and possibilities of inquiry. Students, girls in particular, refer to chemistry as if they are undertaking some survival course, enduring the discipline without passion and or any experience of its active life outside the pencil and paper. In secondary school, the discipline is taking the test, not the testing, creating or opening spaces inside chemistry. In its dissociated state, high school is the breaking to bits (Jardine, 2000), the reductive grind of pestle which removes chemistry from its passionate beauty, the elemental bonds of life itself.

How could I, as curricular developer and participant in the student/teacher cycle of learning, inspire essential questions, reawaken the passion, set high expectations and reconnect young students to the discipline beyond the mere making of muck? Was there a way that the discipline of chemistry could be honored beyond the walls of our classroom so that it would be passionately discussed and hotly debated long after the fading red cabbage test¹² or the Jell-O dissolved? Was it sitting perhaps, inside an uncomfortable conversation of saponification, not in a kitchen cookbook, but on the soap dish?

¹² An indicator used in chemistry experiments which demonstrates the presence of an acid/base.

The Soapers¹³

Given my immediate fretting about an inquiry labeled kitchen chemistry, it seemed only fitting a modern business based on a bygone cottage industry called The Soap Learning Company, be located off the kitchen of some woman's house. Like the strange lack of teaching materials and scarce reference to saponification in curriculum guides, there were no signs of what lay within—only a welcome sign, an unlocked door and women teaching women. Standing amongst the strange rows of essence bottles and buckets of tropical fat, I find strange comfort in the fleeting glimpse of her kitchen. I cower into the shelves straining to catch snippets of exchanges as experienced soap makers debate coefficients and ponder healing value of lime. I wish the other customers away, and want to be alone with the owner's experience and wisdom. I want no one else to overhear, to know what I am up to.

Her eyes dart sideways as she peers up and over the rim of her glasses. I quietly admit my profession and intent. There is an unmistakable furrow in her brow. Two heavy, white ice cream pails are lugged on the counter top. I glance quickly to the cash register, hoping she doesn't register my concern for the figures. Make no mistake, I know this will cost me. I acquiesce in blind faith to her wisdom and experience as truthfully I have no idea what lies inside; how palm differs from safflower. Why I *had* to have coconut oil but not necessarily butter. Could it all be a scam to sell her wares?

¹³ A term used in the hand made/cold pressed soap business for a person who makes soap.

“Let’s see—three bottles of essence, Jojoba oil, palm and coconut fat, a can of pomace and—oh yes, lye. You’ll *definitely* need sodium hydroxide, you know, for the lye.” she boldly announces.

I wished she wouldn’t say it so loud. Turning sharply, she whisks up yet another innocuous looking white plastic tub and deposits it with the others on the counter top.

“It’s sodium hydroxide, caustic soda.”

I wince.

She studies my nervous shift and continues with furrowed brow.

“You *do* know about sodium hydroxide, don’t you?”

I nod blankly, and cringe, wondering if the other customers have figured out my intent. This woman has no idea how much I love my job.

“Now, how old did you say the kids are? They’re little, right? Don’t worry, you won’t have no problem. I mean, you gotta be careful and all that. You don’t let ’em touch anything at all. Just tell ’em to watch and you won’t have a problem. I made soap with the junior high school kids over at Castle College, and they’re all A.D.D. (Attention Deficit Disorder) over there! It was exhausting, I dunno know how you teachers do it every day. But they’ll never forget the lesson. It’s a page right out of history, you know.”

Thankfully, a phone rings her advice to a halt. Silently calculating the counter-top total, I quietly return the luxury items of shea butter, flower petals and soap molds to the shelves. The modern woman recycles not beef fat to tallow, but juice tins and shampoo bottles to soap moulds. I envy her confidence and the bold wisdom that

experience bestows. Her well-meaning advice does little to calm my nerves or quell this risky feeling at hand. In the grip and with certain reflexivity I sign the bill for seventy-five dollars.

“Oh God, this could be the end!” I think.

If the administration and parents flatly say no, I could, I reason, take on soap making as a personal hobby. Knowing the sparse time for my little-touched hobbies of sewing and gardening, I later puzzle at my twisted logic, knowing full well such feeble rationalization is a mark of something bigger. Some monstrous invitation in. When exactly (or why, for that matter) would I ever make soap?

Saponification occurs. And once this has happened the alkali is on its way to being neutralized and, after curing the soap for several weeks, it (lye) should no longer be in evidence. Soap, therefore is made with sodium hydroxide but does not contain it.”

(Cross, 1998, 8)

I rifle through library and bookstore, consult soap maker and shop, but it is *The Handmade Soap* book by Melinda Cross that is the turning point. I skeptically wonder exactly how the mixing of oil, water and sodium hydroxide could ever be called an art? I appreciate the simple exactness and straightforward explanations of the chemistry involved. But it is the luxurious pictures that awaken some creative pioneer spirit. I want in on the wondrous possibilities. I know in the mere opening of the book, I have taken that fatal first step inside. How could such a wondrous book so full of possibility have such a lack luster title? And so another thirty-five dollars later, the book comes home. There is little chance of going back as the photos are rich and inviting, luxurious like the lather and I am lost in the possibilities of the chemistry in

saponification. The report remains unwritten, the dishes undone and the marking untouched as already in the grip, I cannot put the book down. I dream of hot Turkish baths, of olive oil bars and Peach Melba scrubs. Soap so good you could eat it.

A Monstrous Pronouncement

The coffee shop was alive with aromas and the five o'clock banter of Friday afternoons. With business completed, notes taken and daybooks put away, our collegial conversation turned to story and student, of teaching in these times.

"So what are you and your kids up to, Susan?" Mary asks me, her eyes twinkling with the love of our work.

And without so much as a pause, I hear myself tell these two like minded teachers my thoughts on grade 5 chemistry, called for some reason kitchen chemistry, the lack of life in the subject, and the necessity of bringing real chemistry to the children. Like a possessed woman, I rant on about textbooks suggesting children "make Jell-O with no instructions," of calling a cup of tea chemistry, and of dumbing down chemistry to Dr. Seuss and Bartholomew's Ooblick.

"I intend" I hear some strange voice tell them, "to make soap, real soap in school, during class. I plan to make lye¹⁴ soap, real cold pressed¹⁵ soap, not melt and

¹⁴ A strong alkaline solution usually made with either sodium or potassium hydroxide and water, used in soap making.

¹⁵ Refers to the predominately hand made method of soap making where glycerine is not removed from the final product.

pour,¹⁶ not the kit from Craftland.¹⁷ I'm gonna make soap like our grandmothers made soap."

Like the burning lick of the lye, my diatribe ends as suddenly as it began. Frothed like cream in the latte, lye soap sits on top the murky silence, heavy and still. My pronouncement leaves little space for going back, no retreat. Though the ideas had slowly collected and formulated long before this weary Friday afternoon, this was the first I heard of it. This was not just carrying a project forward, but pushing an inquiry back into the discipline from where it came. A *retracing* and *reconnecting* of chemistry to its elegant beautiful threads with the world. Though lathered in buttered roses and lemon lime lavender, soap was suddenly as basic as oil and water, as obvious as washing your hands.

Huge questions of professional judgement swirl inside the space between care and risk, of controversy and life, of history and her story, and reactions are heated. Whose job is it to rescue the discipline of chemistry?, they ask. Why risk your job? And quietly, Greg, a teacher I have just met, offers the story of the Mount Sapo Romans or then again, was it the Druids?

The Monstrous Tale of Trefoil

This tale has been performed again and again, where fat bludgeoned from the piled stacks of sacrificed bodies mixes with the spring rains and the wood ash from

¹⁶ A popular arts and craft activity where a bottled product is opened, poured into moulds and sets over night.

¹⁷ A local arts and craft store

funeral pyres. The waters run down the mountainside and meld into the clay banks of the now sacred river, where the local women know the clothes get cleaner. And tales of Robin Hood dances before me with sword and fife, castle drawbridge and merry-men. And Mary Margaret, her words dancing with the accents of the Rock, gets a sad faraway look and tells the tragic tale of a classmate, John Sowmeat of Trefoil, Newfoundland, who in grade seven died of lye poisoning. Both he *and* his aunt (“awe-nnt” as she pronounces it), inhaled, ingested.

“Who remembers how?” she somberly recalls. Another thick silence lies heavy, a requiem to those we’ve known but a few short moments.

“Oh Mary, how could they die? They’d puke before they die!” argues a colleague.

“You’re such a bullshitter... You’re making it up!”

But Mary Margaret sits strangely quiet. Her saying nothing, says everything. And I listen to their chat and banter while sipping my Chi tea and know the neck hairs bristle for a reason. I strain to picture exactly where I left the six dollar purchase; that innocuous tub of little white lye.

Watching and Splashing

“Is 9:30 too early?” I cautiously ask the parents, wondering if there could possibly be more than one answer to the question. “Is Sunday morning convenient?” Why would parents, between hockey game and swim meet, agree to meet the teacher and audit a mini soap-making workshop on their own time?

