A Medical Archaeopedagogy of the Human Body as a Trauma-Informed Teaching Strategy for Indigenous Mexican-American Students

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Abstract
In this article, three co-authors share their narratives and clay figurines sculpted during the Mesoamerican Figurine Project of Rio Hondo College (Garcia, in press-a). Through reflective writing exercises and the sculpting of small-scale clay figurines, Los Angeles-based Mexican-American students unearthed parts of their Mesoamerican ancestry and materialized their stories of displacement and violence to assist in meeting student learning outcomes (SLOs). After interpreting these data alongside the medical tools observed on the four Tezcatlipocas of Mesoamerica (Acosta, 2007), the supposition is that Indigenous Mesoamerican students benefit when engaged through the following topics: 1) land and cosmology, 2) trauma and medicine, 3) resiliency and self-determination, and 4) community and family. To support all students’ educational and mental health goals, and to prevent further trauma accumulation, the Mesoamerican figurine is modeled as a pedagogical tool with a wide range of therapeutic values. By employing a critical autoethnographic approach (Ohito, 2017), Instructor Garcia’s ancestral knowledge—combined with his students’ insights—enabled his conceptualization of a medical archaeopedagogy of the human body as a trauma-informed teaching strategy (Cole, Eisner, Gregory, & Ristuccia, 2013) to begin to address the mental health challenges prevalent in the Mexican-American community related to the cultural genocide of Native Americans.

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Introduction to the Mesoamerican Figurine Project of Rio Hondo College

During the summers of 2014 and 2015, I, the primary author, asked students of the *Humanities 125: Introduction to Mexican Culture* class to materialize their views of the body and self through clay-work (Sholt & Gavron, 2006) and reflective writing assignments (Jehangir, 2010). These interactive and therapeutic processes comprised the core work unique to the Mesoamerican Figurine Project of Rio Hondo College (http://www.mesofigurineproject.org), to be published in UCLA’s Raza Studies journal *Regeneración Tlacuilolli*. In one section of Garcia (in press-a), I write about the *Coatlicue State Writing Exercise* developed around the virtues of our ancestral mother *Coatlicue* in an effort to build the classroom into a place of inquiry, where critical teaching and mental health are seen as one. Through reflective writing and the sculpting of small-scale clay figurines, Los Angeles-area Mexican-American students revitalized aspects of their Mesoamerican ancestry that they believed to be non-existent. During the course, numerous students cultivated their Native American identities further as one form of contesting trauma and violence. Of added importance in the *Regeneración* paper, I speak of my own positionality as an Indigenous Xicano educator and of the importance of engaging the 83% “Hispanic” population at Rio Hondo as Indigenous to the land. In this article, Maritza, Eva, and Robert, share their clay figurines and their accompanying narratives. The work written about herein represents both a working and conceptual effort to intersect Native earth medicine (clay), SLOs, and mental health to serve Indigenous Mexican-American communities while being mindful of all Native American groups.

Observing the Signs and Symptoms of Mental Health Disorders Among Students

To begin with, I acknowledge the mental health definition in the “Mental Health Action Plan 2013–2020” of the World Health Organization (2013): “Good mental health enables people to realize their potential, cope with the normal stresses of life, work productively, and contribute

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1 I use “Native American” to identify all northern, middle, and southern Indigenous peoples of the Americas. Native groups include disenfranchised Mexican-Americans, US-identifying Native Americans, the First Nations of Canada/Alaska, genetically identified tribal communities, federally recognized tribes, and non-federally recognized tribes. Due to cultural genocide (land theft, sexual violence, and forced assimilation), this Indigenous diaspora of mixed blood lost great portions of their Native ways of knowing and being—though many are now in the process of revitalizing and sustaining their traditional life ways.
to their communities” (p. 5). This understanding of a healthy body is considered alongside the concept of medicine and wellness (Avila & Parker, 1999) that situates human beings, animals, plants, minerals, water, earth, air, and fire as one living ecosystem, so that when a person finds herself or himself disconnected from parts of nature, illness occurs. In this article, trauma and violence are considered as any form of physical or psychological experience that affects the mental health of students, leading to a disorder, as described in the fifth edition of the Diagnostic and Statistical Manual of Mental Disorders (DSM-5) (American Psychiatric Association [APA], 2013).

In Garcia (in press-a), I list racism, sexism, patriarchy, homophobia, displacement, and deportation as examples of trauma and violence that students experience while attending community colleges. As a teacher who attempts to meet student learning outcomes (SLOs) on a daily basis, I feel concerned about the persistent mental health challenges affecting the learning behavior of my students. I often observe habitual absences, disorganization, disengagement, fatigue, disillusionment, and intoxication. Through conversations with students and through my research, I am aware that such signs and symptoms are related to a matrix of stress, anxiety, and depression. I have been informed that such problems stem from a lack of household support, experiences with domestic and street violence, a low social economic status (SES), intergenerational trauma, a genetic disease, or a more severe condition such as homelessness, substance addiction, diabetes, post-traumatic stress disorder, bi-polar disorder, and various cases of cancer.

