



Hispanic/Latino Issues in Philosophy

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REPORT FROM THE CHAIR

ARTICLES

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I am pleased to announce that the efforts of the Committee on Hispanics toward establishing an annual prize for scholarly work in Latin American philosophy have been successful: the prize will soon be a reality, thanks to the APA's recent decision to support it for an initial period of three years. We plan to offer the prize once a year, at the Eastern Division meeting of the association, beginning this year in Boston. Those interested in applying should be sure to check the conditions, which are listed in this issue of the *Newsletter*.

I would also like to report that we have continued moving ahead full-steam to promote Latin American philosophy, to raise the profile of Hispanics in the profession, and to defend their rights. The Committee had a crucial role in the success of the first annual symposium on Latin American philosophy, held at Texas State University in San Marcos in October 2003. We have also organized well-attended sessions at all the divisional meetings of the APA and plan to continue to do so. Such sessions have produced lively discussions that I believe helped greatly toward raising the visibility of Hispanics in the APA. Many participants also felt encouraged to cooperate with us in various ways, and I can now report that Hispanics are once again fully represented at the APA by a substantial diversity committee. This year we welcome several new members: Nelson Madonado-Torres, James Maffie, Elizabeth Millan-Zaibert, and Amy Oliver.

Finally, let me once again thank Linda Martin Alcoff and other former members of the Committee for their diligence in campaigning for a prize in Latin American philosophy. Our recent success in this project, however, raises an important challenge: for we must now procure private funding to be able to continue granting this worthy prize beyond the three initial years of APA support. Please share with us any suggestion you may have to help us in this task. I look forward to hearing your suggestions on this and other challenging issues facing our committee. And as always, I welcome input regarding plans for possible panel discussions, special sessions, and other events that the Committee might sponsor at future divisional meetings.

Susana Nuccetelli

The Epistemology of Aztec Time-Keeping

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Pre-Columbian Aztec (Mexico) astronomy achieved remarkable empirical accuracy, predictive success, and mathematical precision.¹ Aztec astronomers believed the movement of time through space to be the self-presenting of the sacred. They followed celestial and terrestrial patterns, with an eye towards predicting the future, proper human ritual participation and living in harmony with the cosmos, and understanding sacred reality.

I want to examine two puzzles regarding Aztec astronomy. First, Aztec epistemology maintained that humans attain knowledge of reality a priori using their *yollo* ("heart"), not their senses. What, then, was the epistemological status and role of observational astronomy? Did Aztec *tlamatinime* ("knowers of things"²) regard a priori knowledge and empirical astronomy as epistemologically incompatible? Second, Aztec astronomy was deeply embedded within a broader cultural context of religious, metaphysical, ideological, and political assumptions, motivations, and uses. What role, if any, did these play in the epistemology of Aztec astronomy itself? Before addressing these puzzles, I briefly review some key features of Aztec metaphysics, epistemology, astronomy, philosophy of time, and calendarics.

I use the term "time-keeping" to refer to a constellation of activities, including the observing, counting, measuring, interpreting, giving an account of, and creating an artistic-written record (*amatl*) of various patterns of time. This included: *tonalpohualli* ("counting the days") or counting the days of the 260-day cycle; *xiuhpohualli* ("counting the years") or counting the days of the 360+5-day cycle; *xiuhmolpilli* ("binding the years") or counting the 52 years of the "calendar round"; counting the 65 "years" of the cycle of *Quetzalcoatl* (the Venusian cycle); and counting other cycles in celestial and terrestrial processes. The Nahuatl word *pohua* used in the names of these activities means, "to count, to reckon, to read, to recount, to relate, to give account of, to assign something."³ "Counting" thus involved more than watching and recording the number of days in various celestial cycles; it involved interpreting, divining, giving an account of, and prognosticating their meaning and significance. The individuals who pursued these activities were known as "time-keepers" (*cahuipouhqui*). Aztec *ilhuica tlamatilizmatinime*, those persons wise in the ways of heaven, were responsible for

keeping Aztec society, as well as humankind, in harmony and balance with the cosmos.⁴

By referring to these activities as “time-keeping” rather than “astronomy” or “ethnoastronomy,” I hope to carve out the conceptual space needed for understanding them in Aztec terms rather than in contemporary Western terms such as “astronomy,” “astrology,” and “religion.” I also hope to avoid the connotations of such Western terms as well as sidestep such issues as whether Aztec time-keeping was “real astronomy,” “real science,” “primitive astronomy,” “mere ethnoastronomy,” etc.⁵

The cornerstone of Aztec metaphysics is the monistic claim that there exists a single, dynamic, vivifying, and eternally self-generating-and-self-regenerating sacred energy, power, or force.⁶ The Aztecs called this sacred energy *teotl*. *Teotl*'s self-generation-and-regeneration is consubstantial with its generation-and-regeneration of the cosmos. *Teotl* created and continually recreates, permeates, and encompasses the cosmos. Process, movement, and transmutation are essential properties of *teotl*. Aztec metaphysics is also pantheistic and animistic. As the single, all-encompassing life force of the cosmos, *teotl* animates and vitalizes the cosmos. Furthermore, *teotl* presents itself primarily as the ceaseless, cyclical oscillation of paired, dual, complementary forces such as being and not-being, order and disorder, life and death, and light and darkness. I call this thesis “dialectical polar dualism.” Finally, all creation is *teotl*'s in *xochitl in cuicatl* or “flower and song,” i.e. its continuing artistic performance and self-presentation.

Aztec metaphysics conceives time and its various cycles as the unfolding of *teotl*. Time and space form a single, indistinguishable time-space continuum. The four cardinal directions are simultaneously directions of space and time. Spring equates with east, summer with south, etc. East and west are also defined in terms of sun's rising and setting: east as *tonalquizayampa* (“the place from which the sun habitually emerges”); west as *tonalpolihuiyampa* “the place where (or towards which) the sun habitually perishes”). Weeks, months, years, and year-clusters all have spatial directions. Time is a concrete rather than a neutral frame of reference abstracted away from terrestrial and celestial processes and events.

Time-space is quantitative and qualitative. Different time-spaces bear different colors and qualities and hence time-space does not consist of a uniform succession of qualitatively identical moments. The Aztecs “were interested not only in the quantities of time but also in its qualities, especially its meaning for human affairs.”⁷ The quantitative dimensions of time are inseparable from its qualitative and symbolic dimensions. Questions of time thus “quickly exceed the limits of mathematically describable time and involve questions of timelessness, destiny, divination, religious ritual, and cosmology, all of which have qualitative or symbolic dimensions.”⁸ All these dimensions coalesced in Aztec time-keeping.

Time also bears destinies and burdens, and conveys these to events falling under its influence. The reckoning of any period of time always leads one to investigate the *tonalli* or “day-time-destiny” associated with it. Everything happening on the earth and in humans' lives, from birth to death, is the outcome of *tonalli*.

Numerology also plays an essential role in Aztec time-keeping. Numbers are concrete rather than abstract, and possess quantitative and qualitative characteristics. The number three, for example, is propitious; the number nine, unpropitious. Days are assigned numbers and so possess qualitative properties. Days bearing the number 13 are

auspicious since they reflect order; days bearing the number nine are inauspicious as they reflect disorder.⁹

Aztec epistemology maintained humans obtain knowledge by acquiring *netiliztli* (“rootedness”), i.e. by rooting their intellectual, emotional, imaginative, and physical dispositions and behavior deeply and steadfastly in the sacred (*teotl*). Knowledge consists of cognition rooted in *teotl*. What humans know by means of rooted cognition is the nature of *teotl*. They come to know *teotl a priori* and mystically by means of a *teotlized yollo* (“sacralized heart”) —not the five senses. They come to know *teotl* through their hearts as a consequence of “flower and song,” i.e. artistically induced, mystical sacred presence. The Aztecs also distinguished sensible from insensible aspects of reality. The insensible realm transcends the senses and can only be known *a priori*.¹⁰

Puzzle #1: What Is the Epistemological Status and Role of Observational Time-Keeping?

Western philosophers and historians of science commonly consider science and mysticism (and religion generally) as epistemologically incompatible and antithetical. Aztec *tlamatinime*, however, saw no such incompatibility between the pursuit of *a priori* knowledge of reality (*teotl*) and empirically informed time-keeping. Observational time-keeping served as a propaedeutic for *a priori* mystical understanding. Careful observation and tracking of the patterns of time-space suggested the nature of *teotl*, and in so doing helped “root” and prepare one's heart for sacred understanding. Yet such observations were, by themselves, incapable of yielding genuine understanding; that could only come through mystical presence. Observational time-keeping also yielded vitally important, practical information concerning the “when” and “where” for ritual activities. While such ritual activities helped “root” one's heart in *teotl*, they did not yield understanding of *teotl*. In sum, Aztec epistemology assigned a foundational role to *a priori* mystical knowledge and an ancillary role to empirical observation.

Puzzle #2: What Role, if any, Did Metaphysics, Religion, and Astrology Play in the Epistemology of Aztec Day-Keeping?