The neighbor, a cold pressed, handmade “soaper” opens her home, not just to her craft and four interested strangers, but also I suspect, to the possibilities of chemistry and young children. Her daughter’s teacher never responded to the invitation to come learn about the chemistry in soap.

“We are here to watch the process, this art of making soap, but mostly we’re here to evaluate the risk,” I nervously address the parents, principal and teacher. “To decide if this is a safe and meaningful inquiry for children.”

My voice is strangely shaky and sounds like something between a eulogy and a political pitch. For between the nightmares of Trefoil, the Internet’s cautionary tales of alkyd splash and the terror of sudden termination, I can get no peace. I need the objective voice of other opinions, other eyes.

Back in school between conversations of acid lake and experiments with litmus paper,¹⁸ a question of essentiality presents in class. I know the Teacher’s Guide has not just failed the discipline but exposed my obvious indiscretions, my lack of good judgement when forthrightly Kyle asks, “Mrs. Marinucci, can I ask you something? What exactly was the point of having us make Jell-O with no instructions? Like why couldn’t we just read the directions on the box? It’s right there on your desk!” He points to the Jell-O package on my desk as if I have simply lost the instructions, did not know the instructions were there on the box.

¹⁸ An acid-base indicator which turns red in acids and blue in alkaline derived from a lichen plant.

There was no place left to hide in the infinitely gray space between the totally stupid things we ask children to do in the name of a learning, the need to “keep ‘em busy.” Oh the lies we tell our children.

An Other Announcement

In some ways I know I have contributed another stone to the path of the dull reality of high school chemistry. My apology to the discipline and to them is the telling of the myths of Mount Sapo, of Robin Hood and of what the women knew. I admit to the children I have been thinking about soap. They sit in bewildered silence somewhat amused at some apparent conflict and unsaid tension. Though I refrain from perpetuating the bogey myth of lye, my silence *is* a telling. Animated discussions ensue anyway, of scholarly pursuit and to what we aspire, it is decided making lye soap can no more be about a cute craft than mathematics could be about scribbling circles. The project constructs itself and I suspect there is little option for the other.

There are the very necessary uncommitted, the uninterested skeptics. Soap? they ask with incredulous disbelief at their buddies’ excitement in something so mundane, so ordinary and so taken for granted. But the possibility of doing something that others may not have done, of creating new spaces, of doing real chemistry, and most importantly, of taking something home, pulls them inward. And there is a movement, a changing of place as soon they too join the chants of

“Lets do it, Mrs. M.” they chant, an energy mounting.

“When can we start?” their innocence taunts, the as yet silent, lye monsters
I’ve come to know.

“Why?” I ask them. “Why would we do this?”

Though many did not write about soap, I pour over those that did as it is
telling, naïve and pure as their cold pressed desire for knowledge. And their few short
sentences, included below, strengthens my resolve.

I want to make sope because I like the chemical reactions and we get to have fun. I like to work with the chemicals, get messy and see the exothermic reactions. I like it that we get to play with the chemicals. And that we get to make it. I want to put lavender in my soap.

Rachel

I think that it is going to be exiting. We have to work so hard. This is going ot be so fun. The soap that we are going to make is going to be for my mom. It is going to be my favorite subject in school ever. This is the exitinest ever chemistry is my favorit subject in school ever. Grad 5 is the best year in my life. I love grad 5. I cant wait untill tusday. My mom is going to love it, and so am I. I wish it was toosday. I am so excited. I cant wait.

Ned

My grop is doing so good together I cant wait I don't find anything that's so hard I cant do. I cant wait.

Sherri S

- *What is so interesting soap?*
The interesting part is the way you put it together and what essence are we going to use?
- *Why sould we make soap?*
Because it's a big opertunity for our class!

Emma

I cant wait until the weekend because after the weekend is over we get to learn about soap some more. I think that all of this work is really worth it because making soap is the coolest thing we could ever do and also because it's a good experenent for us to do plus we get to see an exothernic reaction and that would be very cool to see.

Thomas B.

Soap

This is a once in a life time oportunitie and we are not going to mess it up. We want to make soap and we are not going to wait ntil igh school to do chemistry.

Rachel

After dismissal I go straight to the principal with my idea and confession of purchase. It will be real chemistry and very powerful, I suggest. I am sure she had no idea of what I ask, or of the other. There will be mathematics in the calculation of weight and measure, product to keep track of and reaction, *real* chemical reaction. I wonder aloud why there is no precedence, no other images of this inquiry? Where are the other teachers that have explored saponification? Silently I suspect there are no teachers brave enough to write about this work, or are they all dead and fired?

“There is probably more chemistry in saponification than I think any of us really know.” I suggest aloud.

And in the duty of care, I propose inviting parents and administration to evaluate risk and project. I want their opinion to decide if the depth of the inquiry justifies not just the seventy-five dollar expense but invokes a passion into the discipline.

“You’ll be careful and cautious.” Wendy tells us. “That’s what it takes!”

I gulp as she admits she no longer wears gloves or safety glasses. And the principal looks tired and rolls her eyes skyward begging the goddess of suds for reprieve.

“Caustic! Lye is caustic?” she asks incredulously. “Now, I am beginning to see why I was invited.”

With the gift of experience Wendy quietly shows us the place for careful measure, of cutting and the place for tare on her digital scale. It becomes clear that success is tied to careful calculation of lye to fats. We measure drop by drop and reach exactly 102 grams, and I gulp as she tells us the technology is worth three hundred eighty dollars. I was sure our plastic Playskool balance tool would never produce the necessary exactness of gram-by-gram measure. With reverent caution, we stand back, pull away as Wendy adds the sodium hydroxide to water and stirs with a plain metal spoon. Her crazed thermometer begins a gyrating spin to 150, 170, past 190 and then 200 degrees. Hand and palm are invited to touch the silent heat of this powerful reaction, the crystalline waters steam in reaction and have captured more than just our attention.

Lye is added to fats. “Now blend to trace” [Trace; a ribbon test which indicates the beginning of saponification as well as a marker to stop blending.] she carefully directs us. Plugging the stick blender into the outlet she hands the tool to the nearest recipient, a certain urgency in her voice. In my reluctant grasp, the mixer channels a vibration of energy through my hands and down into the pot as swiftly oils and fats consume the incoming lye into some mysterious happening. And for a moment chemistry sits full frontal amongst us. Like the pot of acid and base, we swirl

in certain tension as the purr of the blender forges a thick, fudge-colored silence of wonder. In amazement, five adults stand awestruck as the pot of fat roils into a creamy pudding, the range fan hums monotonously as it sucks caustic fumes up and out into somewhere. And surely the smirking lye monster himself throws back his head and roars a great belly laugh, as from nowhere the hum of the blender drops to a sickening hollow pitch. The vibrations numb hand and grip, and from nowhere a jolt of pure euphoric “Wow!” raises hand and suddenly the blender’s pivoting silver blades rear from the roiling concoction. Infant lye soap splatters floor, stove and skin. “Turn it off,” they yell, “release your grip!”

To show the emptiness of fear, to identify its pernicious working and prevent them must be part of any system of education... Yet the problem remains that the impulse to find a culprit, however innocent, lies deeply rooted in human psychology and culture.

(Joyce Carol Oates cited in Warner, 1999, 377)

The very worst fear, which had brought us as learners to the subject, had at the same time made us survivors of the myth. We had opened a new space, survivors not of the splash, but survivors of the myth and the mysterious lye. No one ingested, inhaled or consumed the lye, and even now it seems strange but necessary to put in words, no one was burnt or dead. Now I truly understood a soap-making friend who cautioned “Don’t let lye turn into the boogey man.” Was this perhaps one of the fundamental, tell tale differences between the kitchen chemistry and the discipline of chemistry. Kitchen chemistry was so over done, so diluted it was over beaten, so safely located in its fluffed up, sweet tasting, fizz that it could never demand the care or require the same kind of respect as lye.

“So many lessons contained in one bar!” murmurs one mother after the nonevent of splashes are wiped up, and washed down the drain.

“And think of all the fund-raising opportunities,” says another.

Forty minutes later we are lathered in lavender and hemp, pouring over palm fat and olive oil, awed in the essence of emulsion, steeped in a change of state. The principal is calculating the cost of making two batches as Wendy answers a battery of questions. Capacity and mass, emulsion and trace, history and her story, and mostly chemistry, pure chemistry in a kitchen. We are living evidence of practice in praxis. All this before Monday morning, and twenty-five students as yet have no idea what chemistry is to come.

