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CAUTIONARY TALES OF LESLLA STUDENTS IN THE HIGH SCHOOL CLASSROOM

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Introduction: Experiential Genesis of the Study

My interest in the topic of LESLLA students in high school classrooms grew out of my years as a teacher of English language learners in and around Minneapolis/St. Paul, Minnesota, USA, when several waves of such students began arriving in the late 1990's. While fairly well-prepared to provide second language instruction to students who were literate in their prior language(s) and had experienced Western-style academic schooling, we teachers were at a remarkable loss with regard to students who were new to school, literacy, and English. At that time, as so often now, most schools did not collect prior schooling information from incoming students, and so I can confess to the collective professional error of not having even recognized in the beginning that prior schooling and literacy were such determinate factors in explaining why some students with low initial English proficiency moved ahead quite rapidly and in predictable developmental fashion, while others progressed slowly, arduously, struggling with and not usually mastering the academic concepts and cognitive dispositions required for success in American schools. Over the years of working with these LESLLA newcomers—Hmong, Karen, Latin and Indigenous American, Liberian,

Oromo, Sierra Leonean, Somali, Sudanese, and others—my colleagues and I became deeply aware of the distinctiveness of their needs along with the inadequacies of our available instructional responses. I began to realize that what we were encountering was not a mere skill gap but an abyss between ways of living and knowing, and it was this realization that coaxed me back to the role of second language education researcher.

New Horizons: Topical Focus and Form of Research

It has often and accurately been noted (Tarone, Bigelow, & Hanson, 2004; Bigelow & Watson, 2012) that Second Language Acquisition (SLA) research has too long ignored the situation of LESLLA learners as a topical focus, leaving the discipline with an incomplete account of how these learners acquire language. In an analogous way, I would like to suggest that the SLA discipline in general as well as the community of LESLLA researchers in particular has operated according to strong methodological biases whereby studies following a scientific mode and rationale are hugely predominant. While it is not my purpose to argue for the complete abandonment of scientific or data-driven approaches, I would argue that in order to achieve a fuller, deeper understanding of LESLLA work, it is important to also practice other forms of research which yield different perspectives on different kinds of questions in order to achieve a more complete understanding of the work that LESLLA students and teachers do. My argument follows the spirit of what many others have asserted in the general educational context (e.g., Guba, 1990; McDonald, 1988; Polkinghorne, 1983, 1988), namely, that studies in the human sciences premised on an assumption of their own objectivity are inevitably limited by the very limits of human objectivity itself. A different, more interpretively analytic research form is required to plumb the deeper strata of human meaning, which is what I have attempted in the larger study from which the cautionary tales

below are excerpted (Watson, 2010). This is not a mere intellectual exercise, however—far from it. What first occurred to me in the practical teaching context is even more clear today: unless we boldly address the fundamental epistemological discordances involved when young adults raised in a milieu conditioned by orality are pressured to function quickly, at amazingly high levels, in a context produced according to the values and dictates of the (to them) foreign mode of literacy, we will not as a discipline be able to provide a truly meaningful, responsive pedagogy that both works effectively with these students within the literate world system, *and* is careful to do so in a way that treats them and their cultural and cognitive ways of being justly and respectfully.

In terms of research methodology, the form of the research practiced here is hermeneutic, which is an ancient Greek term referring to the art of interpretation. This approach to understanding has a 2000+ year history, and is often called upon when clarity in understanding is particularly elusive, as in the case of interpreting the meaning of wisdom or sacred texts. It is also used in social science and educational research to plumb the deeper meanings of human experience (Gallagher, 1992; Smith, 1999, 2006). Following hermeneutic and phenomenological education scholars like Bollnow (1974), Smith (1988), and van Manen (1988), I employ here the constructed anecdote as a device for presenting themes and experiences relevant to our work as educators. Van Manen describes the constructed anecdote form in research as “narrative with a point” (1990, p. 69), indicating that it is important for the anecdote to carry a sense of purpose and cogency. An anecdote is not to be understood as a mere illustration or embellishment, but as a “methodological device in human science to make comprehensible some notion that easily eludes us” (van Manen, 1990, p. 116) in the manner of an allegory or parable. Van Manen further notes the prominent place of the anecdote in oral tradition, and emphasizes its social and often conversational character. The successful constructed anecdote renders

truths that may not otherwise be seen, in a manner that is not purported to be scientifically accurate and objective, but challenging and evocative. It should be noted that a hermeneutic form of research employing carefully constructed stories is without question more naturally harmonious with forms of knowing and teaching in oral cultures than is empirical, scientific research in the Western literate tradition—this alone is reason enough for LESLLA researchers to embrace hermeneutic approaches in seeking to understand and build solidarity with LESLLA learners.

Deeper Dimensions of Phonetic Alphabetic Literacy and Orality

What follows, then, are polemically-toned interpretations of lived experience intended to provoke thought and to allow things to be seen in a new way. In these tales I have tried to ascertain, express, and *interpret* the experiential and affective situation that exists in students and educators trying to bridge the abyss between relational orality and phonetic academic literacy.

The understanding of orality that guides me, as inspired by the work of Battiste and Henderson (2000), Becker (1992), Irele (2001), McLuhan (1964/1994), Moshá (2000), Olson and Torrance (1991), Ong (1982, 1988) and others, and pointed out at the LESLLA 2011 plenary by Andrea DeCapua and Helaine Marshall (2011), does not simply refer to the act of speaking and listening, but rather to the way of conducting and valuing life in oral cultural contexts, which is very different from the way of conducting and valuing life that has evolved over 3000 years as a result of phonetic alphabetic literacy. The phonetic alphabetic literate way of life, it should be firmly noted, is the one in which most all readers of a volume such as this are utterly immersed — it is the inheritance and lifeworld of every Western culture, and the adopted and adapted form of academic pursuit in most colonized cultures. While this is not the place to review the legacy of phonetic alphabetic literacy (for a thorough review see Watson, 2010), it must be

acknowledged that the effect of phonetic alphabetic literacy is intense, massive, and almost completely unrecognized. It is essentially what McLuhan (1964/1994) meant when he coined the phrase, “The Medium is the Message,” that is, the *vehicle* of communication strongly influences the *content* and *valuation* of thought and communication; in particular he devoted massive scholarship to the study of how the phonetic alphabet made it possible for the first time to communicate without reference to context, auguring a revolutionary shift in human relations. He states:

A single generation of alphabetic literacy suffices in Africa today, as in Gaul two thousand years ago, to release the individual initially, at least, from the tribal web. This fact has nothing to do with the *content* of the alphabetized words; it is the result of the sudden breach between the auditory and the visual experience of man [sic]. Only the phonetic alphabet makes such a sharp division in experience, giving to its user an eye for an ear, and freeing him from the tribal trance of resonating word magic and the web of kinship. (McLuhan, 1964/1994, p. 84)

Smith relates this essential insight to the role of literacy in our contemporary world, stating that “the culture of literacy, which Western culture is, has created its own crisis in the sense that a culture oriented by print is one oriented by a particular way of arriving at what should be valued, and how” (Smith, 1999b, p. 71). Irele (2001) explicitly connects phonetic alphabetic literacy to academic traditions, stating that the academic structure and intellectual hegemony of the West is inseparable from phonetic alphabetic literacy. As I have explicated elsewhere in an extensive historical review (Watson, 2010), cultures of alphabetic literacy have characteristic value orientations, which include abstract categorization, linear thinking, definitions and indexes, propositional logic, syllogistic reasoning, reference to texts, and methodically conducted research for truth validation. What are pre-

empted in the Western literate approach are the cultural values of orality: experience, context, community, belonging, ambiguity and spirituality—pre-empted by the authority of the eminently scrutable written phonetic word (Irele, 2001; McLuhan, 1964/1994; Olson & Torrance, 1992; Ong, 1982).

To be clear, it is not and has never been my purpose to discourage the teaching and learning of phonetic alphabetic academic literacy. I am an avid user of the International Phonetic Alphabet, I have advanced certifications in phonology and have taught university seminars on the subject. As a teacher of LESLLA students, it is part of my daily teaching practice to instruct LESLLA students in phonemic/phonetic awareness using materials I myself create. The purpose here, and it is an important one, is to be sure that we who have no particular intrinsic reason to do so take to heart the lesson that phonetic alphabetic literacy *changes* people and societies in profound ways that we should pay attention to since we are at the leading edge of this change.

The long-term cultural and cognitive effects of phonetic alphabetic literacy is such a difficult and easily dismissible topic, one that very few if any of us had any preparation for in our own licensure and graduate courses, one we have considered even less than the role that the cars we drive or the computers we all use have in global warming. Suffice it to say for the moment that I am addressing educators as attendants, indeed midwives, to a process by which we guide our students from the kind of non-phonetically codified, oral world they know to some kind of reconciliation with the foreign world of hyperliteracy, with its radically different valuing, a world we ourselves are both products and promoters of. It is therefore not frivolous nor incidental but rather of the highest ethical and instructional importance for us to explore *what is at issue*, and *how best to proceed*, in a deep sense, when high school students from a background of orality encounter literacy and Western academic thinking for the first time as adolescents and young adults.

Cautionary Tales of LESLLA Students in the High School Classroom

The following tales are varied in context, focus, and length (two short and narrative, one long and polemical), they are postcards from the edge of the abyss between the values of academic hyperliteracy and the values of orality. They provide not a definitive report but an interpretive evocation of a few moments in the clash of oral and literate ways of life, which are, as a First Nations participant at the 2011 LESLLA symposium pointed out, ways of life not easily reconciled. I have termed these tales cautionary because they are constructed as lessons, intended to shed light on obscured phenomena, to warn about dangers, and to call educators of good will to continue their advocacy of the most challenged LESLLA students. It should be noted that the tales have a critical whistleblower quality in that they are politically toned, and meant to shed light on current practices, policies, and beliefs that are inappropriate, ineffective, or worse. They point to things we should **not** do as a way of framing a better conversation about what we **should** do as educators, administrators, and policymakers in whose hands lies the fate of LESLLA students.

Tale #1: Learning to Fake It in Science Class

I want to tell you about a sheltered ESL science class at a large urban high school. Newcomer students, the majority without prior schooling, were asked to do a practice activity from the textbook which involved classifying line-drawn cartoons of activities such as hockey, bowling, tennis, swimming, golfing, gardening, etc. according to whether they were indoor activities, outdoor activities, or both. Students were to write A on the pictures for indoor, B for outdoor, or C for both. This scene presents many dimensions of the challenges that LESLLA students face. The first challenge was of course trying to understand what the pictures represented, as few of the students knew about such sports as hockey or golf or

even gardening as a leisure activity. Another difficulty was with reading the names of the activities, a phonetic labor which as often involves reading the teacher's lips as much as reading the letters on the page. The labels students were told to use followed the "abecedary" system, using the alphabet itself as an indexing tool. This caused more problems than those raised in an alphabetic world might imagine, with students tending to write 'inside' or 'outside' or 'I' or 'O' on the pictures, rather than an artificial designation of A, B, or C. It was a very difficult exercise, brightened a bit by the fact that many of the students had participated in after school programs in ice-skating and tennis, held at indoor facilities in the area.

The truly astounding moment came at the end of class, when the very kind and well-meaning teacher went through the activity with the class, displaying correct answers on the overhead projector, as students rushed to confirm and correct their responses in one of those flying eraser moments so common in such classes. When the teacher got to tennis and asked how it should be classified, an unusual number of hands flew up—the students who had been bussing to an athletic club for months to attend tennis class were confident to say that tennis was an indoor activity (and likely proud to know exactly what the activity was). The teacher's answer key, though, had this listed as an outdoor activity, and so after some animated discussion, he finally decided that "we will just *say* that it's an outdoor activity, ok?" Several students looked to me with questions in their eyes (I was the adult organizer of the tennis program), but no one said anything. Still, erasers did not fly so fast this time, and I was acutely aware of a feeling of discomfort in the room, testimony to a direct clash between the desire to do well in school, get good grades, please the teacher, and act like a student versus the knowledge derived from one's direct, lived experience. One might wonder why the teacher didn't just go for option C, 'both'; I suspect it had to do with ease of grading from

an already completed answer key, or perhaps was strongly colored by the teacher's own experience, certainly not to any malice on the teacher's part. The point here is not to speculate on the teacher's motives or dubious teaching skill, rather, the deeper point I want to make is about the ease with which the teacher and certainly any number of resident American students can adopt an arm's-length relationship to knowledge, we can just *say* that something is what it isn't if it helps us get a good grade—it doesn't matter anyway. Oral cultures do not think of knowledge this way. Knowledge comes from experience, is transmitted within experiences, and always matters. We may also note the inestimably powerful role that the traditional authority of the teacher played—a word from him was able to override the experience of a dozen orally-educated students.