Western ethnoastronomers and archaeoastronomers commonly approach the astronomies of other cultures and times by distinguishing their culturally universal, “observational,” and genuinely “scientific” foundation from their culturally variable “astrological,” “mythological,” and “religious” motivations, interpretations, explanations, and applications.¹¹ Clive Ruggles and Nicholas Saunders, for example, analyze ethnoastronomies into three “essentially” distinct “stages”: “observation,” “perception,” and “use.”¹² “Observation” is “universal” and thus *not* “culture-specific.” Perception is the “process . . . of making sense of and attaching meaning [and “significance”¹³ to particular observations.” It is “culture-specific” since “guided” and “channeled” by cultural, political, and economic factors.¹⁴ Lastly, the political and ideological “use” of observations and perceptions is “culture-specific.”¹⁵

Aztec ethnoastronomers and archaeoastronomers, such as Anthony Aveni and Johanna Broda, are no exception.¹⁶ Broda¹⁷ characterizes ethnoastronomy as “a broad historical approach that analyzes science as a body of exact knowledge embedded in a social context subject to change.” She distinguishes the empirical observation or “observational content”¹⁸ of celestial phenomena from their cosmological, social, religious, and ideological “transformation” and “explanation.”¹⁹ According to Broda, “astronomical observations” became “immersed in myth and ritual” through

a variety of “mental and social processes,” and in so doing, “leav[e] behind the terrain of “objective” scientific knowledge.”²⁰ Broda²¹ distinguishes “the observation of nature” from “cosmovision” (i.e. metaphysics), defining the former as “the systematic and repetitive observation of the phenomena of the natural environment that permits us to make predictions,”²² the latter as “the structured view in which ancient Mesoamericans combined their notions of cosmology into a systematic whole.” Broda²³ thus analyzes Aztec time-keeping into several epistemologically distinct “dimensions”:

- (1) The astronomical “dimension” consisting of “objective” scientific knowledge” involving the pursuit of an empirically accurate and predictively successful record of regularities of celestial phenomena. (Aveni²⁴ dubs this activity, “Following the Images.”)
- (2) The mathematical “dimension” consisting of the pursuit of a mathematically precise record of the observed regularities of celestial phenomena.
- (3) The astrological “dimension” consisting of the reading, divining, or interpreting of the meaning of celestial phenomena and cycles, and subsequent dispensing of practical advice based upon such interpretation. (Aveni²⁵ dubs this activity, “Believing in the Images,” and characterizes it as “teas[ing] the future out of the stars.”²⁶)
- (4) The religious, theological, and mythological dimension: the ultimate end of Aztec time-keeping was understanding *teotl*, as well as successful ritual co-participation with the cosmos in the continuation of humankind and the cosmos. (Aveni²⁷ dubs this activity, “Naming the Images.”)
- (5) The social, political, and ideological dimension: the use of Aztec time-keeping in the service of social, political, and ideological ends, such as underwriting the social-political hierarchy and militarism of the Mexico-Tenochtitlan.

As Broda understands Aztec time-keeping, the “objective” “astronomical” and “scientific” dimension ((1) and (2) above) was *epistemologically* prior to and independent of the “calendrical” dimension, i.e. the religious, astrological, cosmological, and ideological motivations, interpretations, and uses of priests, diviners, and state ideologues ((3) through (5) above). Scientifically “objective” observations were “transformed” by state ideologues and priests into an empirically and hence scientifically ungrounded “cosmovision.”

Although Broda agrees that Aztec time-keeping was “intimately” “embedded”²⁸ in and related to dimensions (3) through (5), she conceives the latter as epistemologically *post facto*, extraneous accretions invented by well-intentioned yet misguided priests, ill-intentioned state ideologues, deceitful diviners, and charlatans.²⁹ Consequently, dimensions (3) through (5) need play no role in our understanding of the *epistemology* of Aztec time-keeping itself. Indeed, to the degree Aztec time-keepers did “good” science, they did not allow religious, astrological, etc. factors to influence their observations.

I refer to this approach as the “positivist approach” in light of its affinities with twentieth-century Anglo-European positivist philosophy of science.³⁰ It embraces a number of tenets one finds in Broda, Ruggles, and Saunders, and Aveni:

- (1) An empiricist epistemology regarding science which holds that the only evidence in favor of the truth of factual claims about the world is empirical. Non-

empirical factors, such as explanatory power, possess, at most, pragmatic value.

- (2) The claim that sense experience is non-interpretive, theory-neutral, and culturally universal.
- (3) The use of a set of inter-related distinctions: context of discovery (the genesis of ideas) versus context of justification (the epistemological testing of ideas); “internal” history versus “external” history of science (i.e., “internal” factors versus “external” factors in science; and the history, psychology, sociology, etc. of science versus the epistemology of science).

Distinguishing science from its cultural context is standard fare for positivist history, sociology, and philosophy of science. On this view, cultural factors, such as religion, enter into the choice of having a science, the choice of what problems science chooses to solve, the selection of what aspects of nature to observe, and the uses to which scientific results are put. But cultural *never* enter into the epistemology of science itself (i.e. the evaluation of observation and belief by scientific standards). As external factors, such as religion, etc., have the potential to guide and motivate science; as internal factors, they can only corrupt science. In sum, science, on the one hand, and religion, astrology, ritual, and politics, on the other, are epistemologically incompatible.

I contend, however, that balkanizing Aztec time-keeping into various “dimensions,” “functions,” and “stages” that presuppose categories commonplace to modern Western thinking yet alien to Aztec thinking, violates the internal coherence and integrity of Aztec time-keeping and consequently prevents us from understanding the Aztec’s own epistemology of time-keeping.

Although willing to contextualize Aztec time-keeping within its cultural context, the positivist approach overlooks the thoroughly *contextualist* nature of the epistemology of Aztec time-keeping itself. Metaphysics, astrology, etc. are essential not only to understanding *how* and *why* day-keeping was pursued and channeled; they are essential to understanding how time-keeping claims were epistemologically validated. Why?

For starters, Aztec epistemology assigned a foundational role to *a priori* metaphysical knowledge and a subordinate role to empirical inquiry. Aztec time-keepers epistemologically evaluated their observational claims against their background metaphysical knowledge. Epistemologically probative empirical claims about the regularities of celestial phenomena had to square with such epistemologically *a priori* metaphysical views as monism, animism, pantheism, and dialectical polar dualism. While the senses were able to enrich *a priori* understanding, they were not able to gainsay it. When observational results did not square with background metaphysics, I suggested that Aztec time-keepers reject them and look elsewhere until they found results that did so square. In the language of positivism, metaphysics played an indispensable role in both the “external” *and* “internal” history of Aztec day-keeping.

Positivism’s artificial distilling of Aztec time-keeping into different “dimensions” blinds us to the epistemological interdependency of these various “dimensions.” Dimensions (3) and (4), for example, are not only indispensable to understanding *why* the Aztecs pursued day-keeping, but also to *what* aspects of the heavens they selected, the *uses* to which they put day-keeping, etc. More crucially, they are indispensable to understanding *how* Aztec time-keepers went about validating their decisions and claims regarding the celestial (dimensions (1) and (2)). Dimensions (3) and (4) were no mere accretions superimposed upon an epistemologically

respectable foundation of “real astronomy” by charlatans and priests. Rather, as Eva Hunt³¹ aptly observes, “scientific, empirico-mathematical investigations” and “mythic symbolism” were “warp and woof of the same ideological fabric”; or to borrow from Quine, they were strands in one and the same “web of belief.”³²

Let’s take a closer look at Broda’s “astronomical dimension.” I contend Aztec metaphysics (monism, dynamism, animism, and dialectical polar dualism) was present on the ground level of astronomical observation and that Aztec astronomical observation was ineliminably theory-laden and interpretive. Aztec metaphysics permeated and shaped celestial observation in a number of ways.

First, since Aztec metaphysics considered celestial phenomena to be nothing more than various facets of *teotl*’s self-presentation, Aztec time-keepers considered themselves to be observing the sacred when observing celestial phenomena. Indeed, observing the celestial was one and the same thing as observing *teotl* since *teotl* and the celestial were identical. The metaphysical presupposition of monism inhabited the ground floor of all time-keeping activities including observation. The heavens of the astronomer were identical with the heavens of the metaphysician and priest; and observing the heavens was simultaneously a religious *and* astronomical activity. When Aztec day-keepers observed the heavens they saw, for example, *Quetzalcoatl*, *Tonatiuh*, etc., i.e. various deified aspects of *teotl*. As Javier Galicia Silva remarks regarding contemporary Nahuas, “*tezahuil* (the portentous) is not merely a symbolic expression but a direct experience of that spiritual being from which it flows.”³³

Aztec time-keepers did not distill skywatching into theoretically “neutral” observations and experiential “images”³⁴ or “bright lights”³⁵ on the one hand, and religious or metaphysical interpretation, on the other. They did not experience sensory images, sense data, or appearances that they later abductively explained in terms of metaphysical or religious posits. Metaphysical and religious interpretation did not occur as an epistemologically idle afterthought, as if time-keepers said to themselves: “Notice that bright sensory datum in the sky above. Let’s inferentially explain it as a deity whom we will henceforth call ‘Quetzacoatl’.” I submit Aveni³⁶ that commits precisely this error when writing, “People first follow the stars, then they come to believe in them.” *Pace* Aveni, people believed in the stars from the outset. That they did so helps explain why they began observing the stars in the first place. They considered the stars to be sacred entities or forces *worthy* of observation.

Metaphysical and religious interpretation was therefore not an epistemologically subsequent, extraneous “stage” or “dimension” superimposed upon ‘scientifically respectable,’ “pure” empirical data (as positivists would have us think). Rather, like their lay contemporaries, time-keepers embraced what we might call “common sense supernaturalist realism.” When they gazed upon terrestrial and celestial phenomena, they considered themselves to be looking at animated entities, divinities, the sacred; just as the common sense realism of most Western folk has them looking at lifeless rocks, planets, etc. It was a feature of Aztec common sense that the world is animated and that the sacred surrounds us. One learned to perceive the world in this manner in the course of acculturation, just as Western children learn to perceive tables, trees, and toys. In sum, Aztec observation was “thick” and theory-laden.