Teaching Focus

When would we actually begin? How would I know we were ready, prepared as it were? How could I guide us from the planning and preparation into the making of soap? My head throbbed in the din of project work, late nights with report cards and long afternoons with quarrelling children. Sherri had taken Barbara’s calculator without asking, Nathan had picked his nose to a full gushing bleed, and Donna was mad I could only promise to edit her writing tonight, not right now at this very minute. Ned was bouncing the soccer ball wondering exactly when we could go out for gym. They *are* the particles in matter that are always moving. “The more (heat) energy you add the faster they move,” read page thirty-nine of the Teacher’s Guide. The din was telling me some kind of rehearsal was necessary. I was not exactly sure what it was we needed to rehearse. Could they maintain focus? Would these, the

somewhat foreign demands of observation, squeeze the passion out of that which fueled their investigation? Could the whole motley crew, Ned's squirming lunges, Carley's gyrating knees, Kyle's caustic comments, Jonas' wandering hands, could we all be on the same page at the same time? For my own mental health and professional sanity, I needed more than a "best guess." Could they intently focus in front of such a deadly reaction?

I couldn't help but wonder back to another gathering where rehearsal was the focus. Teachers and staff gathered the previous Saturday to learn Cardio Pulmonary Resuscitation. The maneuver was rehearsed on plastic people, mannequins. You couldn't possibly imagine how you would react in the heat of the moment, in the grip of the actual circumstance. It was at best a guess, a rehearsal, a preparation, a way to look at death in the face.

"Look . . ." the first aider instructed the staff, "you only do C.P.R. if they're dead." I rehearsed it.

A sturdy wooden table, like some altar for the gathered, was hauled out of the school storeroom and dragged to the center of the class. It was more than just a centerpiece; the table focused the attention and defined our demo space. It was awkward, close and uncomfortable for all. Those at the front had to kneel so that those in the middle could see and those at the back, not wanting to miss anything stood precariously on chairs. Their anticipation and close breath fraught with threads of the ancients tightly pressed into crowded amphitheaters to observe amputation or dissection.

"Begin by demonstration!" Lise, the wise Soap Learning owner had warned.

“Its far too dangerous to actually let the kids make the lye. There’s fumes and heat, lots of heat!” she cautioned.

”Just do a demo.”

Surfacing tension

She had no idea what she was asking me to do. Previous teachers used such descriptors as loud, hyper, busy and even nightmare to describe our class. These were children that did everything by doing, by touching, prodding, by lifting up and turning over and stirring twice. I was quite sure they wouldn’t know what it meant to *only* observe. It was not something I purposefully ever asked or expected young children to do; sit still with focused intent for any length of time. Like the worksheet and spelling bee, the expectation to “just watch-me” was fraught with certain pedagogical dissonance. Yet to be sure, it was a necessary component and vital element to our work of making soap. Lye required careful attention, and demanded cautious observance. The question was, could learning take place this way and more importantly, could they do it? How was I to know? What meaningful work could we undertake as a way of finding out if it was possible? It was to be a classic demonstration of surface tension.

When desperate or in doubt, consult the curriculum, find the Teacher’s Guide.

5-7-5: Students will be able to recognize the surface of water has distinctive properties, and describe the interaction of water with other liquids and solids.

Science Background

What is surface tension?

All atoms attract other atoms of the same kind. In a glass of water the atoms in the middle of the glass distribute their attractive forces in all directions. The atoms at the surface don't have any atoms above them to attract. The attractive forces on the atoms below and beside them are stronger. The atoms on the surface attract each other so strongly, it becomes difficult to break them apart.

*The Alberta Program of Studies; Science
(Elementary) Grade 5 Classroom Chemistry (1996)*

The Kitchen Chemistry Teacher's Guide suggests a lesson between Sweet Stir and Yeast the Beast as Salad Dressing (or emulsions) and is labeled "Demo". This suggests a sage-on-the-stage or stand and deliver teaching model seen in many high school chemistry classes. I couldn't help but notice soap making and salad dressing shared the essential base ingredients of water and oil, and that soap itself is an emulsion. The demo focus was on that which breaks the surface tension. A layer of detergent is poured onto the water. Pepper (egg, mustard or plant product) breaks the surface tension with an instantaneous rent on the surface and an emulsion is created. Though both caustic soda and pepper can burn and blind, they were fundamentally very different compounds. The most naggingly obvious: one was positively forbidden in elementary classrooms whilst the other was a culinary basic found on every kitchen table.

Surface tension indeed.

Though the curricular links and similarities between lye and pepper seemed ridiculously weak, the experiment was not really about emulsions, but the experience of controlled focus. The risk factor notwithstanding, this gathering was not in service

of the thrill of a reaction. The links had everything to do with our learning community rehearsing observance, of learning to look, of looking space. Of taking children out of the space of doing, touching, and moving, and inviting them into the space of intent observation, of just watching.

They were their usual wriggly, squirmy selves, bright and effervescent, full of wonder and the dickens. Like the very particles in matter themselves, they are always moving, I remind myself.

“The table’s in the way,” whined Ned.

“I can’t see round her head.”

“Ahh gross! Nathan’s pickin’ his nose again”

“Do we need our books?”

“Why do I have to kneel? I wanna stand. I don’t want to get my pants dirty.”

I found myself carefully rehearsing the lesson, reading the suggested questions aloud and considering “extension/enrichment” ideas. Rarely did I partake in this particular kind of preparation as inevitably the children took us places the text could not see or predict. Passion to learn unleashed in unexpected places, unexpected ways.

After school a parent lingers at the door, waits to ask;

“Mrs. Marinucci...that word on the spelling list, the “s” word? *Sup...* *supponation*¹⁹?” Forlornly she stumbles over the foreign sound of strange vocabulary,

¹⁹ This parent was attempting to locate the word saponification.

“My husband just couldn’t go to work today until he looked it up in the dictionary.

Do you *really* think these kids will get it?”

We gathered around the table. I, fully planned and armed with the suggested book, bottle, and blender, prepared as if it were possible, for the unexpected. We were to complete our first demo. Sensing some deeper chemistry in the event, the attention shifts and the children pressed closer, moving in on what little arm room there was to maneuver pan of water and pot of powders. I tried to envision what this would look like if it were lye, not detergent around which we gathered. As the circle tightens in a delicately balanced, eye straining, tiptoed hush, some invisible drawstring tightened until no movement was possible. We were captured, totally still, caught in the seldom seen pure energy of stone still focus. Like the embrace of some circular straight jacket, the tension so tight my arms could not be freed to grasp the ingredients necessary for the demo. The circle’s focus had pinned me in. Like the pepper emulsion witnessed minutes later, my pleas for space to move surprised them and broke the surface tension. We had been there. We could do it. We were ready. We knew the discipline to stand and watch in full focus. Surface tension and passion drew us, with scholarly intent, deeper down into the discipline of chemistry.

Danse Macabre

Strangely enough, the first day of long stretches of uninterrupted time where our community is all to ourselves is October 31st. Hallowe’en. Danse Macabre²⁰ leaps

²⁰ By Camille Saint-Saens, an ghostly sounding orchestral piece that features the sounds of dancing bones.

into my automatic hummer. With great purpose I try to switch tunes, surely somewhere there is a sweet and lovely song of soap. Where are all the children's songs of soap I ask the lavé goddess? Annoyed, I don't even like Saint-Saens.

While the rest of the costumed school eats pumpkin cookies and plays ghostly games, our class hunkers down to make our first batch. There is much excitement, nervous anticipation. It is a day we have long awaited and I am unsure that it is a good choice of date. Perhaps I should have waited until tomorrow when the skeletons of Hallowe'en are behind us. The children are pumped with sugar and adrenaline and I come to realize their constant buzz of activity has little to do with trick or treat.

We have organized ourselves into four soap-making businesses each with a media/advertising manager, material/equipment monitor, pricing manager and chairperson. Gowned in aprons and gloved in yellow rubber we practice pouring oil and pick up small objects until we can no longer stand the sweating fingers and itching glove fuzz. We write notes until the safety glasses fog up and giggle as the hazy world goes dizzy for a spell. I look at us costumed in goggle, gown and glove, and can't help but think somehow we are indeed appropriately dressed for the occasion; soapmaking on the eve of Hallowe'en.

A sickening feeling sets in as the children come in with not one volunteer form returned. I swallow a surge of self doubt that not one adult supports this endeavor. The two parents attending the workshop report they have to work, another says she's sick. I know I cannot take this responsibility on alone, I need other set of adult eyes, opinions and counsel. I catch myself thinking of those I could invite with short notice. Catherine says her Grandma *might* come, Carley *wants* her Dad, Rachel

hopes the new fiancé will show, Kyle says he *thinks* his Mom will come. Years of collecting intent-to-volunteer forms tells me there can be a huge gap between what a child wishes and the actual arrival of the form. In the spirit of *Field of Dreams*,²¹ we start the morning out believing they will come. So with recipe reviewed, method established, steps rehearsed and jobs assigned, we carry on as if the others will come and work in excited preparation. And there is vinegar everywhere! A bottle by the sink, another at the table, a cupful on my desk and another by the phone. Everything is so backward, so upside down. It seems somehow ironic that it could be an acid, *acetic acid*, which saves the day should there be an accident, a splash of the hideous lye. The acid in vinegar will, in fact, be a neutralizer, a mediator as it were, to the caustic base.