A framework that incorporates teaching strategies, mental health knowledge, and Native medicine at community colleges is essential. The text summarized by Katz and Davison (2014) reveals that community colleges, unlike four-year colleges, mostly serve the working class, single parents, undocumented students, ethnic minorities, middle-aged students, individuals with physical disabilities, and veterans. Mental health disorders dominate low-SES individuals because they are exposed to greater stress and environmental adversity (Dohrenwend et al., 1998). For example, single parents, representing 1-in-6 community college students, suffer higher rates of poor mental health when compared to dual parents because of the unique challenges that they face (Shenoy, Lee, & Trieu, 2016). Native Americans are at greater risk of developing, inheriting, and/or accumulating trauma, since many Native individuals still endure modern forms of racism and violence (Bassett, Tsosie, & Nannauck, 2012). The DSM-5 (APA, 2013) acknowledges these findings, noting that Latinos and Native Americans have a higher prevalence of developing stress-,
anxiety-, trauma-, and substance abuse-related disorders. Moreover, Jorm (2012) reports that non-white culturally diverse groups are less likely to seek help due to a lack of mental health knowledge. As community college instructors interact with a wide range of behaviors daily and on a more personal level than University professors do, they are often the first to observe poor physical and mental health, and, in turn, are the first to offer support. By cultivating teaching strategies that take into account the well-being of students, a vital component of a more holistic mental health model (Garcia, in press-b) begins to emerge. To believe and/or accept that historically marginalized Native American students live carefree lives in the classroom free of any heartache, pain, or emotion from their past is to fall short of a critical understanding of the human experience.

**The Many Methods of an Indigenous Xicano Educator**

As the primary author, I write from the perspective of a critical autoethnographer, in particular, by considering Esther O. Ohito (2017), who, as a teacher educator, challenges herself and her students to commit to teaching strategies that mediate and untangle relations between the flesh, racial identities, place, and history. The Western classrooms she writes about represent “scenes of dismemberment” (Ohito, 2017, p. 15), where bodies are cut off from the mind. Acting as a critical autoethnographer in the classrooms that I teach in, I observe this carnage of the body, mind, and spirit (BMS) in the form of fatigued bodies, battled bodies, and yes, disabled bodies recovering from severe combat injuries. These experiences at the community college are what led to the development of an archaeology of the human body (Garcia, in press-a), conceived of when students took on the challenge of writing about traumatic histories in an effort to construct new meanings of the self. An archaeology of the body aims to create podiums on which Indigenous Mesoamerican learners systematically excavate their most profound BMS experiences toward a restorative journey of their body; similar to how an archaeologist, the sibling of the ethnographer, carefully surveys and excavates the Earth’s layers to understand and reconstruct human experience.

Seeking to advance this archaeology of the human body, herein, I explore how a revitalization of ancestral knowledge may assist in informing teachers and students of the signs and symptoms of trauma and the effectiveness of ancient medicine—in this case, earth clay. I ground the new model—a medical archaeopedagogy of the human body—on the experiences of
former and current students, and draw further from the medicinal tools observed on the bodies of the four Tezcatlipocas of Mesoamerica. I borrow from the bodywork of the ancestor Elena Avila (Avila & Parker, 1999) and Patrisia Gonzales (2012), which reminds us that, “Native knowledge is experienced directly through the body, whether it is in direct relationship to land and place or felt in ritual and ceremony” (p. xxiv). I describe the making of clay figurines as a culturally relevant therapeutic practice (Figure 4) for its capacity to unearth, mediate, and materialize the signs and symptoms of both poor and good health. Borrowing from the fields of critical education, mental health, art therapy, archaeology, and Mesoamerica, I align the strategies of a medical archaeopedagogy of the human body (i.e., reflective writing and the sculpting of clay-figurine assignments) as a trauma-informed teaching strategy (Cole et al., 2013) to sort through the matrix of mental health problems experienced by Indigenous students.

As outlined by Cole et al. (2013), a trauma-informed school: 1) realizes the regularity of trauma in students; 2) recognizes the psychological and relational impact on teachers; 3) converts this knowledge into practices that offer wide forms of support; and 4) prevents the accumulation of trauma by adopting practices that foster recovery and growth, as opposed to punishment and exclusion. In brief, a medical archaeopedagogy of the body engages students of Mesoamerican ancestry, all students, as: 1) tied to land and cosmology, 2) affiliated with trauma and medicine, 3) resilient and self-determined, and 4) habitually communal in ways of living.

In the following section, I share the figurines sculpted by the three co-authors, Maritza, Eva, and Robert during the 2015 Mesoamerican Figurine Project, along with the accompanying written narratives that were transcribed from the reflective writing assignments that accompanied the clay-work, as evidence of the adverse experiences and environments navigated by college students of Mesoamerican ancestry. In the process of describing the ritual of sculpting clay and self-reflections (Garcia, in press-a), I highlight the various forms of cultural wealth (Yosso, 2005) that student figurine-makers possess, and how information informs lesson planning, i.e., the meeting of SLOs, curriculum development, as well as their own identity formation. The section where I model the Mesoamerican clay figurine as a classroom instrument of therapeutic value

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2 When the assignment was handed out, students were asked to voluntarily sign a consent form, granting permission for the publication of their stories and figurines on social media, in educational blogs, and in educational journals. A final draft of this article was shared with all co-authors for their final consent, and they all agreed to have the work published. Rio Hondo College did not require IRB approval for the assignments or activities of Humanities 125 during the 2014 and 2015 semesters. The primary author’s IRB experience is published in Garcia (in press-a).
follows this discussion. Woven into this argument, I cite works that speak of the Mexican-American/Latino/a student population that regularly display signs and symptoms of trauma. To conclude this section, I write of the figurine as it may have been used in ancient familial Mesoamerican rituals and ceremony, and how figurine making may promote positive health and well-being in the individual learner, in his or her family, and then out into the community at large. In the section that follows, I write of the four Tezcatlipocas of Mesoamerica (Tezcatlipoca, Quetzalcoatl, Huitzilopochtli, and Xipe Totec) as a major source of knowledge. Vital to the argument of this article, I describe the four personalities and their association with medicine. I write of these as a rigor of natural science, technology, and medicine—a model for teachers and students interested in ancestral science and medicine (ASM). To end the article, I conceptualize a medical archaeopedagogy of the body as a trauma-informed teaching strategy to sustain the educational goals and aspirations of Indigenous Mesoamerican communities as they shed the traumatized flesh of unresolved intergenerational trauma.