Second, celestial observation was shaped by dialectical dualism. Billie Jean Isbell³⁷ argues the Sun (*Tonatiuh*) and the Pleiades (*Tianquiztli*), for example, were conceived as two dialectically opposed yet mutually interdependent entities or

forces. Both were associated with opposing yet dialectically interdependent climatological processes. The rainy season was announced by the disappearance of the Pleiades and the shadowless moment of zenith passage of the sun on May 17. The dry season was announced by the appearance of Pleiades at the zenith and the sun at nadir on November 18. As a consequence of *conceiving* the sun and Pleiades in this manner, I suggest Aztec skywatchers *perceived* the sun and Pleiades in this manner.

Celestial observation was also shaped by the belief that various parts of nature undergo a life-cycle (consisting of dialectically complementary stages). Aztec skywatchers conceived and accordingly perceived the sun in a variety of ways: during winter solstice, as the “tired” or “dying” sun that needed to be ritually cajoled back into movement; during sunset, the “dying” or “ripe” sun; and during sunrise, the newly reborn infant sun. They perceived the dialectically interdependent birth, death, and rebirth of Quetzacoatl each time Venus appeared in the morning sky, disappeared in the Western sky, and reappeared in the morning sky.³⁸

Third, by Aztec lights skywatching was cut from the same epistemological cloth as reading sacred books. Walter Mignolo argues that Aztec *tlamatinime* made no epistemological distinction between looking at and understanding the meaning of celestial phenomena on the one hand, and looking at and understanding the meaning of painted-written pictographs on the other.³⁹ Both activities were interpretively “thick,” semiotic interactions. One read (i.e. interpreted, divined, and recounted) the meaning of the patterns of the heavens in the same manner as one read (i.e. interpreted, divined, and recounted) the meaning of patterns of painted-written pictographs).

Celestial patterns bore meaning, information, and messages just as did the pictographs painted-written by Aztec sage-artists in their sacred books. To read-interpret-divine the pictographs painted-inscribed by *teotl* upon the sacred pages of the heavens and upon the walls and ceiling of *teotl*’s grand, cosmic “house of paintings,” one needed to first learn how to read-count-interpret (*pohua*) their sacred language. Only the literate, those with prior *a priori* understanding yielded by a *teotlized* heart were able to read-count-interpret the sacred painting-writings of the heavens. Consequently, when time-keepers literate in the sacred language of *teotl* gazed upon the heavens they saw something different from those who were not literate. Aztec time-keeping was more akin to what we Westerners would consider reading-interpreting a painting, dance performance, or operatic performance than to reading a discursive essay in *Science* or the *Journal of Philosophy*. *Teotl*’s sacred cosmic text is performed in “flower and song, i.e. a non-discursive language consisting of artistic symbols, icons, glyphs—not assertive sentences composed of alphabetically transcribed, spoken Nahuatl words.

Fourth, Aztec philosophy conceived time-keeping literally as a dialogue or conversation with the sacred.⁴⁰ As Aveni⁴¹ rightly points out, “When a living universe is your home and all parts of your world pulse harmoniously, then you talk to the stars and they talk back to you.” Day-keeping involved putting questions to *teotl* and trying to understand *teotl*’s symbolic responses. Conversing with the heavens involved both an empirical (listening) and non-empirical component (interpreting and understanding). Celestial patterns were conceived as messages from a living (albeit non-intentional) being, and to read and understand them, one needed prior understanding.

Aztec metaphysics shaped Aztec observation in one final way. Aztec time-keepers *conceived* the heavens as animated and *perceived* the heavens accordingly. How one perceives

something one believes to be animate differs from how one perceives something one believes to be inanimate. One perceives the former as a “thou,” the latter as an “it.”⁴²

Let’s examine Broda’s “astrological dimension.” Time-keeping involved not only observing the properties and motions of the sacred, it also involved divining (“reading”) their significance for human ritual and nonritual behavior. Time-keeping was simultaneously religion, astronomy, and astrology. Indeed, the “astronomical dimension” was epistemologically interdependent with the “astrological dimension.” The Aztecs believed the celestial and terrestrial (including human affairs and human body) to be metaphysically continuous, interconnected, and interdependent. They therefore treated “astronomical” claims as having logical consequences for terrestrial (“astrological”) phenomena and regarded the observation of terrestrial (“astrological”) phenomena as one way of evaluating astronomical claims. Celestial claims had to square with terrestrial events, and vice versa. Positivists would have us think the Aztecs first constructed their astronomy, and then later turned to the astrology. I suggest they were constructed dialectically and of a piece.

That Aztec seeing was theory-laden in that what time-keepers saw when looking at the sky was shaped partly by their background metaphysical theories, is an instance of the more general thesis: how one sees “x” is shaped by one’s beliefs about “x.” Or, as N. R. Hanson succinctly put it, “There’s more to seeing than meets the eyeball.”⁴³ And the “more than meets the eyeball” to Aztec seeing was furnished by their *a priori* metaphysics. If this is correct, it suggests that Aztec and modern Western astronomers do *not* see (in the *epistemological* sense) the same things when looking at the sky. While Western astronomers see a random collection of inanimate objects, Aztec time-keepers saw vivified entities and the continuous, cyclical unfolding of a single, sacred energy. Western astronomers see the Sun and Venus; Aztec time-keepers, *Tonatiuh* and *Quetzalcoatl*. This relativity obtains even if Western and Aztec astronomers share congruent (if not identical) retinal images, share identical visual fields, and make identical sketches of what they see. For as Hansen⁴⁴ remarks, “there is a difference between a physical state and a visual experience.” Epistemological seeing involves more than being visually stimulated; it involves the *way* or *manner* in which one sees. And the way in which one sees depends upon one’s prior beliefs and theories.

This does *not*, however, entail the relativity of seeing in *de re* sense. Electromagnetic radiation originating from the one and the same object (*re*) causally impacts the retinas of Aztec and Western skywatcher alike, resulting in congruent (if not identical) retinal images. Western and Aztec skywatcher *do* see *de re* the same objects: e.g., Venus according to Western science’s ontology, *Quetzalcoatl* according to the Aztec’s.⁴⁵

In conclusion, although undeniably closely attentive to the testimony of the senses, Aztec time-keeping was epistemologically integrated within a broader context of *a priori* metaphysical, religious, and astrological assumptions. Aztec skywatching contained both empirical and non-empirical elements. The non-empirical element was epistemologically prior to the empirical and consisted of *a priori* conceptualization or theory. Yet the non-empirical element was temporally concomitant with the empirical, since it helped shape empirical percepts so as to make them observations of something. In short, what the Aztecs saw when looking at the heavens was the joint product of empirical percept and *a priori* concept. The positivist distillation of Aztec time-keeping into culturally “universal” observation versus “culture-specific” interpretation is thus mistaken. Trained and literate Aztec

skywatching was theory-laden and interpretively “thick” from the “get go.”

Endnotes

1. Aztec astronomy has received impressive scholarly attention over the last thirty years, especially by Anthony Aveni and Johanna Broda. Anthony Aveni, *Empires of Time* (New York: Basic Books, 1989); “The Role of Astronomical Observation in the Delineation of World View: A Center and Periphery Model,” *The Imagination of Matter: Religion and Ecology in Mesoamerican Traditions*, ed. David Carrasco (Oxford: BAR International Series 515, 1989), 85-102; “Mapping the Ritual Landscape: Debt Payment to Tlaloc During the Month of Atlcahualo,” *To Change Place: Aztec Ceremonial Landscapes*, ed. David Carrasco (Niwot, Colorado: University Press of Colorado, 1991), 58-74; *Conversing with the Planets: How Science and Myth Invented the Cosmos* (New York: Times Books, 1992); “Moctezuma’s Sky: Aztec Astronomy and Ritual,” *Moctezuma’s Mexico: Visions of the Aztec World*, eds. David Carrasco and Eduardo Matos Moctezuma (Niwot, Colorado: University Press of Colorado, 1992), 149-158; *Stairways to the Stars: Skywatching in Three Great Ancient Cultures* (New York: Wiley & Sons, 1997); *Skywatchers of Ancient Mexico*, revised edition (Austin: University of Texas, 2001). Johanna Broda, “Astronomy, Cosmology and Ideology in Pre-Hispanic Mesoamerica,” *Ethnoastronomy and Archaeoastronomy in the American Tropics*, eds. Anthony F. Aveni and Gary Urton (New York Academy of Sciences, 1982), 81-110; “Templo Mayor as Ritual Space,” *The Great Temple of Tenochtitlan: Center and Periphery in the Aztec World* eds. Johanna Broda, David Carrasco, and Eduardo Matos Moctezuma (Berkeley: University of California Press, 1987), 61-123; “Geography, Climate, and the Observation of Nature in Pre-Hispanic Mesoamerica,” *The Imagination of Matter: Religion and Ecology in Mesoamerican Traditions*, ed. David Carrasco (Oxford: BAR International Series 515, 1989), 139-149; “The Sacred Landscape of Aztec Calendar Festivals: Myth, Nature and Society,” *To Change Place: Aztec Ceremonial Landscapes*, ed. David Carrasco (Niwot, Colorado: University Press of Colorado, 1991), 74-120; “Astronomical Knowledge, Calendrics, and Sacred Geography,” *Astronomies and Cultures*, edited by Clive N. Ruggles and Nicholas J. Saunders (Niwot, Colorado: University Press of Colorado, 1993), 253-295.
2. I follow Miguel Leon-Portilla, *Aztec Thought and Culture: A Study of the Ancient Nahuatl Mind*, translated by Jack Emory Davis (Norman, Oklahoma: University of Oklahoma Press, 1963) in translating *tlamatinime* as “sages” or “philosophers.” Typically priest-poets and priest-astronomers, Aztec *tlamatinime* reflected upon the nature of reality, the source of knowledge, etc.
3. Francis Karttunen, *An Analytical Dictionary of Nahuatl* (Austin: University of Texas, 1983).
4. Of their time-keepers the Aztecs said: The observers, those who concern themselves with the course and the systematic movements of the heavens . . . they guide us, they show us the way. They determine how the year falls, how the reckoning of the destinies and the days, and each one of the complete counts follow their paths. They occupy themselves with this, for it is their task, their commission, their duty: the divine word [*Coloquios y Doctrina, Los Dialogos de 1524*, quoted in and translated by Miguel Leon-Portilla and Earl Shorris eds. *In The Language of Kings* (New York: Norton, 2001), 320].
5. Indeed, the customary use of the notion of ethnoastronomy is ethnocentric since it starts from two assumptions: (1) Western astronomy (science) provides the benchmark by which all other cultures’ astronomies (sciences) are to be measured and understood; and (2) Western astronomy is astronomy *simpliciter* (Western science, science