Though each group will have one specific job in the preparation, it is agreed the whole community shall attend the final blend and trace, the long awaited exothermic reaction of saponification,²² They beg me to pick two students who will be first to hold the blender, one girl, one boy, they insist. These two will be the first front-line witnesses, recipients of the blender, conductors of the reaction. I reluctantly pick Catherine and David, even though I am not at all sure, being no other adults presented, that today will be the day.

Cooling the Heat

The lunch hour whizzes by. A microwave rolls down into the classroom, a fats

²¹ A novel and movie about the building of a baseball field where it is hoped fans of the game will come.

²² Saponification: the conversion of acids (oils/fats) and caustic base (lye) to form glycerine soap.

and oil station set up, essences arranged, directions put up on the board, inquiry sheets prepared so children have a worthy space to record their findings, the traces of their inquiry.

And then, quite magically five adults show up at the strike of one and await my direction. I feel guilty for even thinking that there would be no support. There is a certain awkwardness amongst the adults. I am not sure if their nervous shifts are just the shyness of the first meeting, a discomfort with chemistry or a reflection of my own nervous energy. I stifle a surging “what if” scenario; perhaps they know something about making soap that I don’t. Briefly we walk through the groups, the protocols, the hazards, the care and the reactions.

“Let’s do it!” says a Dad. And so it is the making of our first batch begins.

Together we pour over the work. Distilled water is measured down to the last gram, cocoa butter takes forever to melt, palm oil is a solid, moulds are selected and greased, fans are humming, windows opened, temperatures recorded and graphed. I try not to notice, on the eve of this annual sugar fest, that sodium hydroxide looks strangely like sugar. The camera buzzes and pictures of our work flash by like some record for posterity. The volunteers measure, question and laugh with us and the room is abuzz with talk and excitement, debate and collegiality.

Exothermia: The Potential Heat in Patience

The oils are hot, so hot, too hot. They must cool down in an ice bath. We cannot proceed until all the liquids; oil, lye and water, meet in a window of common temperature. We wait.

The frenzied heat of all our preparation sits stoically on a bag of ice cubes and a blue frozen ice pack. We patiently *await*. Gathered around the table where we've rehearsed before, we all cool down. Energy, adult, child and liquid, we cool down into a critical space where the much-awaited reaction occurs. Like watching the pot boil, the mercury retreats at a pitiful rate. There are groans and guffaws, as the wiggling, moaning starts.

"Can't we just blend it anyways Mizz M. Who cares?"

"The thermometer must be broke Mizz M. Check it again."

"Comme-on", Thomas pleads to the thin glass tube, "*Comme-on!*"

The volunteers glance sideways as the children's impatience hardens into an icy uprising. They, like the liquids cast to the ice pack, squirm and tease, bounce and fidget. The wild beasts change their place. The table is knocked, and a verbal scrum results as harshly they reprimand the culprits. I am impatient with their silliness in front of this audience of adults, impatient with my own impatience. I want them to be as good as I know they are. I wonder of ways to keep them busy, to mediate the heat. We move back to our desks, as if by asking them to move I could cool their energy. My pleas for patience transgress into a swelling litany of "don'ts" and "watch-outs" as discussions are ignored, questions go unheard, unanswered. The uneasy tension interrupted by a report of

"Okay ! YES!" and the nodding heads of volunteers and chemists grin in blessed relief.

Finally the thin red mercurous line permits us to proceed. The cooling stirs a renewed heat.

Pure Chemistry

The tedious arrival at this ten-degree differential implicates some unspoken, urgent, immediacy. I too find myself wanting to move, quickly. They rush to assemble as if finally they can attend to the main event, assuming the previously arranged spots around the table. The wiggly gloved and goggled circle of chemists again whine and complain their usual irritation of what they can and cannot see, who farted, whose sweaty fingers have the worst fuzz itch and who won't share what. Then there is the dead silence, the surface tension.

Lye is swiftly poured into the lily-white bowl of fats and the circle tenses and closes as the first child mans the stick, the whirling blender. There now is nothing but pure chemistry here. The bowl of yellow fluids swirls slowly into a thickening golden mass of fudge-colored gel. We congeal in some strange kind of awe. This could never be confused with Jell-O, Ooblick, muck or goo.

Tracing the Splash of Recursion

Like some eerie foreshadow, the pitch of the electronic stick blender suddenly drops to a dull sickening hum. Though it took but a second, it unfolded in some horrid slow motion. I knew at that instant what would happen before it did. For, but days earlier, I too had experienced the same sound, the same grip and the same exhilaration.

And then again he roars his ugly growl as it is David now who howls in the euphoric grip of the lye monster. To the horror of us all, a radiant David thrusts the pivoting blender skyward, silver paddles spraying lye like a fountain, and shrieks

“Oh Look! It’s . . . it’s soap! I made soap!” He is radiant, beaming.

And the support is immediate, everywhere and encompassing. One adult wipes his sleeve. Grandma takes the blender. One Dad mops up the table. Rob points out a small yellow puddle near the spoon. Marcus tells everyone to be quiet. Laurence says he is scared. Catherine, the next designated blender, suddenly realizes that David’s misfortune is her own sweet luck.

Changing Places

“So *I’ll* be the first to blend to trace!” she announces with a smirk.

I wonder, just seconds after the fatal splash, how there can still be such tenacity, such pride and determination as she relieves Grandma of the blender, mans the machine, and awaits permission to trace.

David is annoyed, *very annoyed*, as I steer him away from the table, and insist we neutralize at the sink. I didn’t really want an audience for the mess I was about to uncover. In some autonomic mode, my hand shakes as daftly I grasp the waist of his lye-lathered shirt and begin to roll it up. Though the act performed hundreds of times on my own children, *this* procedure was somehow very different, foreign, foreboding. As if something dreadful, some unknown was about to come rolling out, released. Up and over his neck, my mind’s eye prepares for a great gaping gastric hole or some unsightly wound to his abdomen. I ponder donations to the Children’s Hospital burn unit as my nostrils wait, prepare for the unmistakable stench of burnt flesh. All this given in one split second. There is only one stench; that of the acetic acid wash as pungent vinegar fills our nostrils and his chest. I look and look again at his pale thin

abdomen. No blemish, no scar, no burn, nothing; no trace of the event. Now neutralized, chest and shirt damp with memory of vinegar, David wants out, back into the action. Again, we hear, but are removed from the roar and distant cheer of the table in the background.

“Trace! Trace! We’re at trace”

“I *made it* and you’re making me miss the best part!” he hisses at me.

There are oohs and ahs as the golden mixture is poured into the readied plastic bottles and scraped into wax-covered boxes. David cranks his torso around trying to see while dutifully I further inspect. I wonder the whereabouts of the dreaded monster burns, how long it will take to appear. What am I missing? The only remarkable thing on his abdomen is the mixed aroma of sweet soap and pungent lick of vinegar. A classmate produces a fresh, dry shirt and David, like some spring-loaded slingshot, jettisons back into the community to resume his work, to pick up where he left off.

His T-shirt is curled up in a vinegar-soaked ball, rolled off in a corner of the sink for later attention. I wonder if there will be anything but threads left of his lye-spattered garment. And for the first time, in a brief fleeting moment, I wonder if I have fallen victim to the monster or will I too retreat, thread bare and shaken up by the event. Is it time to close my doors on the project, a victim to the discipline? Could this be the end? How much can I take?

I wondered how I could word the accident report without directly spelling out the word sodium hydroxide. Later I sound ridiculous, as with far too much care, I call David’s mother at work and tediously explain the lye accident. There is a long pause.

“So, is he hurt?” she asks.

“No. I can’t see anything wrong. There’s no mark. Nothing. The only thing really different is the stains on his shirt are gone, nowhere to be seen. I guess you could say it’s never been cleaner.” I sound like something between a soap commercial and an apology.

“Well... is he burned?” like me, she was preparing herself for the worst.

“No, there is nothing. His skin is exactly the same, like unchanged.”

“Oh” she says, “So he’s okay. Should I talk to him?”

“Well” I tell her, “actually he wouldn’t come to the phone. He is busy weighing his soap. It’s something he missed while we tended to the splash.”

“So. Okay.” says she, “Is there anything else? So have a good afternoon.”

His shirt is dry by the time he goes home. The Dads gush over their work at the end of the day. The kids are wound up, buzzing, hyper and excited though they have yet to consume a candy. We have been too busy, too focused, to even miss it. There is sheer exhaustion in the focused, disciplined work. All memory of time, of where we are, is suddenly returned when Kyle reminds us it’s Hallowe’en night. They whoop and cheer as they squeeze out the classroom door. Catherine’s Grandma waits behind, washes another bowl and wonders if she could help again. Would I know when we are next making soap?