**Personal Storytelling Through Reflective Writing and Clay-Figurine Making**

With her permission, I begin with a narrative titled *Mi Virgen de Guadalupe* written by one of our three co-authors Maritza, during the 2015 Mesoamerican Figurine Project portion of *Humanities 125*. Unedited, Maritza’s narrative reads as such:

*Mi Virgen de Guadalupe* Queen of my Indigenous ancestors.
Faceless woman to me but my spiritual mother.
Why is it that I find myself always drawn to you?
Is your promise of peace carved in my heart?
Is your manifestation of unity bringing me victory in my journey.
Your significance to my people brought in times of death.
As I mold you to be beautiful
I find myself looking through my memory vault
Trying to pinpoint what you mean to me
I’m just brought to my troubled teenage years
Where rejection was common, where ending pain was ceasing life
Where my amateur art was only interested in every part of Juan Diego’s *tilma.*
At times, I found myself reflected in you
Drawing my insecurities and sorrow on you
The connection started making sense
nonetheless I sketched my mother offering her my pain, loss and all.
My parents told me stories about your Son; your importance in our people.
They introduced you to me as my angel
As my spiritual mother
Who I confide in
Looking at your manto reminded me to look at the night sky
remembering that even in the galaxies suction my worries.
That when I looked at the crescent moon
it would remind me about its cold beauty but still carrier of my tears.
the light around you was love radiating warmth to my humanly form.
Most importantly your hue spoke to me in levels that bring every kind
of emotions: love, tears, revolution, warrior women
you appeared before us, bring peace, unity and universal sense.
I thank you for connecting with me through my ancestors, dreams, and purpose.
DIOS TE SALVE MARIA, LLENA ERES DE GRATZIA, DOMINUS TECUM BENDICTA
TU IN MULIERIGUS, BENEDICTA FRUCTUS VENTRIS TU JESU, SANCTA MARIA
MATER DEI ORA POR NOBIS PECATURIBUS EN LA ORA Y EN LAORA DE NUESTRA
MORTIS, AMEN.

Michael Connelly and Jean Clandinin (1990) presume that the study of narrative remains central
to understanding the ways in which people see and experience the world. Narrative analysis
excavates Indigenous history, allowing us to honor the oratorical traditions of people of color
(Boutte & Jackson, 2014) that, according to Delgado (1989), represent the counter-story that is
often never told. For Indigenous people, narrative and experience form the basis of teaching and
learning (Aldern & Goode, 2014). Getting to know student’s through such inquires has made me
a more informed, critical, and concerned educator. After reading Maritza’s story, I understand
she: 1) recalls a troubled past; 2) abides by her spiritual and religious Catholic views; 3) remains
connected to her Native American ancestry that is Tarascan/Purépecha; 4) possess trilingual skills;
5) acknowledges her parents’ contributions; and 6) maintains strong aspirations through resistance, storytelling, and critical consciousness.

As an instructor who serves a large Mexican-American population at Rio Hondo College, when students self-reflect, and share their life stories (such as Maritza), I am quickly prepared to validate and integrate their own histories into future lesson activities as valid and important knowledge. Maritza’s hopes and dreams, which are shared through reflective writing, are in line with the six forms of community cultural wealth (i.e., aspirational, social, navigational, linguistic, resistant, and familial capital) identified by Tara J. Yosso (2005) as necessary to reforming U.S. schooling around the strengths of students of color. For our Native youth, such as Maritza, writing about life often leads to the furthering of a critical consciousness as they unearth both the trauma and the beauty of their ancestry. This is evident when Maritza writes, “I thank you [the Virgin Mary] for connecting with me through my ancestors, dreams, and purpose.” In reading this, I acknowledge Maritza’s state of mind and aspirations, partaking in her story as a co-journeyer (Cervantes, 2010), or as one that enables an ethics of caring (Ladson-Billings, 1995). Such safe “interventions” in the community college setting may help to reconcile feelings, when taking into account how storytelling often leads to self-determination, as stories expose a consciousness shared among colonized people (Gonzales, 2015).

During the project, dialogue, writing, and using the earth to unearth, provided a place where students opened up for the first time in a compassionate manner. The practice proved itself helpful in meeting educational outcomes and in the creation of new knowledge.

The Stories and Working with Clay...

For Maritza and members of the Figurine Project, the authoring of their own stories took place alongside the sculpting of clay. In clinical settings, art therapists use clay-work (Sholt & Gavron, 2006) to treat individuals with a host of mental health disorders. For example: the ego-resilience of low-SES teenagers (Jang & Choi, 2012); pre-school children with anxiety (Rahmani & Moheb, 2010); adults with negative feelings (Kimport & Robbins, 2012); adults with depression and anxiety (de Morais et al., 2014); emotional distress in patients with Parkinson’s Disease (Elkis-Abuhoff, Goldblatt, Gaydos, & Corrato, 2008); and anxiety, fear, and aggression among the visually impaired (Herrmann, 1995). According to Patricia Sherwood (2004), clay-work draws on four cognitive processes: sensing, gesturing, visualization, and sounding. Therapists usually cite a
therapeutic process in clay-work that involves the mining or unearthing of deep thoughts and feelings, the showing of emotion, non-verbal communication, and the safe destruction of the negative self through the building and beating of the clay body. Clay shapes emerge as diverse natural forms seen in nature and they vividly portray the culture of the human psyche (Sherwood, 2004). In turn, clay-work has the ability to spark inner growth and healing, Sherwood continues. The goal of art therapy is a new level of speculation on what is occurring in life (McKenna & Woods, 2012).