- simpliciter*) —rather than just another ethnoastronomy (or ethnoscience).
6. I defend this view of Aztec metaphysics in:
James Maffie, “‘Like a Painting We Will be Erased, Like a Flower, We Will Dry Up Here on Earth’: Ultimate Reality and Meaning According to Nahua Thought in the Era of the Conquest,” *Ultimate Reality and Meaning: Interdisciplinary Studies in the Philosophy of Understanding* 23 (2000): 295-318; “Why Care about Nezahualcoyotl?: Veritism and Nahua Philosophy,” *Philosophy of the Social Sciences* 32 (2002):73-93; “‘We Eat of the Earth and the Earth Eats Us’: The Concept of Nature in Pre-Hispanic Nahua Thought,” *Ludis Vitalis X* 17 (2002): 5-20; “To Walk in Balance: An Encounter between Contemporary Western Science and Pre-Conquest Nahua Philosophy,” *Science and other Cultures: Philosophy of Science and Technology Issues*, edited by Robert Figueroa and Sandra Harding (New York: Routledge, 2003), 70-90.
The two best general studies of Nahua (Aztec) philosophy remain: Leon-Portilla (1963) and Alfredo Lopez Austin, *The Human Body and Ideology: Concepts of the Ancient Nahuas*, Vol. I and II, translated by Thelma Ortiz de Montellano and Bernard Ortiz de Montellano (Salt Lake City: University of Utah Press, 1988).
 7. Barbara Tedlock, *Time and the Highland Maya*, revised ed. (Albuquerque: University of New Mexico Press, 1992), 1.
 8. *Ibid.*, 3.
 9. See Gordon Brotherston, “Astronomical Norms in Mesoamerican Ritual and Time-Reckoning,” *Archaeoastronomy in the New World*, ed. Anthony F. Aveni (Cambridge: Cambridge University Press, 1982), 109-142; “Zodiac Signs, Number Sets, and Astronomical Cycles in Mesoamerica,” *World Archaeoastronomy*, edited by Anthony F. Aveni, (Cambridge: Cambridge University Press, 1989), 276-288; “Native Numeracy in Native America.” *Social Epistemology* 15 (2001): 299-318.
Michael D. Coe, “Native Astronomy in Mesomerica,” *Archaeoastronomy in Pre-Columbian America*, edited by Anthony F. Aveni (Austin: University of Texas Press, 1975), 3-31; Eva Hunt, *The Transformation of the Hummingbird: Cultural Roots of a Zinacatecan Mythical Poem* (Ithaca: Cornell University Press, New York, 1977).
 10. For further discussion of the foregoing issues, see:
James Maffie, “‘Like a Painting We Will be Erased, Like a Flower, We Will Dry Up Here on Earth’: Ultimate Reality and Meaning According to Nahua Thought in the Era of the Conquest” (See n. 6); “Why Care about Nezahualcoyotl?: Veritism and Nahua Philosophy” (See n. 6); “‘We Eat of the Earth and the Earth Eats Us’: The Concept of Nature in pre-Hispanic Nahua Thought.” (See n. 6); “To Walk in Balance: An Encounter between Contemporary Western Science and Pre-Conquest Nahua Philosophy.” (See n. 6).
 11. See: Clive N. Ruggles and Nicholas J. Saunders, “The Study of Cultural Astronomy.” *Astronomies and Cultures*, eds. Clive N. Ruggles and Nicholas J. Saunders (Niwt, Colorado: University Press of Colorado, 1993), 1-30; Jonathan E. Reyman, “The Nature and Nurture of Archaeoastronomical Studies,” *Archaeoastronomy in Pre-Columbian America*, ed. Anthony F. Aveni (Austin: University of Texas Press, 1975), 205-215; Stanislaw Iwaniszewski, “Exploring some Anthropological Theoretical Foundations for Archaeoastronomy,” *World Archaeoastronomy*, ed. Anthony F. Aveni (Cambridge: Cambridge University Press, 1989), 27-37; Ray A. Williamson, “North America: A Multiplicity of Astronomies,” *Archaeoastronomy in the Americas*, ed. Ray A. Williamson (Los Altos, California: Ballena Press, 1981), 61-80.
 12. See Clive N. Ruggles and Nicholas J. Saunders, “The Study of Cultural Astronomy,” 4 (See n. 11).
 13. *Ibid.*, 2.
 14. *Ibid.*, 4.
 15. *Ibid.*, 4.
 16. Aveni, *Empires of Time* (See n. 1); *Conversing with the Planets* (See n. 1); *Stairways to the Stars* (See n. 1); *Skywatchers of Ancient Mexico*, revised edition (See n. 1).
Broda, “Astronomy, Cosmovision, and Ideology in Pre-Hispanic Mesoamerica” (See n. 1); “Templo Mayor as Ritual Space” (See n. 1); “Geography, Climate, and the Observation of Nature in Pre-Hispanic Mesoamerica” (See n. 1); “Astronomical Knowledge, Calendrics, and Sacred Geography” (See n. 1).
 17. *Ibid.*, 254.
 18. Broda, “Geography, Climate, and the Observation of Nature in Pre-Hispanic Mesoamerica,” 139 (See n. 1).
 19. Broda, “Astronomy, Cosmovision and Ideology in Pre-Hispanic Mesoamerica,” 100-101 (See n. 1).
 20. *Ibid.*,100 (See n. 1).
 21. “Astronomical Knowledge, Calendrics, and Sacred Geography,” 254 (See n. 1).
 22. *Ibid.*
 23. “Astronomy, Cosmovision and Ideology in Pre-Hispanic Mesoamerica” (See n. 1); *Ibid.*
 24. Aveni, *Conversing with the Planets*, 84 (See n. 1).
 25. *Ibid.*, 128.
 26. *Ibid.*, 139.
 27. *Ibid.*, 34.
 28. “Astronomy, Cosmovision, and Ideology in Pre-Hispanic Mesoamerica” 100, 54 (See n. 1).
 29. Broda, “Astronomy, Cosmovision, and Ideology in Pre-Hispanic Mesoamerica” (See n. 1) and Aveni, *Conversing with the Planets: How Science and Myth Invented the Cosmos*, 135 (See n. 1) claim that astrologers were not charlatans but rather “helpless spectator[s] trying to follow the rules [their] profession.”
 30. For discussion of positivism in the history and philosophy of science, see: James R. Brown, ed., *Scientific Rationality: The Sociological Turn* (Dordrecht: Reidel, 1984); Robert Klee, *Introduction to the Philosophy of Science* (Oxford: Oxford University Press, 1997); John Losee, *Philosophy of Science: A Historical Introduction*, 3rd ed. (Oxford: Oxford University Press, 1993).
 31. Hunt, *The Transformation of the Hummingbird*, 137 (see n. 9).
 32. Willard Van Orman Quine, *From a Logical Point of View* (New York: Harper & Row, 1953).
 33. Javier Galicia Silva, “Religion, Ritual, and Agriculture among the Present-day Nahua of Mesoamerica,” *Indigenous Traditions and Ecology: The Interbeing of Cosmology and Community*, edited by John A. Grim (Cambridge: Harvard University Press, 2001), 307.
 34. Aveni, *Conversing with the Planets* (See n. 1); *Empires of Time*, 325 (see n. 1).
 35. Aveni, *Stairways to the Stars*, 18 (See n. 1).
 36. *Conversing with the Planets*, 177 (See n. 1).
 37. Billie Jean Isbell, 1982, 354.
 38. Aveni, *Conversing with the Planets*, 69 (See n. 1); Hunt, *The Transformation of the Hummingbird*, 138 (See n. 9).
 39. Walter D. Mignolo, “Signs and their Transmission: The Question of the Book in the New World,” *Writing Without Words: Alternative Literacies in Mesoamerica and the Andes*, eds. Elizabeth Hill Boone and Walter D. Mignolo (Durham, North Carolina: Duke University Press, 1994), 220-270.
 40. See Aveni (1992), Leon-Portilla (1988), and Alan R. Sandstrom, *Corn Is Our Blood: Culture and Ethnic Identity in a Contemporary Aztec Indian Village* (Norman, Oklahoma: University of Oklahoma Press, 1991).
 41. Aveni, *Conversing with the Planets*, 131-132 (See n. 1).