The next day a fine red line on my wrist is the only reminder; a pink trace of the splash. A place where, in my hurry to bathe David’s back and waist, lye stuck to my bracelet and sat unnoticed against the flesh of my wrist. Lise had said it wouldn’t burn until later, just feel slimy, and itch. The pink ring not a scar, but a faint reminder of the power of lye.

First Batch

I loved it, This ws the most excitingist project we did. This is how you make it you. You melt canola oil with other tipes of fat. And then you make lye, lye is sodium hydrocid. You make it with water and H2O. Then you mix it with the fat and it makes soap. Then you pore it into molds

Sherri S

Makeng soap is fun its hard but fun. There is tuns of math involved that's what I like. But I would rather do the math than make soap.

Like

NaOH + Distild water = lye + fats = soap

Rachel

*My groups soap is called PURE PETALs (Loo can do that better)
...Our original logos are SO nice. Loo stil isn' done our powerpoint
(project)I don't blane him our powerpoint is so awesom so far.*

Thomas

I thnk that soap making is fun. I think that We are a lucky class because we get to make soap. How We make soap is We have to make the fat with palm oil, cococ Butte . Conala oil. After that we have to Go and microw wave the fats for 13 minutes. Then you Got to make the lye. After that you pour the lye into the fats out You have to put the lye into the fats not the fats into the lye. Then you have to blend them together. Then you put the petals and the esents in.

Ned

Four weeks and five batches later, saponification paves a steady stream of traffic in and out of our classroom. Former students, teachers and parents I've never met come by daily, inspecting, smelling, inquiring after the soap. Our classroom swells with pride and the full-bodied aromas of peppermint, spruce, grapefruit and lime.

"You never did this with us!" Tara, a former student accuses me. "I think you like them better then us."

Though she cuddles the bars and inhales the essence, she flicks off the rubber gloves with a disgusted snap. There is no chance, no space to talk. I want to tell her each project, like each class, is as special and different as the inquiries we construct. Because we didn't do this last year implies that this is different. It is the step outside the usual that *is* the doing something different. This makes some snap.

Richard, a quiet soft spoken student who pushed his way to the front of the saponification demo to be number three to hold the blender, has strangely taken to tightly closing our classroom doors at the end of the day. He is quick to lock up our work and shut out the rest of the world. I suspect he is the brave heart enacting the wishes of a few who want the onlookers away.

"Can we see your soap?" his buddies from the other classroom ask.

"Oh it's nothing." he replies, steering the lads away from his box and out the door he carefully closes behind him.

I suspect there are others who wish the work be only ours. I hear it buried between the proud lines of their telling friends and adults that they are studying saponification and making lye in grade five chemistry, *real* chemistry.

Repeatedly we address the subtleties embedded in the mostly unspoken wish that chemistry be ours and only ours. To create new knowledge or new space we must be out of the cozy closet and out in the face of the world. To do anything different would only further the secondary reaction, the dissociative separation of other kids from chemistry, of chemistry from the discipline.

Yet there is a little Richard somewhere in each of us. A twisted fleeting wish that doesn't *really* want to let all the others in. How tempting to hoard in savored

insulation and navel gaze on only what you sew in your field of dreams. I prod them on, reviewing our beliefs, ignoring the seductive urge to say nothing, insisting the work gets out.

“Too often the great work of students dies with the teacher behind the classroom doors,” a colleague tells me.

Perhaps it is lethargic compliance of not knowing anything different, mixed with professional exhaustion that is part of not writing. Not telling is actually the other, a collapsed version of the real monster that lies panting, chest burning in breathless exhaustion, waiting to snip away the difference.

The open doors have put new requirements on the children. By constructing new work we look different, we smell different, we have become different. They answer a barrage of questions. They know it is the smells and the novelty in the bars that bring them in, yet each student soaper is mindful of the discipline, careful to tell the chemistry.

Chemistry Telling

Hey! Look here. This is from Batch 3. It's golden because it's made with frozen goat's milk.

Thomas

Ya gotta see this one! The lye burned the paint right off the plastic bag. It was lining the mold! Cool eh? This one's mine!”

Maggy

And this one here is Tropical Fruit. We made the recipe ourselves. We used a lye calculator off the 'Net. It's lemongrass, très cool.”

Kenneth

Glycerin. Do you know what glycerin is? Its from triglycerides. Its in our soap. It's why everyone wants our soap.

Catherine

This here is the only batch with cinnamon. It makes it go brown. It smells so good I could eat it!"

Sherri

People are talking. There are mixed reactions of excitement and groans when I tell them there are teachers, educators, academics and parents who want to know what they are thinking, read their writing and share the understanding. This is the work, the responsibility infused in the doing of something different. It is the only hope of opening the sometime tightly closed doors of innovative work to other teachers and students. Some scurry off, pulling out care filled journal or tattered scribbler, write volumes and want to know exactly which piece will be selected. Others will insist they have not yet had a turn to talk to the media, to meet the visiting scholar or take the school board official on a tour of our work. They want to survey the principal, ask their classmates, and collect comments from home. They want to put up their work, on the wall, the screen or Internet for all to see. It is the only way to uphold anything different. They stand proud and tall with certain naïveté of being nine years old. But there are monsters contained in the very being different

November 7-13

When do we get to make soap after this time?

Thomas B

I am so happy that we are making soap! I am so happy that I can give the soap to my dad for christmas.

Emma

Soap name: Cinamint

We called our batch of soap this because it has cinamin and min in it. (Other kids are copying us)

Barbara

Soapmaking is really fun. Our soap turned gold and the lye was so active that it color copied the presidents choice simble right off the bag. Me and Chris B are planing on going to the sience fair together. We're going to ask the question "What is soap?" Its going to be so much fun we'll blow our head off.

Rachel

Yesterday my group made a Honey-spruce batch of soap. We were going to make a lavender batch but no one has used spruce! This is our logo

Emma

I lernt that you haff to ware eye glases and gloves when you are making sodeumm hi grocksid . I lernt how to make soap

Ned

Soap is more fun to make when you make up your own rsipie (using the lye calculator on the internet). It you do it out of a book its no fun

Rachel

I hope we could do some other cool stuff when we end soap. I love exsperamenting with chem-icals. I would like to exsperament on bugs / animals that would be relly neat. Or make cookies with our own recipes,or loshions for our hands. I love chemistry !!!!!

Sherri

The Monstrous Reduction

“...But mind now, Conrad, what I say,
 Don't suck your thumb while I'm away.
 The great tall tailor always comes;
 To little boys who suck their thumbs;
 And ere they dream what he's about
 He takes his great sharp scissors out,
 And cuts their thumbs clean off – and then,
 You know, they never grow again.”

From The Story of Little Suck-a-Thumb in *Struwwelpeter*
 (Hoffman 1845)

In 1845 Heinrich Hoffman, a German pastor or doctor depending on which translation you read, published a book of what is now referred to as cautionary tales for children, called *Struwwelpeter*. The English version was translated and published as *Shock headed Peter; Merry Stories and Funny Pictures*, the amended title perhaps an English directive of how the short stories within should be read or taken up. It was a volume my father, my siblings and I all treasured as children. There is some kind of timeless appeal in the horrific use of word and image to proselytize certain correctness in the behavior of corrupt children. The moral laden tales of such common insubordination as playing with matches, teasing the dog, or complaining about meals all end in disturbing consequence. There is both monstrous character and monstrous act in the likes of Great Agippa who drowns the vulgarities of racism by dipping white skinned, foul-mouthed little boys in the blackness of inkwells.

Yet it is the great long legged scissor-man who leaps through doorways to cut off the thumbs of those non-conforming children who insist on sucking their thumbs.

The door flew open, in he ran,
 The great, long, red-legged scissor-man.
 Oh! children, see! The tailor come
 And caught out little Suck-a-Thumb.
 Snip! Snap! Snip! They go so fast
 That both his thumbs are off at last.

This is the monster I have never forgotten, never lost. There are those who would have us believe it is the sheer pleasure of habit, or perhaps the pure naïveté of childhood that makes Conrad turn his back on the rules of Mamma. Or is it pure feisty will, like that of David's insistence to go back into the fray, the allure to test the limits of the myth that begs Conrad put thumb to mouth? Like the lye monster, Conrad and I both know the myth and the monster are quite one and the same. The lesson given is that which sticks out or is in the way of what looks right or proper, that which the mythic monster of conformity wants to remove; will attempt to snip away.

Demonstrating Caution

I remain concerned. Not for a lack of safety or of rethinking the rules, no remorse for interpreting curriculum. Maintaining a transparent practice is a veritable invitation for trouble, the *other*.

Many teachers elect to close their door and go about their business. Seeing this as a way to enhance continuity and declare space for their work, colleagues report that shutting doors reduces interruption. Imbedded here are the threads of self or curricular preservation. If I conduct my work behind the safety of a closed door, I need not justify my work by what is or is not accomplished. If I just do what is on the

Provincial curriculum, I am doing it, done. If nothing is discussed, published, or declared, there is nothing to debate. Shutting out the debate around practice or curriculum, is to strangle that which they are attempting to preserve. There is also no hope for change, reform, *reformation*. Controversy requires courage to reflect, to critically justify, and the audacity to proceed differently.