Tale #2: The Torture of Prescribed Hyperliterate Curriculum

This is a story from a high school experience that illustrates the different levels of distance educators have from the human lifeworld, and how these levels of distance impact empathetic understanding and the instruction of preliterate newcomers. At an urban high school which has the specific mission of educating the district's newcomer ELL students, a math teacher whom I will call Mr. Warsame was experiencing a lot of frustration with the new "discovery" math curriculum. Mr. Warsame, a native of Somalia, is a very intelligent, multilingual, veteran teacher, a man devoted to his immigrant and refugee students whose experiences mirror his own in many ways. While his task of bringing students whose learning needs begin with basic addition and subtraction to a point of being able to manage algebra and geometry in just a few years had always been a great challenge, things took a turn for the worse a few years ago when the district adopted the new curriculum and a new pedagogical approach to go with it. This expensive new constructivist curriculum followed a lesson model that called for a brief "launch" or introduction,

then devoted the bulk of the class period to an open learning phase in which students were to act as independent inquirers who use their cognitive schemata to discover patterns and create solutions, and closed with a brief wrap-up when results are shared with the class. Introduction of new material in the textbook was through contextual vignettes which described an event in which the target math skill would come in handy—the whole textbook in other words, was presented as a series of story problems in English, based on American cultural contexts, albeit using inclusion-friendly names like Juan and Farhiya and Htoo Saw and Ying.

Since he began implementing this approach a few years back, Mr. Warsame had seen a troubling decrease in student learning and an increase in frustration, copying, and “losing assignments.” Many of his students, some years most, had not been to school before, and didn’t have the prerequisite skills and ways of thinking that the new curriculum assumed students to have. He had attended several professional development courses in best practices for ELL students, including courses in the Sheltered Instruction Observation Protocol (Echevarria, Vogt, & Short, 2008), and knew that all ELL students, especially those with limited education and literacy, need to have careful, step-by-step, explicit, scaffolded instruction that meets them at their level. The new math approach that he was required by the district to use was in many ways the diametric opposite of what research and his own experience told him was effective practice with ELL newcomers lacking formal schooling.

And so, although he felt that “all but a few of my students just can’t learn this way,” Mr. Warsame followed the mandates communicated at regular district professional learning community meetings of math teachers, many of whom reported how difficult this new textbook series was even for their English-speaking, grade-level educated students, although some from the more affluent high schools with few ELLs found that the discovery approach to pedagogy

worked well. As the year progressed and the disparity between mandated instructional approach and real instructional needs of students became more and more painfully apparent, Mr. Warsame shared his impressions with the school’s instructional facilitator, an experienced ESL teacher and teacher educator whom I’ll call Ms. Mohahan, asking somewhat furtively if he could use the adaptive math series he had used in the past even though he was being instructed by the district to use only the new curriculum. Ms. Monahan’s response was that, yes, of course he could, if it allowed the students to learn the material, which the two spent some time confirming matched topically almost chapter by chapter with the new curriculum. Ms. Monahan relayed all this to the principal, who spoke to Mr. Warsame in support of modifying presentation of content so that students could learn it. This was, after all, the district’s ELL high school, charged with tailoring instruction to meet the unique needs of its unique student body.

Some time later, it became clear that Mr. Warsame was still trying to stick with the prescribed curriculum, which resulted in some very painful class experiences which Ms. Monahan observed as part of her teacher coaching duties. She could see that it was torturing both students and teacher to try to conduct lessons in this way, going through pedagogical motions that could not have much meaning for students, amounting not only a waste of instructional time but a sort of systemically intentional inflicting of pain motivated by an inquiry-oriented ideology that was based on assumptions appropriate to a literate, numerate, well-educated, English-proficient, ideal student. Mr. Warsame was trying to respect the authority of the district, the students were trying to respect the authority of Mr. Warsame, and the result was an excruciatingly painful simulacrum of learning that had nothing to do with what, by virtue of their experience, the students needed nor with what, by virtue of his experience, the teacher knew they needed. When Ms. Monahan spoke to

Mr. Warsame about this, he threw up his hands in a recognizably East African gesture and said, with evident frustration, that all the math teachers were being told in no uncertain terms by district administrators, in meetings run by professional consultant types that came off a bit like propaganda sessions, that all teachers were to use the new curriculum not only faithfully but enthusiastically. He compared it, chuckling, to the old Soviet system (he had lived for years in Cuba), but expressed concerns about his job if he were to stand against the tide.

When invited to a meeting with the principal and the district math curriculum coordinator, Ms. Monahan, a veteran of many wars between ESL departments and administration, was thrilled to think that perhaps here would be an opportunity to customize the district policy in support of newcomer ELL math needs. She therefore laid out, in full and honest detail, what the experiences in this school had been with the math curriculum, describing how tortuous the experience was, something akin to educational waterboarding, which certainly no one wanted or intended. Motivated by the exciting potential of this partnership with the district curriculum office that could truly benefit LESLLA students and not sweep their needs under the rug, she delineated point by point some basic understandings from research about good content instruction for older ELLs, an area of research and teaching Ms. Monahan specialized in. The math coordinator shared the district perspective on math instruction, talking about the desire to move away from rote memorization and direct instruction, and the two, in over an hour's conversation, explored how the current district policy did and didn't converge with best practices for ELL students, in particular newcomers without prior schooling. When the principal returned to the room, all three agreed that the math coordinator, Ms. Monahan, and Mr. Warsame should team up to work on creating guidelines for a model math curriculum with ELL and LFS student needs

in mind. Ms. Monahan left the room ecstatic, and rushed to tell Mr. Warsame. Spirits were lifted that day. It came therefore as a surprise when the principal received a phone call from a senior district curriculum administrator a few days later, letting him know how the conversation, especially the word *waterboarding*, had shocked the math coordinator. This district is *not* waterboarding, came the message from above. As for the instructional needs that were the focus of the conversation, the outcome was this: the prescribed math curriculum continued as before, and nothing further was done with the plan to create guidelines for teaching math to LESLLA high school students.