42. See Sandstrom (1991); Hunt (1977); Tedlock (1992); Barbara Deloria, Kristen Foehner, and Sam Scinta (eds), *Spirit and Reason: The Vine Deloria, Jr., Reader*. (Golden, Colorado: Fulcrum Publishing, 1999); and Henri Frankfurt and H.A. Frankfurt, "Myth and Reality," *The Intellectual Adventure of Ancient Man*, eds. Henri Frankfurt, H.A. Frankfurt, John Wilson, Thorkild Jacobsen, and William A. Irwin (Chicago: University of Chicago Press, 1946), 3-30.
43. Norwood Russell Hansen, *Patterns of Discovery: An Inquiry into the Conceptual Foundations of Science* (Cambridge: Cambridge University Press, 1958), 88.
44. *Ibid.*
45. Nor does the preceding entail an ontological relativism of the sort commonly attributed to Thomas Kuhn, *The Structure of Scientific Revolutions*, 2nd ed. (Chicago: University of Chicago Press, 1970). Although Aztecs and Westerners inhabit different "lived," experiential, or phenomenal worlds, I do not claim—nor does it logically follow—that they literally inhabit different metaphysical worlds or ontological realities.

Reason Among the Mayans

Susana Nuccetelli

1. The Puzzle

Before and after the arrival of the Spaniards, the Mayans produced a number of documents revealing how they went about attaining knowledge in a variety of matters, including the natural and the supernatural. Among them, the Codices or books of *Chilam Balam* offer strong evidence that prediction was a common epistemic activity for the Mayans. Here, I ask whether prediction, as practiced by them, could be considered rational. On the one hand, there is sound evidence that with certain astronomical phenomena such as eclipses, they did very well. But on the other hand, there is equally sound evidence that the Mayans regularly trust predictions based on defective reasoning. A puzzle, then, arises concerning their rationality. I show that, although none of the available accounts of rationality could help to resolve this puzzle, an analogy with morality can. I argue that the Mayans were in error in their beliefs based on magical predictions and, furthermore, that their error was massive, since that sort of prediction seems to have been a crucial epistemic practice of the Mayans. But if my analogy succeeds, it shows that beliefs formed that way are better seen as a-rational rather than irrational.

2. Evidence for the Puzzle

The *Chilam Balam* of Maní opens with an almanac that recommends bleeding, bathing, and swimming to those born under the sign of Aquarius. It also tells us that among them, appetite is evident, and that the men born on the days ruled by this sign will have these physical and psychological traits: small, always sad, very fond of women, and noted for using great quantities of small chiles with their meals. Women, on the other hand, will live for exactly fifty-six years and have two illnesses: the first at the age of thirty-four, the second perhaps at thirty-seven. Similarly, the almanac takes other signs of the zodiac to determine particular events in the lives of individuals and their practical affairs—and prediction here concern topics such as health and crops, which ought to have been crucial for the survival of the Mayans. From our Western perspective, beliefs on those grounds appear quite irrational. Yet at the same time, since there is overwhelming evidence of the intellectual achievements of the Mayans, we could not conclude that these peoples were irrational in the way they conducted their epistemic affairs.¹

3. Two Attempted Solutions

To solve this puzzle, we need to look closely at two theories that might account for alleged rationality failures among the members of some traditional societies. Prominent among such theories is the so-called bridgehead view, which holds that people in those societies must have some perceptions, ways of referring to things perceived, and a notion of truth similar to ours, for these are a *bridgehead* required to be able to interpret those peoples. Without it, we could neither identify the propositions about the natural world that they accept nor distinguish them from those that are the contents of their ritual beliefs. Roughly, in the case of the Mayans the bridgehead argument would run: if the Mayans did not have some of our criteria of truth and logic, there would be no grounds for either interpreting their documents, describing their intentional states, or passing judgment on the rationality of their beliefs at all. Since there are such grounds, it follows that they must have had some of our criteria of truth and logic.

This argument faces, however, a number of obstacles. First, are we really sure that we can interpret the Mayans? There seems to be some evidence that we might not be getting things right here. What, for example, did the Mayans mean when they took a priest to be a *Chilam Balam*? Although the term has been translated as "jaguar priest," it is difficult to see what is the intended concept in this case. And what exactly is the story told in Maya book *Popol Vuh*? Those who teach this material to undergraduates can attest to the difficulties that they encounter when they try to read that text. It appears, then, that whether we are in a position to interpret a certain people is an empirical question, that cannot be answered by an a priori assumption as proposed by the bridgehead theorist.

A further problem for the bridgehead view concerns the sort of rationality it ascribes to members of traditional societies. The view distinguishes between two kinds of rationality: perfect rationality and minimal rationality. Only the latter amounts to the bridgehead needed in linguistic translation and intentional interpretation. But the standards for minimal rationality are rather low, since they merely consist in some true empirical beliefs and some rules of reasoning such as *connectedness* (through the relation, "supplying a reason for") and *consistency* (among the beliefs thus related). Surely, the Mayans' beliefs in astrological predictions and prophecies are rational in this sense, but so are beliefs held by infants, and perhaps higher animals, such as chimpanzees and dolphins. No doubt small children, for instance, are capable of entertaining consistent sets of propositions, which they connect in ways that we would translate by using particles such as "because," and "supplying a reason for." But if rationality consists merely in requirements of this sort, the resulting view is vulnerable to criticisms similar to those raised against Lévy-Bruhl and other strong rationalists. For then the bridgehead view also has the unacceptable consequence that the Mayans would count as quasi-rational people—which is preposterous in the face of the evidence from the documents mentioned above. This would be so because according to the bridgehead theorist, their beliefs in magical predictions qualify for no more than minimal rationality, a kind of rationality that may equally be possessed by infants and, perhaps, by chimpanzees, dolphins, and other higher animals. But given the evidence concerning the intellectual achievements of Maya, something has gone wrong here with the bridgehead view.

Let us now consider an alternative to this view: cognitive relativism (hereafter, "relativism"). This might be a solution to the puzzle since, roughly, it maintains that

- (A) If a certain proposition is accepted as true by some group of people or culture, then it *is true* for that group or culture.

- (B) If a certain rule of reasoning is accepted as rational by some group of people or culture, then it *is rational* for them.

That is, the relativist holds that there is no absolute concept of truth, valid independently of, for instance, when and where propositions thought as true are accepted—and that there is no absolute set of logical rules, valid independently of, for instance, when and where those rules are accepted by a group of people. Thus, given relativism, in the case of the *Chilam Balam*'s magical predictions, if they were true and rational for the Mayans, then they were true and rational, period.

Relativist claims such as (A) and (B) above, cannot, however, be shown to be correct,² for there is no valid route from premises about what people believe to be true or rational to relativism about truth or rationality—that is, to the claim that conflicting judgments about the world or conflicting rules of thinking could be equally correct. Clearly, any such claim amounts to a very controversial view.

To see the invalidity of the argument for relativism, it is sufficient to point out that people have historically held the most absurd beliefs and theories about the natural world and rules of thinking—involving, for instance, plainly false propositions about cause-and-effect relations, how things are, methods of confirmation, etc. But then, believing a group of propositions to be true and rational (i.e., supported by the evidence and related according to well-accepted rules) must be distinguished from such propositions' actually being true or rationally held. After all, claims about the former belong to the epistemic domain, while claims about the latter, to the metaphysical. Again, from an epistemic premise holding that a certain group believes a proposition to be true, *nothing is deductively implied* about a metaphysical claim concerning the truth of the proposition believed by this group.

But perhaps the relativist is not maintaining that premises about what people believe to be true or rational entail the relativistic conclusion. She may instead hold that the relativistic conclusion is what best explains the evidence provided by those premises. This argument begins by noting that there is evidence that, at different times and places, people have different, and sometimes incompatible, views about what is true or rational. From this premise, the relativist concludes that relativism is the best explanation of that evidence. Since the premise is supported by compelling empirical evidence, this cognitive relativist argument seems inductively strong. Now the relativist argument has been recast as an argument to the best explanation of some empirical evidence, and this argument is strong. The relativist has, then, succeeded in providing us with at least *one* reason for her view. But that reason must of course be weighed together with counter-reasons before we make up our mind about relativism.

At this point, the relativist may add another argument supporting her view: she may hold that statements about *the way things or the rules of reasoning that are correct* appear elliptical. For they seem to contain a hidden (or implicit) relativist qualifier indicating that whatever is being held true or rational is always so only “for” those who take it to be true or rational. When that qualifier is made explicit, it becomes clear that some statements apparently contradictory at the outset are nonetheless logically consistent. According to this argument, when a heliocentric theorist claims that the earth move and her geocentric rival that it does not, each of them must be interpreted as saying, respectively, “The earth does move *for me*,” and, “The Earth does not move *for me*.” There is no contradiction now because, although it first appeared that we have a statement and its negation, once the qualifier “for me” is added, the parties are asserting different propositions.