While there seems to be no lack of controversy in the profession today, it also reflects the current time *less* in which we work, as teachers are required to take on more ownership and responsibility for work that previously belonged to social agency and the family. It is easy to forget the time required to collect money, track forms and phone a social worker, supervise lunch or fill out book clubs, is not teaching. It is time away from that which we profess to do. Hence, teachers are forced to take great care of what little time they have.

There is often the somewhat blind snip. The swipe as it were, not because it is different, but because at first glance it sticks out. In its difference it looks messy or disorderly. If it is only removed because it is different, held up say, in an ivory tower of academia or left in some lonely vase of current practice, the vital threads of the context in which it grew will be lost to research or bandwagons or wither away. Looking different is not the same as making a difference.

Then too there is the reductive snip of conformity. While more purposeful, more intent-full than the previous, this *paring down to size* leaves no hope for making a difference to others in the field. What space is left for those who want to create the new images, to push the practice into places that look different? The tall poppy is subject not just to the reductive snip in service of the familiar, but also to the reflexive

“clean sweep” as it were. The snip that snaps before carefully examining what is really being presented.

The greatest intellectual sin that educators commit is to oversimplify ideas in order to transmit them more easily to learners. In addition to removing ideas from their natural contexts for teaching, we also strip ideas of their contextual cues and information and distil the ideas to their simplest form so that students will more readily learn them. But what are they learning? That knowledge is divorced from reality . . .
(Jonassen 1999,9)

Calling Up the Monster

Speaking of oversimplification, what monstrous ventures forth when adults cannot take up the inquiry, the invitation brought by a child. Students decided to respond to a public survey in the local newspaper about beliefs around biotechnology. How easy to simply call up...

220-877....1. With great care and much purpose, her thin pale finger hesitantly pressed the last digit, as if the pressing of this last key was a sure ejection into the chaotic, adult world of professors and surveys and research. With a quick upward glance and sharp breath, she waited nervously, her lips repeating "Doctor Siedelmen, Doctor Siedelmen, Doctor Siedelmen,..." the rehearsed name, sounding like some kind of mantra, perhaps eased the anxious seconds between pulsing drone and a human contact on the end of the receiver. Holding her breath in anticipation, the colour ran from her cheeks, slapped with an abrupt "Yes!" as I inquired whether this was still a good idea. The annoyed reply was accompanied with a nod so fierce between the Siedelmens of her mantra and phone rings, she bumped her chin on the receiver.

-contact-

"Oh!" she gasped. Candace stopped short and with a pleading upward glance begged the gods for the now lost mantra. "Yes! Yes!" followed, "I am a student (breath) a student yes, at a school, Galpam School, and I read your article in the paper about the survey, about the Biosafety, about the Biotechnology and I am a student at the school, and you are..... Dr. Siedelmen!"

Her hand now shaking so fiercely she could not read the prompts she had scribbled in front of her.

"Dr. S S Ss... Siedelmen" she gushed "...could we just do your survey, your adult survey on biotechnology? We have been doing, no...researching, no...studying biotechnology and we are really good. Galpam, we go to Galpam Elementary, I am Candace and we just want to be part of the survey you got to do. Do you just want to talk to my teacher?" and the excitement of connecting with academia, anticipation of the event and the energy from chaos slid zero by one animatedly through the lines.

"Whad she say, whad she say?" her classmates anxiously whisper as Candace hung up the phone slowly with a slight touch of the dramatic.

"She said...."Grade five eh? So your in grade five! Then she (the professor) said, "No, This survey is only for adults." She said, "*Grade five?* You're only in grade five", like she didn't believe I was in grade five."

And so what does happen when a subject, brimming full of the science and social concepts pervasive in the curriculum, a subject laced with controversy at the

thin space where worries of the adult world are laid open to young students? What of the problems of too few textbooks or age-appropriate resources.

"But there are no textbooks, no library books. It's such a ...challenge!" complained a student teacher, mortified that not only were the shelves of our small elementary school barren, but so too were the shelves of the public library. There were few traditional reference materials.

What happens to the learning and *the curriculum* when monstrous topics hot on the breath of media, journalist, ethicist, farmer, and environmental activist become the work of young children? Moreover, what happens to a staff, to teachers who dare to invite and open the subject? This brave step, when taken, is more often the proverbial leap of faith initiated usually on the intuitive belief that the subject is what will invite the dissonance and cultivates the culture of curiosity and inquiry so necessary for deeply engaged learning. It requires the courage of the entire learning community. The student teacher, students, teacher and community must boldly step forward, step up and create the new images. In the pursuit of new knowledge, there must be the creation of new images. To revert to the closed door classroom is not "get out" of the box, to close the door is to close the opportunity for topic and medium. It is a given that all are implicated. Like the tall poppy, there is much to be learned from the humility of knowing your practice will be under incredible scrutiny. For this is the only way of doing something different. The call to be different.

An Opening Invitation

The soap invites mothers, teachers, dads, friends, and staff to lift and sniff and turn and ponder. Some know that one bar may one day be theirs. Visitors are watched with eagle eyes, all inquiring hands are gloved, each essence named, each recipe given.

“It still has active lye in it!” I hear the young chemists caution the curious, as if most people have even the remotest idea what that means.

But I hear another layer, a layer that is not just in the words, but given in the exchange of exasperated glances as yet another strange hand raises their bar to nostril. The caution delivers a darker wish, a silent curse that these strangers would just go away and leave their soap alone.

A bar slides unexpectedly from the latest inquiring hand of yet another visitor. The soap hits the table and thuds onto the floor. The embarrassed visitor mutters, “I didn’t think it would be so soft, so slippery!” she apologizes. It is as if she has dropped a work of art, a work in progress. Soap has indeed become something between a serious work of art and an elegant chemistry experiment. The second someone inquires, a winding explanation of sodium, fat, oil and trace is recounted. Triglycerides and glycerin, hot and cold pressed soap, sit daily in the classroom conversation.

Though some are small and rather pathetic looking, they are quick to tell any who asks they have made a total of 179 bars. This includes each student’s carefully selected bar which they will take home as a gift. I wonder if they will really be able to give it away. For awhile the batches are carefully housed in our room near their makers; turned daily, touched by many, refused by few. They factually report exactly

how big is a bar, the average weight, and size. They argue red faced with each other how they will send it out in the world. What will they charge and when exactly will they sell it? The Christmas concert is too late in the season. Where will they post their advertisements? Who gets to say what the label logo will look like? How will everyone get a chance to do the actual selling? And what will the final package really look like? It is not just a big lesson in math and science, *it is the democratic process.*

I suggest we figure out our revenue potential. Nathan wants to know if we will have enough money to pay for a “sleep over” field trip. Ryan, a student with a math learning disability and one of the three serious class gamers,²³ repeatedly asks me if he could actually take home his money, have cash. Suspecting an electronic motivation, he uses a calculator to propose a way each child could receive actual cash. Two painfully tedious mornings are spent calculating the revenue potential, each group proposing price and profit. Double-digit multiplication and times tables are critical to predicting the possibilities of hard earned cash. Each business prepares a presentation of how much and at what cost. There are those who madly man the calculator in an attempt to show the possibilities of five or six different prices. The instant fix of an answer is not enough. The calculator leaves no trace of the work, no place to argue the slip of the finger or incorrectly entered data, no evidence of error. The quick flash of a liquid display leaves no place to debate a contested answer. To moans and groans we agree to a place which really *shows* the work in double digit

²³ Gamer: a colloquialism for someone who is highly interested in and frequently plays video or electronic games.

multiplication. All calculations are marked down, recorded on sheets, corrected with calculators. Proposal and defense ensues.

Three on the clock has turned into some kind of endurance test; a cyclic nightmare. I am either so exhausted by the afternoon I can hardly keep my eyes open, or wide awake in the early morning nightmare of lye and loss, lathered in calculation, saponification. Exposed. I need closure so we can pack up, move on, clean up as it were. I insist on closure, I need to know the end. They *must* soon vote on the price.

A Report on Soap

The numbers seem grotesque. There are monetary fruits for this chemistry inquiry. The suggested prices have been solicited from like product seen on the Internet, from friends and teachers, from what prices they note at craft sales and from what parents say they will pay. Repeatedly they stand and show proof that a class of 23 nine year olds could potentially generate, with careful advertising, four hundred dollars. I listen carefully and can't help but recall the parent's comment about fund raising possibilities. I shudder to think what the future could hold as it seems this work brings a whole new edge, a shift in what we call child labor. A raucous argument erupts when someone suggests the class should have first dibs on their own product. Should they give themselves a purchase discount? "No!" they roar.

Assembled around a wall full of white-sheeted calculations, a visiting reporter asks what they are doing. Some look up and nod, most pay him little attention. They are carefully checking each other's calculations, looking for error, to see the numbers their chemistry could generate.