Although it has never been my intention to practice art therapy in the classroom with clay, clay-work as pedagogy has benefits, I have noticed, in that students harmlessly materialize, and unearth their emotions, phenotypes, and a spectrum of sexual and gendered characteristics. For some, this serves as a revelation and provides relief (Herrmann, 1995). I observed this often when students sculpted anthropomorphic bodies. Later, through the reading of clay-figurine narratives, I learned that some students saw themselves as possessing animistic healing abilities. Ritual clay-work, at its best, represents a materialization of the human body that, as a result, births a small-scale record of varying human identities. In this case, clay serves as a visual reflecting object (Or, 2010). Or (2010) demonstrates that sizing small-scale sculptures elicits mentalization: “In the intrapersonal realm, mentalization provides the means to discover and express subjective experience, and allows deepening and broadening of self-knowledge; it leads to the development of capacities essential to self and affect regulation” (p. 319).

I knowingly selected clay, made of the Earth’s sediments, for the task of revitalizing and reacquainting students of Mesoamerican ancestry with traditional views of pottery making. In line with the notion that elements, plants, and animals serve as Native sources of knowledge (Aldern & Goode, 2014; Simpson, 2014; Wildcat, McDonald, Irlbacher-Fox, & Coulthard, 2014), these tenets are central to ancient medicine and wellness (Avila & Parker, 1999). As students pounded and sculpted earth clay into small-scale human body parts, food shapes, and animal bodies, I paced the room breaking down and describing Mesoamerican subsistence strategies, the adaptation of natural resources, and interregional interaction among the many Native American groups. Discussions centered on articulations and interpretations concerning insightful relationships, animal and plant medicine, and knowledge of cosmology as a metaphor for new ways of being and becoming. As a collective, we discussed the details of giving and receiving, getting well, and sustainable practices among living people. At the same time, students spoke of past traumatic
experiences and ongoing forms of violence. Together, they regained their voices by comprehending the origins of their intergenerational trauma, as opposed to strictly burying it without contesting it. The teaching lessons are designed to spread outward into families and the wider community, therefore allowing a collective of consciousness for the now and for the future, based on a reserve of living Indigenous wealth.

Through clay-work, Maritza’s place on Earth found its way into a curriculum that before her arrival had no relevance to her learning needs or understanding of her Indigenous wealth. Her figurine *Mi Virgen de Guadalupe* (Figure 1), though micro in scale, materializes and reaffirms a strong sense of overcoming and recovery, despite a troubled past. Both the narrative and figurine inform us vividly of an appreciation for the cosmos when references are made to the night sky and the Moon. Sculpted with earth, figurines bring to life memory of the self, hope, and ancestral knowledge. The clay-work is telling and outstanding, and a testament to her innate abilities, which I would have never been made aware of without reflective writing and “hands-on” work. Working with clay, she also meets one of the SLOs by understanding how potters in Ancient Mesoamerica strengthened household economies and reciprocal exchanges.

*Figure 1. Mi Virgen de Guadalupe* queen of my indigenous ancestors. Photo by primary author.
In a second example of clay-work (Figure 2), Eva shares with us a figurine of her own self. In micro-scale, she materialized her full body with visible facial features, a stethoscope around her neck, and what she calls a “winged snake” draped atop her head and adorning her long hair. Unedited, Eva’s narrative reads as such:

My figurine symbolizes the healing winged snake above the nurturing woman who cares for the sick and infirm. She is skilled in promoting healing and good health. She cares for her family and those whose family cannot care for them. The Mexica [Aztec] within her makes her realize that she Curandera [feminine with knowledge of healing and medicine] inside her allows her to treat the body and soul of all her patients. The Curandera allows the Quetzalcoatl to take over her and assist with the physical and spiritual healing of her patients. Achieving my goal of getting my BSN [Bachelor of Science in Nursing] means a great deal to me because I will be the first of my sisters to achieve not only a college degree but a career. When my parents brought us to the U.S., we never thought any of us would be getting a college education since we were illegal at the time. I am eternally grateful to my family for supporting me, although they don’t always agree with my decision or choices.

Figure 2. Healing winged snake above the nurturing woman (Quetzal Nurse). Photo by primary author.
After reading Eva’s narrative and sizing her figurine, I am made aware of the persistence she carries to earn an advanced degree in nursing. She will become the first among her migrant family to complete an education, despite her early undocumented-citizenship status. Her story and verbalization of Nahua culture is consistent with her ability to use ancestral knowledge in a contemporary context, aspiring to help cure the sick and unwell.

Her sense of ancestry and keen awareness of her place in life represent positive aspects that Eva had established long before the clay-work. I regularly witness similar responses to challenges and the ability to self-determine in times of need in other students. Heejeong Jang and Sunnam Choi (2012) inform us that although different, people have the capacity to cope with threatening situations through the sustainment of resistance and optimism. This human response to adversity is explained in the concept of ego-resiliency (Block & Block, 1980) and was developed to help adolescents respond safely to trauma and violence. This view, however, that children are resilient should be interrogated, as more recent work has demonstrated the harmful effects on the brain related to adverse childhood experiences (Anda et al., 2006). As a psychological approach to treating the psyche, ego-resilient measures advocate adolescents focus on the positive parts of their life as opposed to only focusing on the dysfunctional (Jang & Choi, 2012). In the work of Jang and Choi (2012), making pottery in groups produced positive effects on the ego-resiliency of low-SES adolescents. They highlight, specifically, that during clay-work, peer communication about similar problems leads to an exchange of emotional support. Pottery making through sessions brings about positive regulation and expression of emotions (Jang & Choi 2012), and in this way, the unearthing in the group setting rebuilds BMS, as the deep-rooted and traumatized self of the Native American becomes conscious and more likely to challenge ongoing violence in the household and wider local community.