But arguably, such a defense of relativism is at odds with the historical fact that those who held geocentric and the heliocentric theories perceived themselves as holding rival views that actually contradicted each other. And since this is compatible with our own intuition about conflicting claims that the relativist wishes to relativize, why should we accept her argument here? Recall that it holds that, when a group of people accept a proposition, they should be understood as implicitly relativizing its truth or rationality to their own group. But this seems to ascribe to people hidden intentions and meanings that they do not appear to have.

In addition, we may ask: What help, if any, could this sort of relativism provide in the case of concern here? The view leads to the odd conclusion that clearly false predictions and prophecies, such as those found in the books of *Chilam Balam*, may in fact have been true and the outcome of sound reasoning. But this is of no help at all in solving the puzzle about the rationality of the Mayans.

4. The “Error Theory”: The Solution to the Puzzle

To solve the puzzle, the first step is to acknowledge that the *Chilam Balam*'s predictions consisted in predominantly descriptive propositions about future events of the natural world. Belief in such predictions had correspondence with reality-truth conditions and the Mayans took them to correspond to future events of the natural world and to be based on good evidence. But as we have seen, often those propositions corresponded to nothing in the natural world and lacked empirical support. From this it follows that the Mayans were in massive error with respect to the truth and evidential support of their beliefs in the *Chilam Balam*'s predictions. But ordinarily, the standards of cognitive rationality apply only to sets of beliefs based on either empirical (observational) evidence or a priori (purely rational) thinking. And the *Chilam Balam*'s predictions were based in neither. If this is correct, those standards of rationality fail to apply to their magical predictions. From here, we may conclude that, although the Mayans were massive in error in their beliefs about truth and evidential support of their magical predictions, such beliefs were not irrational.

This line of reasoning could be supported by appealing to the analogous case of moral beliefs. Arguably, the latter have descriptive content, in spite of the fact that there is no reality that corresponds to them.³ Failing any test of objectivity, they could be said to be false. But are they irrational? Surely, a common intuition about moral beliefs is that we have no need to carry out empirical tests to determine whether they are true. Of course, were such tests to be performed, they would show that we are in error, since assuming that the natural world is all that exists, moral beliefs correspond to nothing in that world, and are therefore false. Yet we do not judge them (or their holders) to be irrational. There appears to be a presumption in the case of that, in evaluating their rationality, the norms of cognitive rationality are out of place. Although such norms do seem to be required for the rational evaluation of beliefs supported either empirically or by reason alone, they fail to apply to moral beliefs.

I submit that an analogous “error theory” could solve the puzzle of Maya rationality. The Mayans took magical predictions to correspond to events in the natural world, even when those predictions turned out to be predominantly false. But their rationality is in the clear, since their belief in those predictions fall beyond the standards of cognitive rationality.

Endnotes

1. Magical predictions and prophecies can often be found in the books of Chumayel and in those of other Maya towns—which further supports my view that a puzzle arises when we attempt to understand Maya rationality.
2. Among those who think that relativism is rationally defensible are, for instance, David Wong and Gilbert Harman.
3. The “error theory” for morality was, of course, developed by J.L. Mackie in his *Ethics: Inventing Right and Wrong*.

References

- Craine, Eugene R. and Reginald C. Reindorp, eds. *The Codex Pérez and The Book of Chilam Balam of Maní*. Norman: University of Oklahoma Press, 1979.
- Edmonson, Munro S. *Heaven Born Merida and Its Destiny: The Book of Chilam Balam of Chumayel*. Austin: University of Texas Press, 1986.
- Harman, G. and J. Thomson, eds. *Moral Relativism and Moral Objectivity*. Malden: Oxford University Press.
- Hollis, Martin. “Reason and Ritual.” In Wilson, *Rationality*. Worcester: Basil Blackwell, 1970. 221-239.
- Lévy-Bruhl, L. *Primitive Mentality*. Boston: Beacon Press, 1966.
- Lukes, Steven. “Some Problems about Rationality.” In Wilson, *Rationality*. Worcester: Basil Blackwell, 1970. 194-213.
- Mackie, J. L. *Ethics: Inventing Right and Wrong*. London: Penguin, 1977.
- Meiland, Jack W. and Michael Krausz. *Relativism: Cognitive and Moral*. Notre Dame: University of Notre Dame Press, 1982.
- Nuccetelli, S. *Latin American Thought: Philosophical Problems and Arguments*. Boulder, CO: Westview Press, 2002.
- Nuccetelli, S. and G. Seay. *Latin American Philosophy: An Introduction with Readings*. Upper Saddle River, NJ: Prentice Hall, 2003.
- Wilson, Bryan R. *Rationality*. Worcester: Basil Blackwell, 1970.
- Winch, Peter. “Understanding a Primitive Society.” In Wilson, *Rationality*. Worcester: Basil Blackwell, 1970. 78-111.
- Wong, David. *Moral Relativity*. Berkeley and Los Angeles: University of California Press, 1984.

Comments on James Maffie’s “The Epistemology of Aztec Time-Keeping”

Alberto Hernández-Lemus

In an article entitled “Philosophy and the Colonial Difference,” Walter Mignolo describes the double bind of the colonial difference as a trap in which non-Western philosophy is often caught when attempts are made to describe it as a free-standing intellectual praxis. The double bind consists in its being either so different from Western philosophy that it simply does not deserve the name “philosophy,” or its being so similar to certain Western philosophical strands as to be indistinguishable from them and therefore not deserving as a unique theoretical enterprise.

Jim Maffie’s “Epistemology of Aztec Time-Keeping” may be inserted in a long tradition of efforts by scholars of non-Western philosophies attempting to explain to and convince Western audiences that certain so-called “ethno-epistemologies” deserve, first, to be viewed as philosophies and, second, have unique and important contributions to make to philosophy in general. Susana Nuccetelli’s own *Latin American Thought*¹ chooses examples of Latin American philosophical argumentation ranging from the pre-conquest period to our days, and subjects them to rules of logical reasoning to demonstrate their rationality. Both efforts, I would contend, fall under the parameters of Mignolo’s “double bind” of the colonial difference. Mignolo’s essay, however, is also a call to arms to “decolonize philosophy.” According to him, to “think from within the colonial difference, means assuming philosophy as a regional practice and simultaneously thinking against and beyond its normative and disciplinary regulations.”² In this view, to assume philosophy as a regional practice must necessarily take into account the power relations, “the coloniality of power [active] in the very making of cultural differences.” Both efforts by Nuccetelli and Maffie may be seen as useful contributions to that project. Both argue for a special definition of Latin American philosophy inextricable from the cultural context in which it is embedded.

I have been charged to comment on Maffie’s essay, so my comments on Nuccetelli’s books should be treated strictly as if in passing. I will begin with Maffie’s Puzzle #2. In his effort to help a nonspecialist audience make sense of Aztec time-keeping, Maffie begins by giving an account of what time-keeping is not. To this end, he sets out to demonstrate that positivist models, such as that of Broda, fail to do justice to the phenomenon he purposely calls “time-keeping.” The coinage is meant to indicate an effort to understand this practice in “Aztec terms rather than in contemporary Western terms such as astronomy, astrology or religion.” The positivist, Maffie argues, wants to base cultural practices (such as the crafting of cosmovisions, and justifications for religious and political systems) on the theory-neutral event of empirical observation. According to Maffie, observation, at least in the Aztec case, is never quite free of theory, nor removed from the cultural context in which those observers live and observations are made. In exposing the limitations of the “positivist approach,” that analyzes “Aztec time-keeping” into five relatively discrete dimensions of discovery, justification and use, Maffie wants to emphasize the “epistemological interdependency of these various ‘dimensions.’” Puzzle #2, which asks about the role that metaphysics, religion, and astrology play in the epistemology of Aztec time-keeping, reveals itself as puzzling mostly if we implicitly accept a positivist-type model of the various dimensions of cultural practices *distinguishable* from “objective” scientific observation. To solve the puzzle, Maffie’s

strategy is simple: merely pointing out to the (for most of us today) inconceivable concept of theory-neutral observation that the positivists hold so dear, is enough to pave the way for the ready acceptance of what he calls the “thoroughly *contextualist* nature of the epistemology of Aztec time-keeping itself.” Quoting Eva Hunt and Quine, Maffie seems to want to remind us that in many important respects we are today dwellers of an epistemic horizon born as a reaction to the facility of the positivist *episteme*. The passage reads (this is Maffie quoting Eva Hunt talking about Aztec epistemology): “‘scientific, empiro-mathematical investigations’ and ‘mythic symbolism’ are warp and woof of the same ideological fabric’ or to borrow from Quine, they are strands in one and the same ‘web of belief’.”

Perhaps I am twisting Maffie’s words, wanting to hear in his strategy to solve puzzle #2 echoes of Foucault’s genealogies of the different paradigms of thought serving as *arche* during the different epistemic eras that constitute our (selective) universal history. If I am right in recognizing in Maffie’s strategy a hint of Foucault, or Deleuze or perhaps more accurately, echoes of Reiner Schürmann (whose posthumous *Broken Hegemonies* has finally appeared in English), that would allow Maffie to address another riddle lurking behind his second puzzle. The riddle I have in mind is the hermeneutical one.

How would it be possible to understand Aztec time-keeping in “Aztec terms rather than in contemporary Western terms” (as Maffie puts it)? The solution I propose, suggested by Maffie’s strategy against positivist Broda, is that Maffie’s effort to interpret Aztec epistemology “correctly” is a philosophical question which takes place in a specific regional philosophical practice, and one, more precisely, in which Maffie prefers to think like Eva Hunt and Quine, rather than like Broda. In other words, Maffie’s version of Aztec terms understood in Aztec terms is possible for him and credible for us because of the theoretical horizon we share. Ours is a theoretical horizon in which we conceive of life and knowledge as a web of interpretively thick semiotic interactions with others and with the world. We view history as a thread of traditions whose continuity is constituted by a series of shifts informing past, present, and future.