"This is about chemistry." Catherine volunteers, "We're doing chemistry. It's about saponification and glycerin."

The reporter stares blankly and says nothing. No vials, no Bunsen burners, just soap and noisy kids.

"We are calculating out averages. We didn't just want to make Jell-O and Jujubes." offers another child.

It is obvious he has no idea what they are talking about. How could he? That's why he is here looking in, reporting on schools or computers or some damn thing. No one is listening, they have heard all these stupid questions before. They just want to do their work, finish up the math so the sale can begin. The principal asks them to pay attention (as if they aren't), to just stop what they are doing.

"What *are* you doing? she begs, "Tell John why you made soap."

So again a few compliant hands go up and generously attempt to help him understand what they are on to. They offer saponification and Jell-O, lye with lime, hydroxide and Robin Hood. They tell him the attributes of cold pressed soap and he is obviously hard pressed for time. He has to write and so do we. There is much to be lost when the work of children is dislocated from the context of the bigger picture, of where we have been. I offer some examples, hopeful these may build pedagogical bridges between the world of children and adult. It sounds quite meaningless and elementary and they know it. He scribbles something down.

"Can I buy a bar?" he asks the class with a big boyish grin "and take it back home to my kids in Toronto."

They stare at him blankly, the definitive answer roared by their dead silence. He doesn't get it. Whether friend, or parent, visiting teacher or reporter, they have never wavered from the answer asked many times before.

"They can't agree on a price." I tell him. "The soap is not for sale...yet."

The national reporter never takes up Catherine's invitation to see her project work, her research.

"Why does everyone want to take away our soap?" Heather asks me. I know what she means, it's what she said that makes me gasp.

I know I am strangely quiet, somewhat preoccupied during the staff meeting. I keep wondering what a reporter from a national newspaper, who spends twenty short minutes in a classroom, will say about our work. I hope he knows nothing about the chemical demands of soap. This is the seldom talked about risk a teacher assumes when agreeing to open her work to others, to the world. This is what is really being asked of teachers when the media asks if they could just "talk to your students." I think of Richard closing the doors tightly at the end of the day. I am bugged. I wonder if I am obsessing. I hope my worrying will soften the realities of what I imagine the actual to be. I have been in this place too often to know any different. The comparative quiet of a staff meeting provides the time to realize what has just happened, or more importantly, what could now happen. I tell a senior colleague my concerns, my thoughts over lunch. She is strangely quiet. I suspect she too has been in this space of standing tall and looking different, of pondering the importance of pure inquiry. Though she offers to phone the reporter back and ask him not to write about soap, we both know it's too late, impossible. The very request will fuel an inquiry,

heat up the piece. Backing out will not let anyone forget you have already taken the first step in. The lid is off when the door is open, the word is out. It is too late, there is no going back. For like the forbidden lye that reacts by rearranging bonds to make soap, the monster too disturbs the connections. The heat generated swells in controversy and new image. There is always the potential for something new, just as there is always the potential for a monstrous splash. But most importantly, it cannot be forgotten that though the change cannot *be* without it, it is not there. You can no more touch the lone monster of learning, anymore than hold the lye in a hand made bar of soap. Though it has been there, it is not contained.

POST SCRIPT

——Original Message——

From: Susan Marinucci [mailto:sjmarinucci@home.com]

Sent: Thursday, December 21, 2000 11:10 PM

To: Doug Knight

Subject: Visit to Galpam

Hi Doug,

Thank you for your invitation to post my student's projects. I don't mean to take so long to return your email.

I am writing this "off" the Alberta Learning ecircles because I am in a rather interesting position regarding the chemistry project that our learning community is currently involved.

It is a long story, but after we made Jell-O and baking soda bread as part of the Chemistry study, we decided to explore saponification and exothermic reactions. As you know we did this by making cold pressed soap. Soap is thick with chemical reactions, balanced equations and the real life results lie in little bars in front of you. My head is spinning with chemistry. Our inquiry has had us make close to 134 bars of soap, which we have turned, cured, botched, marketed, packaged and (and of yesterday) sold out. We currently have two classroom that want us to start a "Soap Club" in January so they too can learn about all the wonderful chemistry in soap, as well we have special orders from people in the community. Their sales of this inquiry grossed \$315.00.

Now here is the dilemma. Cold pressed soap requires lye, but does not contain it. Lye is made with sodium hydroxide and water. NaOH is a banned classroom substance (the fumes are caustic and the solution will "burn" if it touches your skin) and is on the WYMISS list. This is one of the known "calculated risks" that my admin, myself and a representative group of parents had to make.

The concern is that if our project work was put up somewhere (and you should see their work!!) it would ofcourse mean admitting we used lye. There would be huge problems if ever there was a problem or accident and our project appeared as an exemplar on the Alberta Learning website. Our work would no doubt be ethically vulnerable, challenged.

So here lies (pardon the pun) the dilemma. I had heart failure when the reporter from the Globe actually printed the word cold pressed. The kids gave him the unabashed, full meal deal about our work and what we were doing. I never thought for one moment he would care to actually print this down. There will eventually be fall-out I feel sure.

Sad to say, but for this reason, it is probably not possible to use this (very engaged) project as an exemplar for your project. I took Diane's checklist of Indicators of Engaged Learning to our students and with exception of one or two areas, this has totally covered all aspects of the indicators of engaged learning.and we can't talk about it!

Susan

Susan: Wow! What an interesting situation to be in. Not only a chemistry lesson, but an ethical lesson as well. How very rich and lifelike. I think the situation needs to be explored and pondered, in the open!

Are all rules meant to be followed verbatim, or when is there license to bend the rules, or indeed, not even follow them at all? Kohlberg's theory of moral reasoning works well here. Don't we have other situations in schools where we have to weigh the consequences and make decisions based on some principles, including a principle of greater benefit? Higher moral reasoning depends on principled judgement and situational variables (Is it OK for a starving man to steal a loaf of bread to feed his family?) By the way, I have a little monograph put out by OISE in 1972 'titled How to assess the moral reasoning of students - a teachers' guide to the use of Lawrence Kohlberg's stage-development method. While Kohlberg's theory has come under scrutiny, I think it has a lot of merit as a discussion piece.

I appreciate your sensitivity to the issue, and I'm not suggesting you put yourself in harms way, but there may be an opportunity here to examine ethical and moral dilemmas as we stretch the boundaries of schooling. How can we provide an arena for this kind of discussion for teachers? I don't think we need to make your situation the center of this but we can provide examples of other situations to see where the discussion might take us. I think CBE and other school systems (the ATA) might be interested in raising our consciousness. In the long run we become better (thinking) teachers as a result, and create better schools.

I remember a policy manual once that had one sentence: use your common sense. Of course there is an argument that there is no such thing as common sense, only agreed upon norms and values. And we don't all agree. What do you think? Can you tuck the chemistry experiment away for now and wait to see if it is safe to uncover later? I'm sure you will be doing all kinds of interesting work with your students that would make for a marvelous student sample project.

Do you want to raise a hypothetical case in our discussion forum?
I will look at my schedule and see when would be a good time to visit, thanks.

Have a great Christmas!
Cheers,
Doug

CHAPTER SIX

Finale

Most theses end with a chapter called Coda. As an amateur musician, coda, or more precisely D.C. (*da capo*) al. coda meant only one thing: to repeat, to go back, to play again, to take it from the top. The coda fell away, so I only saw *da capo*, and I prepare to go back, to look for the second ending, to revisit. Even now I cannot forget *da capo* and I could not possibly go around again. So this *is* finale, the end.

All readers share one interest: they want to read reports that impose on them as little unnecessary difficulty as possible. They may appreciate elegance and wit, but first they want to understand the point of your report and how you reached it.

(Boothe, Colomb, & Williams, 1995,19)

Necessary Difficulty

These are the words in the first chapter of the only required textbook, in the only required research course in my three years of graduate work. It is called The Craft of Research. Unlike other books on my shelf and cited in this paper, it still looks quite lovely in it's newness. It is unmarked. Strangely enough, this newness makes it a prime candidate to return back, to take the D.C. coda and recycle. Its very lack of marks is what makes it a good used book. Yet it's very *unusedness* points out it is useless. It bears no marks of use, no trace of anguish, of places been, or evidence of performance. There is nowhere the splatter of lye, no sweaty palm print, no drips of coffee, no highlighted scribbles, no wafting scent of lavender as you open the spine. Yet it's unmarked loveliness, like the words in the book above, are critical. These are

the firm reminders of what research usually looks like; of the existence of another academic method, of the particular way that most reports are written, so as to impose no difficulty. They must be named here so there is no mistaking omission with forgetting. Forgetting in the hermeneutic sense is critical. There is nothing to remember unless something is first forgotten (Gadamer 1998,16). Remembering requires some things to come forward, while others remain hidden. Remembering requires, not the little unnecessary difficulty, but what is given when tangling with the necessary difficulty.