This anecdote reverberates with the clash of oral noesis and hyperliterate academic practices on many levels; what I want to highlight here is the differential extent to which knowledge that is empathetic and participatory, versus objectively distanced, impacts decisions about what to do in this experiential context. Although himself a person of high literacy and numeracy, born and educated in pre-war Somalia, Mr. Warsame is deeply attuned to the lifeworld of his students, both as their teacher and as a member of the ethnic community. His interests are entirely fixed on how they can learn best, and he is a fan of any curriculum that can support them. But he is also a person with real life concerns, in fear for his job if he bucks district programs. Ms. Monahan, a veteran of many schools and many policy battles in which the best interests of ELL students almost always lose, is weary of the new segregation whereby the actual needs of students are sacrificed to a pedagogical ideology out of touch with the students' experience and the experience of those who teach them. The district math coordinator, who is herself most certainly evaluated on how faithfully she implements the mandated curriculum, and sees herself as an advocate for academic rigor, is not only out of touch but is unconcerned with getting *in* touch with the actual experiences of a few students and teachers who represent a small proportion

of the total district enrollment, and who attend an alternative high school anyway. She, too, is a real person with real-life concerns, and her performance evaluations will not be enhanced by deviating from the plan. Even the curriculum itself is based on imaginary idealized experiences—the story problems—which may be intended to be more interesting and socially inclusive, but end up having the contextual, lifeworld effect of excluding the students whose experience, and English reading proficiency, is quite distant from the cultural and educational assumptions on which the curriculum is based.

The inexorable, take-no-prisoners, progress model of what indigenous Canadian scholar Marie Battiste calls cognitive imperialism (Battiste & Henderson, 2000) is on full display in this story: power emanates from the center via professional development meetings that give teachers the playbook, manipulate their mental endorsement, and finally subjugate the classroom lifeworld, forcing all the non-literate, non-academic vibrancies into strictly foreign formats that distort and maim and deaden. The horror to those in power is not the pain of what is happening but the marketing disaster of having someone use the word *waterboarding* to describe the effect of the curriculum on a particular group of marginalized students. What matters is that the district has spent a lot of money on branding, and the last thing they need are some fringe staff members using inflammatory language; what is completely ignored are the lessons that could be derived from attunement to the lifeworld of students and teachers. Hermeneutically understood, this story, as so many others in schools today, demonstrates the practice and failure of applying the thinking of the *Naturwissenschaften*, the natural sciences, to educational situations requiring the insights of the *Geisteswissenschaften*, the human sciences (For an excellent introduction to the great hermeneutic scholar Wilhelm Dilthey's discussion of the Natural versus Human Sciences, see Rickman, 1979.) It demonstrates the blind pursuit of a

scientific-positivist ideal of academic *rigor*, which, like rigor mortis, freezes policies and scenarios so that they can be expertly sectioned, rolled out, bought into, and evaluated, when what we need is an infusion of academic *vigor*, a way of carrying out the events of education that is deeply, inter-subjectively attuned to lived life, to what the real and often unexpected needs of the situation are.

Curriculum theorist James MacDonald once quoted Einstein's question: "What does a fish know about the water in which he spends his life? (MacDonald, 1988, p. 102). From the literate scientific perspective, the fish knows nothing about water—not the chemical formula, not the temperature of freezing and boiling, not how to purify water in lab conditions nor mix it industrially with other substances, nor any of the scientific minutiae that are the province of hydrologists. From the oral indigenous perspective, the fish lives and breathes water, is enveloped by water, is born, finds a mate, gives birth in, and dies in water. A fish knows how to navigate water, sensing and responding to its slightest undulations every minute of its life. No one knows more about water than a fish. The difference is precisely to what extent knowledge is conceived as empathetic and participatory as opposed to something one has or wields from a state of separation. Both kinds may be considered knowledge, but not of the same thing, and not with the same costs and consequences.

Tale #3: LESLLAs in High School: The Sacrificial Paradigm

Thirty years of scholarship on neocolonialism by Battiste and Henderson (2000), Bhabha (1990, 1994), Dussel (1995, 1998), Kristeva (1991), Mazrui (1990, 1998), Said (1978, 1993), Spivak (1988, 1999) and others has explicated relationships between structures of knowledge and forms of oppression of the foreign Other. Phonetic alphabetic literacy and the structures of Eurocentric rationality have played a cornerstone role in the construction of a system leading to the present configuration of academic endeavor. In order to reach levels

of academic achievement which are considered age-appropriate in American education, high school ELL students of primarily oral background must journey across a perilous abyss that has been historically set against them in discourses of Enlightenment rationality combined with violent imperial will to power, even up to and including manifestations of these in American education. For these students, the noetic stakes are high. As Ong says:

There is hardly an oral culture or predominantly oral culture left in the world today that is not somehow aware of the vast complex of powers that is forever inaccessible without literacy. This awareness is agony for persons rooted in primary orality, who want literacy passionately but who also know very well that moving into the exciting world of literacy means leaving behind much that is exciting and deeply loved in the earlier oral world. You have to die to continue living. (Ong, 1982, p. 15)

Death is a steep price to pay for literacy and the world it opens one to, but, lest we give in to scoffing, this is not as hyperbolic a description as some might believe. Based on the understanding of the oral psycho-social structure and the legacies of Enlightenment rationality and colonialism that I have extensively explicated elsewhere (Watson, 2010), I submit that the experience of LESLLA learners in US high school classrooms presents a modern manifestation of what Dussel has called *the myth of sacrificial reason* (1995, 1998), in which students are forced into an artificial relationship with language and with the world that drains the oral indigenous life out of them, and a survival mode with regard to instruction that is characterized by massive pretending on both the students' and the teachers' parts. This state of affairs is both the observable and the predictable consequence of the encounter between a living relation with the living word/world of the oral way of life and the frozen, murdered, dissected form of academic knowledge presented by and in the Western

classroom. In this section I will tell a final cautionary tale, a strong interpretation of the sacrificial paradigm in initial literacy classrooms, in order to make a point that is usually suppressed by triumphant Western educational discourses, for as Said has said, "we must excavate the silence, the world of memory, of itinerant, barely surviving groups, the places of exclusion and invisibility" (Said, 2004, p. 68). We must engage the underside of literacy's modernity.