This brings me to puzzle #1. In it Maffie asks about the status of observational astronomy, given the fact that “Aztec epistemology maintained that humans attain knowledge of reality a priori, using their *yollo* (“heart”) and not their senses.” This puzzle is also solved when Maffie shows the interdependence of layers artificially separated by Broda and the positivists, that is by “emphasizing the *contextualist* nature of the epistemology of Aztec time-keeping itself.” The puzzle that does linger in my mind, however, is Maffie’s choice of words when he calls metaphysical knowledge a priori and observation a posteriori. I ask myself why he deems it necessary to continue using these categories when stressing the mutual feedback and interdependence, and yes, circularity of the thick interpretive context he wants to paint. Metaphysical knowledge, in this description, is a result of training and education in metaphysics. And this knowledge will be reinforced by what one sees in the world, shaped of course by the beliefs and theories of one’s epistemic horizon. Maffie is so successful in describing a perfect hermeneutical circle, that I wonder if the a priori/a posteriori categories are not encumbrances for the case he wants to make. He attempts to untangle this complication by dissecting logical versus chronological priority. The relevant passage is at the end of the essay: “Aztec skywatching contained both empirical and non-empirical elements. The non-empirical element was epistemologically prior to the empirical and consisted of a *priori* conceptualization or theory. Yet the non-empirical

element was temporally concomitant with the empirical since it helped shape empirical percepts so as to make them an observation of something.”

Thus, Maffie’s solution to the puzzle indicates that where he wants to maintain a difference in kind between metaphysical a priori and observational a posteriori knowledge, the Aztecs may have seen merely a difference in degree. Not only where they are not incompatible, in Maffie’s account training in observation of rituals and of nature were indispensable propaedeutics for attaining mystical knowledge. A good heart *as well as* participation in a living tradition of ritual practices (in which ongoing active research is expanding the limits of knowledge) are both necessary for genuine knowledge. (It would be important to note, by the way, that for the Aztecs knowledge was always deemed as insufficient, as their flower and song philosophical poems always remind us.) In other words, a good heart with its a priori mystical knowledge is inconceivable without a context that would first of all define it as such. Even if we were to understand the concept of *yollo* as “faith,” in the sense of a predisposition to believe, it is hard to conceive of faith as a priori possible in the absence of an a posteriori cultural context. Why then hold on to the a priori/posteriori distinction in the case of Aztec epistemology?

Endnotes

1. S. Nuccetelli, *Latin American Thought: Philosophical Problems and Arguments* (Boulder, CO: Westview Press, 2002).
2. Walter Mignolo, “Philosophy and the Colonial Difference,” Eduardo Mendieta, ed., *Latin American Philosophy* (Bloomington: Indiana University Press, 2003).

The Puzzling Epistemic Practices of Pre-Columbian America

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Comments on:

Susana Nuccetelli, “*Reason among the Mayans*”

James Maffie, “*The Epistemology of Aztec Time-Keeping*”

Both Maffie and Nuccetelli are concerned with bringing our attention to certain problematic issues (which they call “puzzles”) concerning what they refer to as the epistemic practices of the Aztecs and the Mayans. The Aztecs and Mayans were the two most influential indigenous civilizations that shaped the culture in the area now spanning Mexico and Central America, and I share Maffie and Nuccetelli’s belief that the scientific and cultural contributions of these groups deserves much more recognition than it has hitherto received. The issue of how we can come to an understanding of the contributions of these groups is a difficult one to resolve. Both Maffie and Nuccetelli explain the sources of some of the difficulties. To begin with, these groups had a view of nature as a vitalistic, sacred realm, rather than merely a collection of mechanistic forces. A vitalistic, almost mystical view of nature is not entirely foreign to the Western cultural tradition. The early German Romantics, for example, emphasized that we must go beyond charts and graphs, that is, beyond the merely quantifiable dimensions of nature if we were to understand nature as a

living, breathing whole rather than as a set of lifeless mechanisms.

Similar remarks as to the inappropriateness of the reductionist science are indeed famous in the West during the last 200 years—from Wittgenstein to Husserl. Moreover, one of the most important natural scientists of the eighteenth century, Alexander von Humboldt, claimed that we must go beyond “vicious empiricism” if we want to understand nature in its entirety, that is, to understand the living, vital forces of the cosmos (the title of his final work).¹ Of course, what is not so common in Western science is to hold that science is surrounded by a halo of sacredness which renders it quasi-mystical—although many of the opponents of vulgarly reductionist science have been accused of being mystics.

Lest anyone think that I undermine the very purpose of this discussion by polluting my comments with Europeans in order to, as is so often the case, take on an ethnocentric and dismissive view of the contributions of the Aztecs and Mayans, let me point out that Humboldt was one of the first Europeans to appreciate the indigenous cultures and to criticize the disparaging way in which Europeans dismissed the cultures of native America as inferior to the European culture—in fact, in his *Political Essay on the Kingdom of New Spain*, he challenged the widespread European view that there had been no serious scientific or cultural achievements made by the indigenous civilizations that preceded the Spanish Conquest:

How shall we judge, from these miserable remains of a powerful people, of the degree of cultivation to which it had risen from the twelfth to the sixteenth century, and of the intellectual development of which it is susceptible? If all that remained of the French or German nation were a few poor agriculturalists, could we read in their features that they belonged to nations which had produced a Descartes and Clairaut, a Kepler and a Leibniz?²

Both Maffie and Nuccetelli realize that understanding the contributions of the Mayans and Aztecs is no easy task, and I agree. They discuss several issues confronting us as we try to sort through the Mayan and Aztec understanding of the cosmos. Maffie and Nuccetelli suggest that to understand such phenomena as Aztec and Mayan time-keeping and sky-watching, the slide specimens in the lab, the chemical composition of individual organisms, the charts and graphs produced by the empirical data will not be sufficient. A holistic understanding of nature necessitates a vision of nature that is more than the sum of its individual, isolated parts.

As Maffie tells us, “time keeping” consisted of constellations of activities including the observing, counting, measuring, interpreting, giving account of, and creating an artistic written record (*amatl*) of various patterns of time: includes, counting the days, counting the years, binding the years, counting other cycles in celestial and terrestrial processes. So, he continues: “Counting thus involved more than watching or recording the number of days in various celestial cycle; it involved interpreting, divining, giving an account of, and prognosticating their meaning or significance.”

To achieve this holistic vision, I would like to add, we need to recognize that aesthetics and history are central to the very conception of science. Given the strong aesthetic, historical dimension to the activities at the heart of the Mayan and Aztec attempts at understanding the cosmos, I am not entirely convinced that framing the discussion in terms of the particular epistemological puzzles presented by Maffie and Nuccetelli is the best way to uncover the truly valuable contributions of the Aztecs or the Mayans; so after presenting

their puzzles, I will draw attention to some of my own questions. In contrast to Maffie’s and Nuccetelli’s the views, I would like to suggest that part of the value of examining Mayan and Aztec scientific, or proto-scientific practices, is to realize that for them, as well as for some in the West, scientific thought was a much richer phenomenon than it is typically acknowledge (at least in empirical and other reductionist camps).

1. The Puzzles

At the outset, Maffie alerts us to something that Nuccetelli also addresses in fine detail, namely, that for the indigenous groups of pre-Columbian America, there was no distinction between prophecy and science. Maffie tells us that the Aztec astronomers “believed the movement of time through space to be the self-presenting of the sacred.” This belief gives rise to the “two puzzles regarding Aztec astronomy” that Maffie proposes to address:

- (1) Aztecs epistemology maintained that humans attain knowledge of reality a priori using their *yollo* (heart) not their senses: What then was the epistemological status and role of observational astronomy?
Did Aztec *tlamatinime* (“knowers of things” or philosophers) regard a priori knowledge and empirical astronomy as epistemologically incompatible?
- (2) What role did the broader cultural context of religious, metaphysical, ideological, and political assumptions play in the epistemology of Aztec astronomy?

Interesting as these questions surely are, they face two relatively minor problems: first, why are they called puzzles (surely not all questions are puzzles, and I am intrigued by the rhetorical force intended by referring to questions as puzzles)? There is, however, a deeper dimension to this problem, to which I shall return shortly. Second, it is not clear how these questions relate to the belief from which they supposedly come into existence, i.e., the belief, roughly, that time and space are sacred.

Nuccetelli also brings our attention to several puzzles. The title of Chapter 1 of her very interesting book, *Latin American Thought: Philosophical Problems and Arguments*,³ carries the title, “The Epistemic Practices of Latin American Indians: A Puzzle for Philosophers.” Why are the epistemic practices of the Latin American Indians a puzzle for philosophers? (One problem that presents itself immediately is the use of “Latin American Indians”—the only group Nuccetelli discusses is the Mayans, so why not make that clear in the title? Certainly, not all indigenous groups had the same “epistemic practices.” Let us consider one puzzle she mentions:

Mayan documents such as those from the books of the Chumayel and Maní contain unquestionable evidence pointing to both the rationality and the irrationality in the ways these peoples went about predicting future events. Furthermore, such books are not alone in displaying highly rational calculations of future events together with astrological and prophetic predictions, for these disparate features are also frequently found in similar texts that have been preserved in other Mayan towns. This contradictory evidence, then, generates a puzzle about Mayan thought. From our perspective, these books are puzzling because we simply do not know what to make of the evidence that they provide about the Mayan methods of understanding nature.