In the final figurine (Figure 3), Robert presents to us the morbid head of a person resting at the base of a stone water well. The head and profile appears distraught in appearance, having no body, large hollow eyes, and a wide-open mouth. At first glance, I was clueless as to its meaning. Only after reading the narrative did I become aware of its reference to the ensuing violence in Mexico surrounding the sale of narcotics, the use of weapons, and human trafficking. The figurine was given the name All’s Well that ends Well and the narrative states:
All’s Well that ends Well. This figurine originates from Sinaloa Mexico. It symbolizes the struggle with violence in the area because of conflict with drug, arms, and possibly human trafficking. Perhaps a man driving along the side of a Mexican Road and the Mexican cartel looking to make a statement or perhaps it has a deeper and darker secret involving the headless man and the cartel. Perhaps the cartel and this man were somehow affiliated and it takes a simple miscommunication or this man was biting off more than he could: all it takes is the idea of betrayal for it to be true. Perhaps this feud lasted a long time and this man was found in the pueblo from where he originates and was tortured and beheaded then tossed in the pueblo’s well in order to make a statement for the people who were harboring the fugitive. I plan to contribute to my people through dentistry. I want to give back to my community and other countries through dental medical attention. I see a lot of immigrants like myself in need of Dental attention. I’ve seen girls that are beautiful, but very insecure because of their heavily damaged/corroded teeth. Children who were born in other countries and have to deal with toothaches because their immigrant parents are afraid or do not have the means to seek medical attention. I believe this to be a simple/basic human right that is not given enough attention.

Figure 3. Morbid head of a person resting at the base of the stone water well. Photo by primary author.
Robert’s figurine and narrative convey one grim and hurting reality, taking place not only in Sinaloa Mexico, but also across many regions of Mesoamerica. I am made aware of his wide grasp of narco culture and violence. His understanding is morbid, yes, but the details of the story made relevant many talking points concerning land rights, the sale of weapons, and the procurement of natural resources. Land rights, and access, and the natural products that come from the land have been key to the development of Mexican culture since people tamed maize 9,000 years ago. From a morbid perspective, I take in a host of community cultural wealth, allowing for the development of culturally relevant exercises.

Though each co-author is unique, Robert, Eva, and Maritza share a common Mexican-American experience told from a place of interregional interaction, reciprocity, and the human flesh in motion. Robert writes of a missing dental care program for migrant families. His plan is to become a dentist one day and offer dental health services to local communities. Eva shares her passion for wanting to help heal the sick and aspirations of earning a nursing degree, despite her once undocumented status. Maritza writes a piece where she acknowledges the cosmos and her place in society as an Indigenous Purepecha woman. I pose the question, “How do we develop teaching strategies that deter the accumulation of trauma, contest violence, and ultimately, help alleviate the signs and symptoms of certain mental health disorders?”

The Mesoamerican Clay Figurine as a Classroom Instrument of Therapeutic Value

According to Phillipe, Laventure, Beaulieu-Pelletier, Lecours, and Lekes (2011; see also Anda et al., 2006, Table 6), individuals who experience psychological trauma at an early age are more likely to develop mental health disorders such as anxiety, depression, and ideas of self-harm as adults, than those with a healthy upbringing. These problems produce signs and symptoms, i.e., sleep deprivation, sadness, low self-esteem, apprehension, confusion, and aggression that surface in the classroom on a regular basis. The symptoms are strongly correlated with low test scores, missing assignments, and habitual absences. In Garcia (in press-a), I noted that trauma stemming from ICE deportation, gang violence, domestic violence, low SES, and a lack of household support impede learning, and elicit long episodes of disengagement. It is now common practice for community college instructors to make mandated accommodations for the growing number of...
registered Disabled Student Programs and Services (DSPS) students. For teachers who serve students of undocumented status at the community college, the presence of trauma is high. For example, Perez, Espinoza, Ramos, Coronado, and Cortes (2009; see also Valenzuela, Perez, Perez, Montiel, & Chaparro, 2015) cite a large population of Latina/o students that live in fear of deportation, are lonely, and depressed, in addition to being barred from scholarships, financial aid, and legal employment. Throughout the Mesoamerican landscape, psychological disorders such as fear, rage, loneliness, anxiety, envy, bad luck, and susto (soul loss) have existed for over five hundred years (Avila & Parker, 1999). The conflicts continue to be proliferated across the United States through outdated curriculums, racist laws, and anti-immigrant policies (Catalano, 2013). These do little to address the learning needs of Mesoamerican students, thus maintaining the intergenerational trauma of people that share a colonial history. As this has been the normative for many Native American students, schools must better prepare faculty and staff in providing appropriate health and psychological services (Valenzuela et al., 2015).

As this article has so far described, my own response to contesting threats and violence led to the Figurine Project and to what I tested out as a non-invasive therapeutic experience through working with clay and reflective writing. As students manipulated clay with their digits and palms, I was aware that deep cognitive unearthing processes were taking place. When describing their figurines, students shared both jubilant and hurtful stories, often shedding layers of trauma openly and voluntarily. Taking deep breaths was essential during the project. These types of engagements are a common discourse among Native people and in line with the SLOs of a humanities course on Mexican culture that surveys the conquest and colonization of once-living people and their descendants. I refer to the pedagogy as excavating the body because students are asked to describe positive and negative aspects of their journey.