Standard American Academic English (SAAE) as codified in textbooks, disciplinary literacy programs, governmental and district standards of achievement for every grade and subject, and standardized assessments, is the modern apparition of Learned Latin (Ong, 1982), the mother tongue of no one, a set, prescribed medium developed for academic purposes, a vehicle, formed specifically around literacy constructions, which serves to sort students according to economic future, according to class (Illich, 1973, 1991). Its primary mode of instruction is definitional, abstract, categorical, and determinate; it is sealed, like the fate of oral culture trying to acquire these norms. The artifacts of Standard American Academic English, the standardized language of education in American schools, can be found in virtually every American public high school classroom, where vast branding, marketing, and buy-in initiatives have worked hard to make them seem appropriate and rigorous. SAAE is founded on and enacts a philosophy which is devoted to the elimination of ambiguity and resists the epistemological and moral challenges of alterity. It is the academic end of history, situated outside of development, the final evolutionary endpoint of humanity's Universal Culture in all its bellicose splendor, superior to localized knowledges and invulnerable to their unscientific oral critique.

Resident American students suffer the effects of deadening, monolithic SAAE in proportion to their distance from privilege, many of them unable to march in step to its insistent drumbeat, resulting not (so far) in a radical reconceptualiza-

tion of SAAE's modernist dispositions but in a redoubling of standardization efforts that, having left a lot of children behind in the past, are supposed to somehow leave fewer behind as the bar is set higher. The unspoken but obvious extrapolation is that some students are expendable, there is no intention of creating a more informed citizenry and a more equitable distribution of wealth according to the principles of democracy, but to realign American education according to the needs of the neoliberal globalized economy, which by its own definition provides just a few places at the top. The fictitious facticity of frozen academic English frustrates great numbers of native English speaking students raised in American society, but, since they receive it over a longer time and in smaller doses, it does not shock them as it does oral newcomers. I am referring here to the strong form of cultural dissonance, or what has also been called at this conference "the third trauma" of school. SAAE presents a surreal challenge to students who enter this way of valuing as young adults whose formative experiences have occurred within other cultural and linguistic paradigms. The world that they have known is gone and they are struggling to find new footing, all the while trying in every way they know how to *look* perfectly adjusted, to appear as if they fit in and can smoothly manage information whose body temperature has been lowered to near death (Caputo, 2000).

The vast abyss between oral noesis and that of hyperliterate SAAE receives little notice in a situation of extremely limited time and the federal requirement that each school and subset cell within the school show "Adequate Yearly Progress," determined by a standard formula under the No Child Left Behind law (2008), in order to maintain autonomy and retain funding, factors which drive teachers to ignore the actual time needed by students and surge forward to "cover" the required units using the mandated methods. The situation that these pseudo-educational behaviors creates forces the development of elaborate

measures of survival by high school students without prior schooling, which takes several forms.

Presented with impossible-to-comprehend sentences approved for high school subjects by curriculum committees made up of monolingual literates, newcomers gifted by oral noesis with the ability to interpret audio and physical cues call on their skills in interpretive listening, reading lips, and understanding body language to infer which word is on the page by looking not at the letters but at the teacher's lips, and to guess at the meaning of a passage not by being able to read it but by reading facial expressions, tones of voice, and gestures. Asked tilting tag-questions like, "An amphibian is a warm-blooded vertebrate, isn't it?" or simply, ubiquitously, "You see what I mean, right?" oral newcomers, intuitive, eager to achieve, dutifully respond in the affirmative, and this is overworked, undertrained teachers need to hear to make them believe that they have understood. It is quite astounding how often teachers ask the class as a whole, "Who finished your homework?" or "Who got only one or two wrong?" Up go the hands of students left and right—I see their papers, and, grinning, they see me looking—students who didn't understand the assignment enough to even start the homework, or got only one or two right, proudly identify themselves as winners in this obviously artificial academic game. Unlike Luria's subjects (1976) who complained how stupid it is to ask "What is a tree?" when everyone knows what a tree is and you can point to one right there, LESLLA students in American high school are not in their home environment but newcomers in a new environment, and they are not inclined to complain about what a silly waste of time so much of this is, not when they have the ability to make the teacher happy and act the part of the proper student. These alone are accomplishments in a foreign academic world.

In the absence of academic reading proficiency and texts that have lifeworld meaning in an oral world, students struggle to laboriously 'sound out' sentences of great lexical

and syntactic obfuscation from the distant side of the abyss. What choice do they have? Here is the reading passage from a homework assignment in beginning high school ELL sheltered social studies:

Benjamin Franklin, one of the most famous men in American history, had only two years of schooling. Franklin triumphed over his lack of education by reading every book he could beg, buy, or borrow. Frequently till long after midnight a candle burned in the room of the young man who was gaining his knowledge from the great writers of the past. Enjoying reading more than playing, never happy unless a book was in his hands or crammed into one of his pockets, Franklin was soon better educated than most Americans of his time.

Assisting a newcomer student with the phonetic reading of passages like this day after week after month, not to mention the true-false and multiple choice questions that follow, is for the sensitive educator an exercise in self-abnegation. And this is a modified curriculum version! How many times have we supported a student phonetically through these difficult passages, providing just enough but not too much help, just so they can *form the words phonetically*, as if that meant anything for understanding to students who do not have this English vocabulary? The hurdle of explaining the word ‘schooling’ alone is agonizing, and emblematic of the distance. And yet at the end of these gut-wrenching intervals, ‘reading’ is the name we give it, referring only to a jagged, halting phonetic excursion. Everyone is pretending at this point, pretending that if you can oralize some semblance of the word’s surface phonemes that means you are reading, pretending that you can grasp the meaning of the sentence without knowing the meaning of most of its words, pretending that if you try hard like Ben Franklin did, you, too, will receive the amazing blessings of candle-lit literacy. Of course some preliterate high school newcomers progress beyond this stage—no one

knows this better or celebrates this more than I. The ones I am speaking for here are the many, many, many who struggle mightily, for a much longer time than either governmental or ideological conceptions typically allow.