What's Missing?

It's probably best not to try thumbing back to see how you missed the lit. review. I remember the dreaded review of the literature, a veritable smorgasbord of surnames threaded together with successive comma and bracket, neatly tied up into one, quick tidy chapter. If you feel you missed it, then to be sure, you did. It is not there in one place, anymore than the bar held in your hand is just chemistry. The literature is everywhere, located on location, standing firm beside the examples, not just tied up, collected in one particular place. The author's names stand as academic markers, proof that many before see the scholarly possibility of pointing out new space opened in story, in conversation. Demonstrating.

Where Go the Monsters?

I have been asked, "So what's the monster? Which one is it?" Like my mother's words, there is such allure in having simply one answer. Much of my energy has been allowing questions such as these to fall into the background, for these are

these are the questions that endure and along with them go the monsters, that won't go away. These are the questions that philosophers, scribes, translators, teachers and students have long struggled. They are evidence of the current way in which we conduct our learning which typically points out that only a right answer counts. And more importantly, that presumes there is, somewhere only a right answer or worse, that some teacher somewhere *withholds* it. The reality of most classrooms is that the search for the correct answer is really more like "guess what the teacher thinks is the right answer, or guess what answer I have in my head". There lies the agony of monsters.

Hermeneutics begins with a story and informs the subject by recognizing how helpless we are if we don't forget so that we can remember. It is in the remembering, the humiliation, humour and humility of castrati given in a young boy's performance. It is not until you forget the simplicity of Jell-O and undertake the horrors of chemistry that the beauty and elegance of soap comes forward. It is remembering the dedication to a subject that was not matched with like dedication, that startles and reminds the teacher to tend to, and attend. It is the horror of error, and the importance of erring.

Hope

The fact remains that just as this paper and the stories contained now have a life, a presence as it were, there is a now a way to proceed. No longer lost in the commotion of the elementary classroom, the frantic attempt to know-it, cover-it all curriculum, or as Reid (2001) so wonderfully put it no longer "hidden away for

generations... awaiting it's due time of revelation." in between volume one and two, the old and new. This conversation, these stories, and their very being here is the hermeneutic hope for the classroom. How is it that Esdras' words written two thousand years ago can today still so wonderfully open secrets in the work of learning in the twenty-first century? The fires that will go out and the lights of learning that come on, the beasts that change places and disappear so that things don't seem quite what they are. These are the opportunities to look afresh, the wide-eyed "Oh, Now I get it!" that only comes when you open up, revisit and know there is no one right answer. The noisy, confusing, messy work, that comes from arriving dripping wet with what the river holds and still being bone dry. These are the necessary stories of woman's work. Of space that might otherwise lie waiting to be opened. This is the opportunity for hope in our classrooms, not just that somewhere there be an invitation, but the expectation that woman *shall* bring forth monsters.

REFERENCES

- Abram, D. (1996). *The spell of the sensuous: Perception & language in a more-than-human world*. New York: Pantheon Books.
- Barbier, (1998). *The world of the castrati: The history of an extraordinary operatic phenomenon*. London: Biddles.
- Bollnow, O. F. (1989). "Ceremonies and festive celebrations in the school" *Phenomenology & Pedagogy*, 7, 64-76.
- Boothe, W., Colomb, G., & Williams, J. (1995). *The craft of research*. Chicago: University of Chicago Press.
- Catholic Encyclopaedia (2001). Retrieved January 2001 from the World Wide Web (newadvent.org).
- Cervantes, X. (1998). "Tuneful monsters': The castrati and the London operatic public 1667-1737". *Restoration and 18th Century Theatre Research*, 13, 1-24.
- Cross, M. (1998). *The handmade soap book*. Pownel, VT: Storey Books.
- Ellison, C. (1992). Breaking the sound barrier: How women finally made their way to the opera stage. *Opera News*, 57(1), 14-17 et seq.
- Encyclopaedia Britannica (2001). Retrieved Jan., 2001 from the World Wide Web (www.britannica.com).
- Gadamer, H-G. (1998). *Truth and method* (2nd revised edition), New York: Continuum.
- Hodges, S. (1993). A nest of nightingales. *The Music Review*, 54(2), 79-94.
- Hillman, J. (1989). Anima Mundi: Returning the soul to the world. *Spring*, 40, 69.
- Hoffman, H. (1845). *Struwwelpeter: Merry stories and funny pictures*. London: Blackie.
- Jardine, D. (1992). The fecundity of the individual case: On the pedagogic heart of interpretive work. *British Journal of Philosophy of Education*, 21(2), 51-61.
- Jardine, D. (1994). Student-teaching, interpretation and the monstrous child. *Journal of Philosophy of Education*, 28(1), 17-24.
- Jardine, D. (1998). *To dwell with a boundless heart*. New York: Lang Press.

- Jardine, D. (1999). *Foundational thinkers: Course description and objectives*. Calgary: University of Calgary Class Handout
- Jardine, D. (2000). "Under the tough old stars" *Ecopedagogical essays*, Brandon, VT: Foundation for Educational Renewal.
- Jardine, D. & Friesen, S. (1997). A play on the wickedness of undone sums. *Philosophy of Mathematics Education Journal*. 10.
- Jonassen , J (1999). *Learning with technology: A Constructivist approach*. N.Y: Merrill.
- Kullberg, M. (1993). *Morning mist: Thoreau and Basho through the seasons*. New York: Weatherhill.
- London, S. (1958). When singing was a monster's art: The golden age of the great castrati. *High Fidelity, February*, 41-44, 124.
- Melicow, M. M. (1983). Castrati singers and the lost "cords." *Bulletin of the New York academy of medicine*, 59, 744-764.
- Mohr, M. (1979). *The art of soap making*. Willowdale: Firefly.
- Neilsen, Lorri, (1998). *Knowing her place; Research literacies and feminist occasions*. Great Tancook Island: Backalong Books
- Nettl, P. (1958). Eternal youth: The age of the castrati. *Opera News*, 23(1), 10-12.
- Palmer, P. (1998). *The courage to teach: Exploring the inner landscape of a teacher's life*. San Francisco: Jossey-Bass.
- Papert, S. (1993). *The children's machine: Rethinking school in the age of the computer*. New York: Basic Books.
- Rebold B. J. & DiYanni, R. (1998). *Arts and culture: An introduction to the humanities* (Vol. 1). Upper Saddle River, NJ: Prentice Hall.
- Reid, G. J. (2001/1907). The Catholic Encyclopaedia (Vol. 1). Retrieved Jan., 2001 from the World Wide Web: (www.newadvent.org). 1999 New York: Appleton Company.
- Rice, A. (1997). *Cry to heaven*, New York: Knopf.

- Saltet, L. (2001/1999). Transc. by S. Hyland (1910) in *The Catholic Encyclopaedia*, (Vol. VIII). Retrieved Jan., 2001 from the World Wide Web (newadvent.org.).
- Smith, D. (1991). *Hermeneutic inquiry: The hermeneutic imagination of the pedagogic text*. In F. Short (Ed.), *Forms of curriculum inquiry*. New York, SUNY Press.
- Souvay, C. (2001/1999). Transc. by S. Hyland (1907) in *Catholic Encyclopaedia*, Vol. VIII. Online Edition retrieved January 29, 2000, from the World Wide Web (<http://www.newadvent.org/ethen/01601a>)
- SpiritWeb (2001). Retrieved Jan., 2001 from the World Wide Web (pict.spiritweb.org/Bible/Apo/esdras2.html).
- Street, E. (1993). The unkindest cut of all: The ascent and decline of the castrati. In R. A. Kapnick & A. A. Kelly (Eds.), *Thinking on the edge: Essays of members of the International Society for Philosophical Enquiry* (315-320). Burbank: CA: Agamemnon Press.
- Sumara, D. (1993). Of seagulls and glass roses: Teachers' relationships with literary texts as transformational space. *Contemporary curriculum discourses: Twenty years of JCT*, 289-311.
- The Alberta Program of Studies; Science (Elementary) Grade 5 Classroom Chemistry. (1996). Edmonton: Alberta Education
- Thompson, C. J. S. (1996). *The history and lore of freaks*, London: Senate/Guernsey. (Original work published 1930.)
- University of Michigan. (2001). Retrieved Jan., 2001 from the World Wide Web ([hit/umich.edu](http://hit.umich.edu)).
- van Manen, M. (1997). *Researching lived experience*. Toronto: Althouse Press.
- Visser, M. (2000). *The geometry of love; space, time, mystery, and meaning in an ordinary church*. Toronto: Harper
- Werner, M. (1998). *No go the bogeyman scaring, lulling and making mock*. London: Chatto & Windus.
- Webster's Third New International Dictionary and Seven Language Dictionary (1996). USA: G. & C. Merriam Co.
- West, M. (2000). *Exploring the labyrinth: A guide for healing and spiritual growth*. New York: Broadway Books