Figurines are not new; the ancient Olmec, Maya, Purépecha, and Zapoteca all made their own types. Mesoamerican archaeologists use them to discern status and identity, and evidence suggests that people used figurines in curing ceremonies. Lisa Overholtzer (2012) has noted that female figurines of Central Mexico largely portray stages of birth, child rearing, wearing ear spools, and sometimes carrying copal bags. Overholtzer (2012) notes that “rattle figurines” with hollow bodies and small ceramic balls in their interior are the most common, having been used as musical instruments. In citing the work of Evans (2001), and McCafferty and McCafferty (1999), Overholtzer (2012) reports that female rattle figurines have been found in temazcales at
Cihuatecpan, a site in the Teotihuacan Valley of Mexico. She notes that these figurines are unique in that they sport the twisted two-prong trenza embedded with a black cord, significant of Xochiquetzal, the patrona of sexuality and fertility. Overholtzer (2012) tells us that people used figurines as cleansing tools in maternity rituals and during childbirth. The evidence she describes informs us that female rattle figurines served as neckpieces and were designed as hand-held instruments. The display further informs us that in Aztec times, the female figurine “communicated an image of powerful, knowledgeable women who played important roles in the maintenance and reproduction of society as midwives and mothers” (Overholtzer, 2012, p. 80). The use of the Mesoamerican figurine aligns well with the art therapy skill of mentalization, which Michal Bat Or (2010) writes promotes the self and its ideas.

The late psychiatric nurse Elena Avila devoted her adult life to treating the ill-health of Native American people. In Avila and Parker (1999), she tells us that it is not enough to mend the body, as one must also tend to the wounded soul. Trauma, she explains, causes part of the soul to become afraid and run away into hiding: “When this happens, a part of our energy is no longer accessible to us” (Avila & Parker, 1999, p. 19). To retrieve the soul from soul loss, Elena relied on deep talks, earth, water, fire, and dolls during bodywork. She describes a ritual in which clients search for hidden dolls where, after having been found, they would hold them as if they were a part of the self, cradling the doll, and making amends. Exchanges develop between the dolls and clients in which the “soul” fragments of the doll are told about the terrible things that have taken place. With no blame placed on either party, the clients and dolls reach a safe understanding of what has occurred to them without feeling guilty. According to Avila and Parker (1999), relating with dolls brings about tremendous restorative effects involving the deep physical, emotional, and psychological realms. Could the same be said of figurine making?

I have observed this to be a possibility. The Mesoamerican Figurine Project produced sexualized naked bodies, morbid bodies, praying bodies, happy bodies, queer bodies in God-like states, and maternal bodies. Sculpting the body became ritual, as we all partook in forming new understandings of what it meant to be Native in light of trauma to the flesh, self-determination, and good health. Student figurines surfaced from a place of ancestry, memory, and Native land. With mindful participation and facilitation, a therapeutic experience (Figure 4) surfaces when students make their own figurines that promote positive health and well-being: 1) bodies reconnect with forgotten ways of being with the land, thus reconciling negative feelings toward
the land; 2) the small-scale body is repeatedly shaped, destroyed, and built up in line with perceived ideas of wealth and happiness; 3) the body is symbolized alongside the departed and disenfranchised, assisting with feelings of guilt, bereavement, and reconciliation; 4) the body making the figurine shares the work with other figurine-makers, thus sharing stories and providing one another with emotional support; 5) heat-fired figurines serve as intimate gifts for the self, family, and community, thereby becoming an example of validation and hopeful resistance; and 6) clay figurines embody the ill-health and well-being of the body, and because of their materiality, sustain medical information for future inquiry. When Mesoamerican clay figurines materialize alongside a decolonizing pedagogy (Garcia, in press-a), preventative healthcare practices such as healthy dieting, Native ceremony, and school advising and mentoring, students have the capacity to repair and to live healthy and prosperous lives, thus positively impacting their own family group and their local community.
The Four Tezcatlipocas of Mesoamerica as Ancestral Science and Medicine (ASM)

In 2007, Curtis Acosta published “Developing Critical Consciousness: Resistance Literature in a Chicano Literature Class.” He wrote about efforts at Tucson High Magnet School (THMS) in Arizona to close the achievement gap between white students and students of color. Acosta (2007) pointed to the fact that across the street from THMS, the University of Arizona had a 15% population of Xicana/o students, compared to the 60% majority of Xicana/o students.
at THMS. Despite their numbers, students of Mesoamerican ancestry were not majority learners at major Arizona universities. Driven by this statistic, Acosta and other Raza educators (Arce, 2016; Cammarota, 2016; Romero, Arce, & Cammarota, 2009) began to teach the ancestry of Tucson students as a way of reclaiming their Native American identities, in an effort to improve academic achievement. Despite a racist ban by the state, the curriculum improved test scores and graduation rates (Cabrera, Milem, Jaquette, & Marx, 2014).

The core of the curriculum, the Xikano Paradigm, pulled from the four Tezcatlipocas of Mesoamerica (Figure 5): 1) Tezcatlipoca – self-reflection; 2) Quetzalcoatl – precious knowledge; 3) Huitzilopochtli – the will to act; and 4) Xipe Totec – transformation. Mesoamerican scholars refer to these as deities with supernatural capabilities and devote much attention to their ancient symbolism. Urban Xicana/o educators (Acosta, 2007; Arce, 2016; Garcia, in press-a; Luna & Galeana, 2016; Romero et al., 2009; Toscano-Villanueva, 2013), on the other hand, interpret Mesoamerican personas not as deities but as the identities of ancestor relatives, each with a set of virtues useful in encouraging positive ways of living. Acosta (2007) explains that, “The paradigm represents a cyclical process that is fluid and malleable like life and not a hierarchical or linear process. Different aspects can be embraced at different times of one's life, allowing us to refer to it throughout the education process” (p. 38).