It is easy to understand why students become adept at all sorts of compensatory strategies, for instance, manipulating placeholders, a strategy often taught explicitly in reading instruction and test-taking support classes. Here is a passage incorporating obsolete English words that can illustrate the point for English-speaking literates:

Filled with ug, the younghede Tenderis groped his way along the downsteepy path toward the cosh wherein dwelled the feared spirit-person. Squit-a-pipes that he was, Tenderis found negotiating his way through the eileber and venerated dway-berries very teenful in the nyle. He tripped over zuches spiss with maily malshaves that made him quetch at their touch. (Spurling, 1977, pp. 33)

Placeholder cues based on limited word knowledge can help us answer many questions: Where was Tenderis going? *Along* the downsteepy path, *toward* the cosh. What did he trip *over*? *Over* zuches spiss with maily malshaves. This kind of structural placeholder skill wears out its usefulness when questions inevitably turn to the definitional: Define these terms: younghede, teenful, maily. Now the student is left to ask a friend, copy, or resort to dictionary or textbook embedded definitions with the fantastic difficulty and unreality these present to the orally traditioned student. “Why this definition is no correct, teacher? I copy it from dictionary!” is the commonly heard refrain, and it does not help to explain that the numerated options under a dictionary entry refer to different contexts known to those who read and write dictionaries but, in the case of the more academically oriented terms, are hardly ever known to students of orality.

And let’s talk about copying, perhaps the most pervasive scriptural form to be found in ESL classrooms and

sheltered content courses. One of the first lessons prelitererate newcomers learn is that there is good copying and bad copying. Sometimes the teacher requires it as a pedagogical exercise: 'Copy the vocabulary words and their definitions in your notebook' may be the most-repeated phrase in American education. There are also intermediary forms, such as copying portions of notes onto a special sheet that students are allowed to have with them on test day—this sheet, but not another. An unregulated form of copying occurs when on a normal lesson day newcomers take their pencils and, glancing furtively left and right, start copying whatever it looks like others are doing. Copying becomes bad when students do it without permission in order to get a good grade on complicated worksheets and tests they cannot otherwise complete. In one case a brand new student just arrived from refugee camp tried to copy an entire English proficiency placement test, bubble answer options and all, on separate sheets hidden in her hijab. This she took to lunch, where she got a variety of opinions on how to answer the various questions that were often miscopied, understandably. This particular case points to the idiocy of the articulation system—the whole incident was motivated by a desire to be placed in a higher ESL level, since this student, after all, was 21 years old, and did not want to be in the lowest level which would keep her from graduating "on time." The greater lesson to be learned from watching oral newcomers navigate the weakness of this literacy-evolved form is how much copying depends on prior literacy—students unaccustomed to reading and writing make constant grievous errors in copying that they are hard-pressed to recognize even when the errors are pointed out, which errors are replicated and expanded in future copyings. How unreal and random all this must seem to orally toned students, who sometimes bring a trusted teacher in on the subterfuge—how unreal, random, and cruel it ends up seeming to the trusted teacher.

Because, let's face it, what good are meaningless creden-

tials? Given the senseless learning situations which so many older students without prior literacy face, it is easy to understand why many work so hard to acquire credentials at any cost, engaging in very sophisticated credit laundering maneuvers between various high schools and harried guidance counselors, leading to the not at all uncommon situation that a student can have seventy or eighty credits but extremely limited ability to read, write, and do basic math. Pretending is the fate of the sacrificial student, ghettoized to receive surface level, tokenistic standards-based content instruction that looks good only in curriculum guides and to outside evaluators of the content area, but is not meaningfully taught to students whose 'deficits' in language proficiency and cognitive academic preparation present an incredible abyss between their actual state and the subject matter we pretend to teach them and they pretend to learn.

Indeed, it is not only LESLLA students who need to make friends with pretending in the current secondary school context. Not long ago, high school teachers in a large urban district I am familiar with were astounded to hear from the district's ELL Director that the new Level One reading program to be launched in the fall was guaranteed to bring all beginner proficiency ELL students, including those without prior schooling, to grade level reading parity within one, or maximum two years. Teachers who want to remain in good standing in this district must now pretend to believe that such a preposterous claim is reasonable, and all students will now be held accountable against the standard of what is essentially a marketing ploy by the program's publisher, which will predictably lead to myriad new forms of pretending by students. Somehow the need to pretend that blindingly rapid progress can be made by students with vast instructional distances to cover continues to override the findings of the entire research base on LESLLA students, not to mention the long professional experience of countless teachers. Like the

science teacher in the first anecdote, it can be easier just to pretend that tennis is an outdoor sport than to rethink the whole activity and its very validity. Like the math teacher in the second anecdote, willingness to pretend that *this* new curriculum is just what our LESLLA students need to make unprecedented learning gains, even as our entire understanding of research and practice screams in disagreement, can be a requirement for keeping one's job.

It is my contention that the basic telos underwriting all of this is not ultimately ascribable to the misdirected vision of administrators, nor to a failure of teacher quality or desire, nor to a handicap within students, but to the authority of Western education sponsored by epistemological supremacy assumptions and the weight of empire that compels teachers and students to participate in the faking. Authorized by versions of knowledge underwritten by Enlightenment scientific rationality and the authority of empire in its contemporary culmination, American education is having a one-sided conversation with LESLLA newcomers that forces the transformation from orality to literacy using ill-suited but mandated methods of standardization, and casts American schools as agents of neo-Hegelian Empire. The credit laundering, faking, and drop-out rates of older newcomers are not aberrations, but the logical consequence of Enlightenment rationality translated to school and instructional practices, and buttressed with an imperial myth of sacrifice which permits us to look upon oral newcomers as less evolved versions of Americans, who, if they do not succeed when given the same rigorous education our children receive, may and should be sacrificed in their culpable immaturity.

The consequences of the clash of oral and literate noeses constitute a compendium of compulsions: copy or fail, credit launder or fail to graduate. Some are more insidious, like the choice between embedded authentic relationships based on shared meanings, and "a better life," every immigrant and refugee's mantra, which can only be

accessed through academic literacy. Or the deeper, less recognized abandonment of the intimate rapport between language and meaning that characterizes the passage from unmediated life in orality to represented life in literacy. Or the transformation from seeing people as relations to seeing others as means to my ends, which, as Mosha (2000) points out, is the hallmark of one who has truly acquired the highest level of the neoliberal globalization model. The encounter of orality and literacy inevitably engenders a sort of mnemonic plague, in which only written knowledge counts, and memories of elders and traditional knowledge become impediments to progress. The two ways of being are indeed difficult to reconcile.

In the neo-Hegelian empire of U.S. schools, words and concepts, and the discourse and pedagogy that surround them, are treated like specimens in formaldehyde, murdered and awaiting dissection. American education in its current manifestation as a product of Eurocentric scientism requires that ideas and words be immobilized in this way. Standardized tests are the ultimate expression of preserved, embalmed knowledge: the text booklets are their caskets, the schools vaults where they are locked for security are their vaults, the results are the students' and schools' academic epitaphs—published in newspapers for the public to decry and to mourn. The encounter of vivified, intimate, contextually charged orality with frozen, preserved, immobilized academic literacy is one that forces young adults who journey from orality to literacy to undergo the process of semiotic embalming while they are living. Just as subjugated, culpably immature primitives have always been sacrificed to the higher planes of progressive Enlightenment modernism, so the noesis of orality is sacrificed to academic literacy.

The moral outrage this situation provokes is great, as is the need for redress. Just as great as the West's complicity in the on-going suffering, though, is the West's need for the particular gifts of orality as a palliative to our own suffering.

Conclusion

From this perspective, we are all both endowed and deficient in different ways, and our gifts and handicaps have distinct sources and consequences.

We might consider the matter in a global semiotic sense, following philosopher Ortega y Gasset's (1959) notion of exuberances and deficiencies. From this perspective, we are all deficient in different ways, and our handicaps have distinct sources and consequences. The Latin root of 'oral' refers to an opening, an orifice through which depths of understanding may be achieved, intimately linked with the sacred—the oracle imparts mysterious portents, *ora* means not only speech but prayer. Literacy (>Lat. for 'letter') is the letter of the law rather than its spirit, the externally accessible, knowable, translatable. If our reference point is modern American academic literacy, it is clear that LESLLA learners have a disability which inhibits participation in the vast workings of the literate world, but it must also be seen that literates, especially the highly literate, have a disability which precludes full participation in the vast workings of the oral world, the ways of people for whom meaning is embedded in proximal context with a known community. (For those who attended the 2011 LESLLA plenary by DeCapua and Marshall, just think back how many of us felt when Helaine Marshall asked us to put away all technology and writing material—the word 'panic' was used at my table.) Each way of living has its own lineage, its own way of being with its own rules and a completely different set of skills needed to navigate it successfully. Both ways are deficient in a certain *sense*, one governed by hearing, the other governed by sight, but one deficiency—illiteracy—puts people at a disadvantage for accessing power and privilege, while the other—illorality—puts people at a disadvantage for accessing relationship and belonging.

The Gift of Orality

The endurance of writing, according to Caputo, is inextricably

ably a function of its mortification, awaiting like Cinderella the kiss of orality, what Gadamer calls the *Vollzug*: "the breath of the living subject, to bring it back to life" (Caputo, 2000, p. 52). I want to suggest that, considered against the psychoses of the literate occidental world — depression, alienation, anomie, suicide, school violence — the way of life in orality brings the possibility of a healing gift, in the sense that much of what we in the hyperliterate academic cultures lack is precisely what oral cultures possess. It is appropriate therefore to speak not only of the challenges of orality, but of the *gift of orality*, a gift that some in Eurocentric cultures have understood the value of, but the institution of American education has yet to position itself to receive.

A Pedagogy of Deep Reciprocity

I want to suggest that an understanding of the fusion of oral and literate horizons provides a new frame of reference, located in a recognition of the pragmatic and ethical imperative of a pedagogy of **deep reciprocity** in educational and societal relations with people and cultures of orality. By this understanding, the underside of modernist literacy, which is orality, is just that to which we of the Eurocentric cultures need to remain open in order maintain the possibility of our own transformation. By the same understanding, the reverse is also true.

This perspective allows us then to affirm that there is no responsible choice other than to teach literacy and academic knowledge to all who come to live in this and other societies of high literacy. Literacy *is* an enormously powerful tool in the world as it has come to be configured, the use of which needs to be powerfully tempered by an embrace of the way of living enacted in face to face relations with other people and the natural world. As I have argued, we must teach literacy to LESLLA students in ways that both make sense pedagogically in light of their specific orientations, as evinced for example in the excellent work of Andrea de Capua and

Helaine Marshall, and that recovers a heart of morality in global intercultural relations. The better angels of our nature call upon us to leave the mindset of political, economic, and cognitive imperialism permanently behind.

My work is driven by the conviction that we learn more about what makes *sense* for both oral and literate worlds by reflecting on the existential nature of oral cultural experience in its encounter with literacy. The gift of orality to our pedagogical transformation consists precisely in how much we stand to learn about the weaknesses and fallacies of our own instructional designs by noticing how they are received by those who are previously untouched by a cynical, distanced relation with knowledge and experience. An intersubjective, valence-structured orientation of deep reciprocity in the context of literacy instruction to oral newcomers might be stated this way: On the one hand, we have a responsibility to teach in the most effective, humane way, so that high school age oral newcomers have a fair chance at *practical survival* in a world of hyperliteracy. On the other hand, we have the opportunity to cultivate our ability to be open and attuned to the ambiguous plenitude of relationships and the natural world through meaningful engagement with spontaneous, embedded, orally-toned ways of being, so that our hyperliterate selves may have a fair chance at our own *ontic survival*.

The unfathomable abyss may turn out to be an image of both death and life: death to the lonely, bitter, know-it-all Western self, and life to... life.