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III On August 23, 2017 Judge Atsushi Wallace Tashima, a US circuit court judge presiding in the state of Arizona, ruled that the banning of Mexican-American Studies in Tucson was a violation of students’ first amendment rights, and that the banning was based on racial animus.
Figure 5. The four Tezcatlipocas of Mesoamerica. Top: Tezcatlipoca (L), Quetzalcoatl (R). Bottom: Huitzilopochtli (L), Xipe Totec (R). From the World Digital Library version of the Historia general de las cosas de nueva España by Bernardino de Sahagún (https://www.wdl.org/en/item/10612/).
As the next four parts describe, the four Tezcatlipocas juxtapose ancient personas alongside nature, natural resources, and inferences of how sacred tools and medicine may have been used by our Mesoamerican ancestors. These represent a source of ancestral science, and a pathway toward individual and community medicine in response to poor health.

Tezcatlipoca appears on stone and codices juxtaposed with flint rocks, jaguar pelts, and iron-ore mirrors. In the Codex Borgia (see www.famsi.org), Tezcatlipoca appears wearing eight mirrors. Archaeological evidence suggests that mirrors in Mesoamerica were worn as pendants (Carlson, 1981; Heizer & Gullberg, 1981). In his work on Mesoamerican mirror use, John B. Carlson (1981) informs us that mirror reflections were equated with one’s soul and sense of the self; that such reflections were tied to curing practices. Heizer and Gullberg (1981) also take note that certain mirrors have been proven to produce fire—an important element in healing ceremonies. While many interpretations arise from Tezcatlipoca, one cannot ignore the metaphor of self-reflection seen through mirrors or fire. As a pedagogy, this literally translates as taking a step back, reflecting, and looking into the mirror for both students and teachers: “As when looking in the bathroom mirror covered in condensation, we must vigorously search for ourselves through the distractions and obstacles in our lives” (Acosta, 2007, p. 37).

Quetzalcoatl, the avatar of the feathered serpent, is a symbol of earth and sky (Coe, 1968). Quetzalcoatl partook in the making of complex society, i.e., art, agriculture, medicine, and the priesthood (Florescano, 1999). Quetzalcoatl represents a wealth of knowledge. The earliest forms of Quetzalcoatl and the feathered serpent date to Olmec times (1500 B.C.E to 400 B.C.E) (Garcia, 2011), where the two appear on La Venta Monument 19 (LVM-19) and San Lorenzo Monument 47 (SLM-47). These two monuments are particularly unique for materializing aspects of medicine and ritual among the Olmec. LVM-19 shows Quetzalcoatl in flight and harbored by a serpent. The figure is wearing multiple loincloths, a scarf, and a cape. On the left hand, one observes an incense pouch (Coe, 1968). SLM-47, on the other hand, embodies Quetzalcoatl in human form. In this case, the persona holds the head of the fer-de-lance snake and bird feathers with both hands. A cape and loincloth are also evident. In Garcia (2011), I argue that SLM-47 depicts a person that had knowledge of Native medicine.

Huitzilopochtli, the humming bird, was born from a falling feather. The Florentine Codex (Sahagún, 1950) shows him born fully-grown from his mother Coatlicue. The tale of how Huitzilopochtli violently defeated the Centzonhuitznahua en route to Tenochtitlan (Gillespie,
1989), and the killing of his sister Coyolxauhqui, is perhaps the most widely shared story among Xicanas/os today. According to most accounts, Huitzilopochtli wore a hummingbird headpiece, a golden tiara, white heron feathers, and the “smoking mirror” (Miller & Taube, 1993, p. 93). In the Codex Borbonicos (see www.famsi.org), Huitzilopochtli is seen carrying a shield with arrows, and is wielding the xiuhcoatl, a staff armored by the fire serpent. Miller and Taube (1993) write, “the newly born Huitzilopochtli represents the fiery rays of the sun dispelling the forces of darkness” (p. 189). Sean Arce (2016) tells us that in the classroom, Huitzilopochtli is the will and courage to create positive change, after acquiring knowledge for themselves and for their community, in spite of the negative reality students often encounter.

Xipe Totec appears in sculpture and pottery as a simplified persona who wears the flayed skin of a once-living person. At the time of the Conquest, the Xipe festival fell during the month of March when seeds would germinate (Miller & Taube, 1993). Other elements that make up Xipe Totec include a skirt made of zapote leaves, the carrying of a drum, and a chicahuaztli (rattle-stick) (Neumann, 1976). In particular, Franke J. Neumann (1976) describes that the word chicahuaztli was associated with effort and force, and that the instrument played a role in cults devoted to rain, water, and mountains: “Both the drum and rattle are instruments by means of which one is enabled to make contact with the spiritual world” (p. 261). In essence, ritual and ceremony is almost non-existent without forceful sounds that mediate feelings and emotions. Because of its associations with agriculture, Xicanas/os embrace Xipe Totec as a model of rejuvenation and transformation. We all have the ability of rebirth, but only after trusting ourselves through self-reflection, knowledge, and courage (Acosta, 2007).