References

- Battiste, M., & Henderson, J. Y. (2000). *Protecting Indigenous Knowledge and Heritage: A Global Challenge*. Saskatoon, Saskatchewan: Purich Publishing Ltd.
- Becker, A. L. (1992). Silence Across Languages. In C. Kramsch & S. McConnell-Ginet (Eds.), *Text and Context : Cross-Disciplinary Perspectives on Language Study* (pp. 115-123). Lexington, Mass.: D.C. Heath.
- Bhabha, H. (1990). The third space. In J. Rutherford (Ed.), *Identity, community, culture difference*. (pp. 207-221). London: Lawrence and Wishart.
- Bhabha, H. (1994). *The location of culture*. London and New York: Routledge.
- Bigelow, M., & Tarone, E. (2004). The role of literacy level in SLA: Doesn't who we study determine what we know? *TESOL Quarterly*, 38, 689-700.
- Bigelow, M., & Watson, J.A. (2012). The role of educational level, literacy, and orality in L2 learning. In A. Mackey and S. Gass (Eds.), *The Routledge Handbook of Second Language Acquisition* (pp. 461-75). London and New York: Routledge.
- Bollnow, O. (1974). The objectivity of the human sciences and the essence of truth. *Philosophy Today*, 18(1), 3-18.
- Caputo, J. D. (2000). *More radical hermeneutics: On not knowing who we are*. Bloomington and Indianapolis: Indiana University Press.
- DeCapua, A. & Marshall, H. (2011). From cultural dissonance to a new learning paradigm. Plenary Address to the 2011 Symposium on Low Educated Second Language and Literature Acquisition by Adults. Minneapolis, MN: University of Minnesota, September 2011.
- Dussel, E. D. (1995). *The invention of the Americas : Eclipse of "the other" and the myth of modernity* (M. Barber, Trans.). New York: Continuum.

- Dussel, E. D. (1998). Beyond Eurocentrism: The world system and the limits of modernity. In F. Jameson & M. Masao (Eds.), *The cultures of globalization* (pp. 3-31). Durham and London: Duke University Press.
- Echevarria, J., Vogt, M., & Short, D. (2008). *Making content comprehensible for English learners: The SIOP Model* (3rd ed.). Boston: Pearson.
- Gallagher, S. (1992). *Hermeneutics and education*. Albany, NY: State University of New York Press.
- Guba, E. (Ed.). (1990). *The paradigm dialog*. Newbury Park, CA: Sage.
- Illich, I. (1973). *De-schooling society*. New York: Penguin.
- Illich, I. (1991). A plea for research on lay literacy. In D. R. Olson & N. Torrance (Eds.), *Literacy and orality* (pp. 28-46). Cambridge, UK: Cambridge University Press.
- Irele, A. (2001). *The African imagination: Literature in Africa and the black diaspora*. New York: Oxford University Press.
- Kristeva, J. (1991). *Strangers to ourselves* (L. S. Roudiez, Trans.). New York: Columbia University Press.
- Luria, A. (1976). *Cognitive development: Its social and cultural foundations* (M. Cole (ed.), M. Lopez-Morillas & L. Solataroff, Trans.). Cambridge, Mass: Harvard University Press.
- MacDonald, J. W. (1988). Theory-Practice and the Hermeneutic Circle. In W. Pinar (Ed.), *Contemporary curriculum discourses* (pp. 86-116). Scottsdale, AZ: Gorsuch Scarisbrick.
- Mazrui, A. (1990). *Cultural forces in world politics*. Oxford, UK: James Currey.
- Mazrui, A. (1998). *The power of Babel: Language & governance in the African experience*. Chicago: University Of Chicago Press
- McLuhan, M. (1964/1994). *Understanding media: The extensions of man*. Cambridge, MA: The MIT Press.

- Mosha, R. S. (2000). *The heartbeat of indigenous Africa: A study of the Chagga educational system*. New York and London: Garland Publishing, Inc.
- No Child Left Behind Act of 2001, 20 U.S.C. § 6319 (2008).
- Olson, D. R., & Torrance, N. (Eds.). (1991). *Literacy and orality*. Cambridge: Cambridge University Press.
- Ong, W. J. (1982). *Orality and literacy: The technologizing of the word*. London and New York: Routledge.
- Ong, W. J. (1988). Before textuality: Orality and interpretation. *Oral Tradition*, 3(3), 259-269.
- Ortega y Gasset, J. (1959). The difficulty of reading. *Diogenes*, 28, 1-17.
- Polkinghorne, D. (1983). *Methodology for the human sciences: Systems of inquiry*. Albany, NY: State University of New York Press.
- Polkinghorne, D. (1988). *Narrative knowing and the human sciences*. Albany, NY: State University of New York Press.
- Rickman, H. P. (1979). *Wilhelm Dilthey: Pioneer of the human studies*. London: Paul Elek.
- Said, E. (1978). *Orientalism*. New York: Pantheon Books.
- Said, E. (1993). *Culture and imperialism*. New York: Knopf.
- Smith, D. G. (1988). Experimental eidetics as a way of entering curriculum language from the ground up. In W. Pinar (Ed.), *Contemporary curriculum discourses* (pp. 417-436). Scottsdale, AZ: Gorsuch Scarisbrick.
- Smith, D. G. (1999). *Pedagon: Interdisciplinary essays on pedagogy and culture*. New York: Peter Lang.
- Smith, D. G. (1999b). Modernism, hyperliteracy and the colonization of the word. In D. G. Smith, *Pedagon: Interdisciplinary essays in the human sciences, pedagogy and culture* (pp. 61-72). New York: Peter Lang.
- Smith, D. G. (2006). *Trying to teach in a season of great untruth: Globalization, empire and the crises of pedagogy*. Rotterdam: Sense Publishers.

- Sperling, S. (1977). *Poplollies and bellibones: A celebration of lost words*. New York: Crown Publishing.
- Spivak, G. (1988). Can the subaltern speak? In C. Nelson and L. Grossberg (Eds.), *Marxism and the interpretation of culture* (pp. 24-28). London: Macmillan.
- Spivak, G. (1993). *Outside in the teaching machine*. New York and London: Routledge.
- Spivak, G. (1999). *A critique of postcolonial reason: Toward a history of the vanishing present*. Cambridge: Harvard University Press.
- Van Manen, M. (1990). *Researching lived experience : human science for an action sensitive pedagogy*. Albany, NY: State University of New York Press.
- Watson, J.A. (2010). *Interpreting across the abyss: A hermeneutic exploration of initial literacy development by high school English language learners with limited formal schooling*. Unpublished Ph.D. dissertation. Minneapolis, MN: University of Minnesota.