After surveying the four Tezcatlipocas, one can surmise that ancient Mesoamericans concerned themselves with nature, cosmology, and a discourse of medicine. As a result, bodies arise with sacred tools: rebosos, fajas, pierdas reflectivas, and medicinas. In her study of the ancient body, Rosemary A. Joyce (2005) informs readers that ornamented bodies mark the social status of the individual wearing them. The body is public, she says, and a media for the communication of one’s identity. Medicine people still use the instruments observed on the four Tezcatlipocas today in ritual and ceremony. Patrisia Gonzales (2012) speaks of this as blood memory, “to serve as a metaphor for an embodied memory that is passed from life to life” (p. xxv). For Gonzales (2012), ancestral knowledge materializes through medicine ways. Water, earth, incense, fire, and feathers are the tools of the traditional healer (Avila & Parker, 1999). The four Tezcatlipocas
(Acosta, 2007; Toscano-Villanueva, 2013), Coatlicue (Anzaldúa, 2012; Garcia, in press-a), and Coyolxauhqui (Luna & Galeana, 2016) have implications for Indigenous Mexican-Americans. Despite the cultural genocide, a material record exists for the reclaiming and sustainment of Native peoples’ healthcare and medicine.

The four Tezcatlipocas as a source of ancestral knowledge benefit teachers in that: 1) they represent culturally relevant material that students identify with; 2) they represent critical thinking and achievement important to Native American culture; and 3) contrary to popular skepticism, the Indigenous Mexican-American body encapsulates science, medicine, and technology. By harnessing such ingenious frameworks, teachers create classrooms steeped in rigor and high standards. These medicines once dominating the well-being of Native youth must find their way into the classroom. As with many culturally relevant approaches, teaching with the four Tezcatlipocas in mind is based on an ethics of caring (Ladson-Billings, 1995) and is fueled by love (Acosta, 2007). Love, fittingly, Acosta (2007) tells us, is a respect for all things moving in and outside of the classroom; listening to the daily struggles of students and still having the energy and intellectual capacity to build around the needs of students. A trauma-informed teaching strategy grounded in the four Tezcatlipocas should have teachers concerned with not only educational outcomes, but also with the mental health status of students.

A Medical Archaeopedagogy of the Human Body

While teaching Humanities 125: Introduction to Mexican Culture at Rio Hondo College, I have relied on reflective writing, storytelling, and the sculpting of clay to better understand and mediate the hurtful experiences of students. In addition to meeting learning goals, students reacquaint themselves with old medicine ways—working with clay—to construct and reconstruct their identities in light of some of the trauma and violence that many experience as members of the Mexican-American community. I consider this part of my pedagogy, since, Rio Hondo, as of 2015, is 83% “Hispanic,” of which a large portion have ancestry in Mexico. In Garcia (in press-a), I describe the pedagogy as an archaeology of the human body for its emphasis on excavating the many layers of the self—BMS—to better bridge teaching, learning, and mental health. I noted then that the pedagogy was non-invasive and in line with SLOs, despite the use of clay in art therapy to treat mental health disorders. Here, I expand the model by situating the Mesoamerican
body as one not easily divorced from land ways of being, and noticeably absorbed with health, trauma, and medicine.

In this article, Maritza, Eva, and Robert shared their narratives and small-scale clay-figurine bodies as evidence of their multiple identities, aspirations, and associations with Mesoamerican culture. All three wrote of the hardships associated with displacement, low SES, undocumented status, and perceptions of poor and good health. To identify linkages between ancestors and descendants, I surveyed the four Tezcatlipocas for material indicators of status and identity, identifying a suite of tools associated with healthcare and medicine. After observing the bodily rituals and medicinal culture of these four ancestors, and after honing in on the lived experiences of three descendant students, I was able to conceptualize four themes underscoring the Indigenous Mexican-American body: 1) the body often remembers its ancestral place among the land and cosmology; 2) the body is familiar with health and medicine, either as a host of illnesses and disease, or as a caretaker of the sick; 3) in light of trauma to the flesh, the body grows resilient and self-determined; and 4) in a quest to not be defeated, students actively seek out family and build community. The four themes represent being and becoming among our Mexican-American students, who are best engaged as Native to the land, as opposed to Hispanic, a term lacking a meaningful discourse.

As a teacher entrenched with a large Indigenous population, I critically reflect, and grapple daily with how to best educate students. My most current approach—a medical archaeopedagogy of the human body (Figure 6)—borrows concepts from the fields of critical education, mental health, art therapy, archaeology, and Mesoamerica. The model involves four classroom practices: 1) a decolonizing pedagogy (Garcia, in press-a); 2) methods of inquiry to safely survey and excavate the learning and mental health needs of students; 3) the use of non-invasive therapeutic tools to prevent and alleviate the signs and symptoms related to mental health challenges; and 4) a material record of the body for gifting, ceremony, getting well, and medical inquiry. These tenets elicit training cues for teachers who engage Indigenous Mexican-American students, in that curriculums must not separate the values of land and cosmology, mental health, medicine, and material culture when teaching and learning.
As an Indigenous Xicano educator, I have used clay-work and critical self-reflection to help Indigenous Mexican-American students build meaning of who they are, as they write and sculpt earth into small-scale anthropomorphic forms of the body. I found that making clay figurines could be used to safely unearth, materialize, and mediate trauma signs and symptoms on a micro-scale, aligning these with positive feelings, meaningful relationships, and learning. I am hopeful that through dialogue, reciprocity, and advocacy, students extend this therapeutic experience into the household and the wider community, thus sustaining good health for all members of society. It is important to note that a medical archaeopedagogy of the human body must not necessarily be grounded in the epistemologies of Mesoamerica, but could work in all Native American intelligences where land and cosmology support the BMS in overcoming the hurtful experiences associated with cultural genocide.
References


A Medical Archaeopedagogy of the Human Body