So what are we really concerned with? (1) Epistemic practices in general? Or (2) the particular problem of appreciating Mayan

methods of understanding nature? It seems to me that both Maffie and Nuccetelli are interested in the latter rather than in the former. If they are interested in the former, more work needs to be done to show that understanding the Aztec and Mayan approaches or methods of understanding nature is sufficient for us to make claims about their epistemic practices in general.

In either case, it is absolutely necessary for Maffie and Nuccetelli to tell us what is the correct assessment of texts like the *Mani*, the *Chumayel*, and the like. An uneasy combination of mysticism and science is also very common in some books from our own culture. Were these books meant as scientific texts or as other things? Asking this question does not entail ethnocentrically applying our distinctions to another culture, for surely it could be argued that some Aztec or Mayan texts differ in terms of their purposes from other Aztec or Mayan texts.

Let me return, then, to the so-called puzzles our authors discuss. On Nuccetelli's account, a puzzle seems simply to be something that "appears irrational." She writes, "the Mayans seem to have neglected the use of rational tools in their attempts to make accurate predictions about questions that ought to have been of crucial importance to them. Surely, for the Western perspective, that appears quite irrational."

In addition to the peculiar fixation with "puzzles," we need to face the problem of defining rationality (and of course irrationality). As a matter of fact, it seems we cannot begin to understand the puzzles until we solve this first issue, a tall order it ever there were one.

Nuccetelli presents another puzzle, in which the problematic and facile appeal to rationality rears its ugly head again: "To see how puzzling the *Chilam Balam's* astrological predictions are, consider what is entailed in ascribing belief in a prediction. Standardly construed, "belief" is a mental attitude that a person has with respect to a certain proposition (or description of a state of affairs). More precisely, "If a person believes that some proposition *p* is the case, then under normal circumstances, she would have the psychological attitude of accepting that *p*."

According to Nuccetelli, the Mayans had a bunch of beliefs about the natural world that "regularly failed to correspond to any facts in the natural world," so that "it appears that those who held those beliefs were irrational after all. Again, is irrationality being defined as the characteristic of holding false beliefs despite evidence which empirically demonstrates the falsity the belief?"

This might be a problematic claim, because it is not clear that the beliefs the Mayans had could be falsified via empirical counterexamples. For example, Nuccetelli talks about the Mayan assertion that males born in March would live to seventy-five years of age (with a protective clause to cover exceptions to the general rule). But someone born in March who dies at age sixty-six, of causes not covered in the protective clause, might not, in the Mayan way of viewing the world, amount to a counterexample to the rule that those born in March will live until age seventy-five. For example, the man who dies at age sixty-six might be said to have died because he broke another rule or what have you. In other words, it is likely that the Mayans had many rules of these sorts, interconnected amongst them and allowing for exceptions. So, what on first approximation might look irrational to us, might not, in the final analysis, be irrational at all.

Yet the puzzle that Nuccetelli is ultimately concerned with is whether "people as clever" as the Mayans were unable to think rationally. In light of numerous assertions which are, and were, easily shown false, many people have suggested that

the Mayans were irrational. Nuccetelli attempts to rescue the Mayans from this charge of irrationality by showing that the Mayans' "massive error with respect to the truth and evidential support of the *Chilam Balam's* predictions does not entail the irrationality of their belief in those predictions," because while the "predictions consisted in predominantly descriptive propositions about future events of the natural world," "often those propositions corresponded to nothing in the natural world and lacked empirical support." And the criteria of "cognitive doxastic rationality apply only to sets of beliefs based on either empirical evidence or a priori thinking," and so cannot be applied to the astrological and prophetic predictions accepted by the Mayans.

I do not agree with this strategy of saving the Mayans from the charge of irrationality. If the propositions in question did not really "correspond to anything in the natural world," how could it be the case, as Nuccetelli admits it was, that the Mayans were in "massive error"? What was the error about? (Additionally, notice that Nuccetelli humbly claims that it only often—not always—that these propositions were not about the natural world: What about, then, those cases in which the propositions *were* about the natural world?) What could possibly be the value of examining a set of propositions that do not refer to anything in the natural world? Again, someone might appeal to propositions, or so-called propositions of ethics and aesthetics as constituting an example of such non-natural-world-referring propositions that are of value. Yet philosophical naturalism is a resilient, sophisticated philosophical position which might accommodate axiological propositions with the confines of the natural world. But I cannot defend naturalism here; in the next section I shall come back to the role that axiological experience plays in understanding reality. Unwittingly, Nuccetelli might do a disservice to the rich conception of nature with which the Mayans operated: a sacred, living realm, the parts of which were dialogue partners for the indigenous people.

I think it fails to give a proper role to the different conception of nature with which the Mayans operated, a sacred, living realm, the parts of which were dialogue partners for the indigenous people.

Prophecies of the *Chumayel* that reveal the designs of the gods to the Mayans through their jaguar priests are difficult for us to assess and to access, and we should think carefully before presuming to know what would count as a counterexample to the truths of the priests. Even in our tradition, prophecy is not normally testable empirically, which is why many philosophers throughout history, but especially after the Scientific Revolution that got underway in the 1600s, have kept religion and science separate. The conditions for justified true belief vary radically as we move from scientific beliefs to religious beliefs. So what are the puzzles really about: Trying to reconcile religious worldviews with scientific worldviews? If so, they would not be puzzles particular to the pre-Columbian indigenous groups but would rather be problems faced by a variety of groups, both indigenous and nonindigenous, throughout time.

2. Aesthetic Dimensions of the Problem: Understanding the Role of the Sacred in Epistemic Practices

As Maffie tells us, a cornerstone of Aztec metaphysics is the monistic claim that there exists a "single, dynamic, vivifying, and eternally self-generating-and-self-regenerating sacred energy, power, or force." The sacred force is called *teotl*, and process, movement, and transmutation are essential attributes of *teotl*. All creation is *teotl's* "flower and song," "that is, its ongoing work of performance."

Aztec epistemology maintains that humans obtain knowledge by acquiring *neltiliztli* (“rootedness”), that is, by rooting their intellectual, emotional, imaginative, and physical dispositions and behavior deeply and steadfastly in the sacred (*teotl*). This rootedness is related to Maffie’s first “puzzle.” We are rooted in the sacred, and we come to know *teotl* “a priori and mystically by means of a *teotalized yollo* (sacred heart), not the five senses. They come to know *teotl* through their hearts as a consequence of ‘flower and song,’ i.e., artistically induced, mystical sacred presence.”

If knowledge is attained via the heart, then what is the epistemological status and role of observational time-keeping? Are science and mysticism epistemologically incompatible? For the Aztecs, answers Maffie, no: “Careful observation and tracking of the patterns of time-space suggested the nature of *teotl*, and in so doing helped “root” and prepare one’s heart for sacred understanding. Yet, such observations were by themselves incapable of yielding genuine understanding . . .”

Maffie notes that “genuine understanding could come only from mystical presence” and that “Aztec epistemology assigned a foundational role to a priori mystical knowledge and an ancillary role to empirical observation.”

The performance aspect of understanding the cosmos deserves our attention. In the great Mayan tale of creation, the *Popol Vuh*, we are told that the creation story was performed, not read. When I teach it, the students complain that it is hard to follow. It is hard for us to relate to stories that were partly imbued with meaning as a result of a performance. How do we, given the gulf of time and conception of the world, come to an understanding of *teotl*’s “flower and song”? I think it might be fruitful for us to consider the following issues: What was the performance art of the Aztecs and the Mayans? And how does performance relate to knowledge? What would an epistemic practice that is tied to performance be like? Is it of such a kind that we are unable to recognize its value?

3. Epistemic Practices of Sacred Science

Both Maffie and Nuccetelli address in detail the seamless connection indigenous groups saw between the sacred and the natural. As Maffie states: “It was feature of Aztec common sense that the world is animated and that the sacred surrounds us.” Aztec sky-watching “was cut from the same epistemological cloth as reading sacred books”—but that epistemological cloth is quite unlike the cloth that shapes Western science, so why even push the sky-watchers into the narrow confines of the scientist? Is the only way to take a view seriously to dub it “science”? We should avoid smuggling typical Western condescendence toward other cultures by avoiding the assumption that, if a culture is not scientific by our standards, then it is not worthwhile. This warning is consistent, of course, with holding *some* standards across cultures.

As Maffie points out, “Aztec time-keeping was therefore more akin to what we Westerners would consider reading—interpreting a painting, dance performance, or operatic performance than to reading a discursive essay in *Science* or *Journal of Philosophy*. *Teotl*’s sacred cosmic text is performed in “flower and song, i.e. a non-discursive language consisting of artistic symbols, icons, glyphs—not assertive sentences composed or alphabetically transcribed, spoken Nahuatl words.”

Time-keeping was conceived a “dialogue or conversation with the sacred.” Dialogue is central to hermeneutics. It seems that we are here concerned with a very particular epistemic practice, that of understanding, as opposed to generic ‘knowing’ and the like. Understanding, as an epistemic practice,

is unique in that it weaves together history, culture, language, and other realms. Understanding demands that we find a way to dialogue with the objects and with the subjects around us. Maffie reminds us of something said by Aveni: “When a living universe is your home and all parts of your world pulse harmoniously, then you talk to the stars and they talk back to you.” If we are to understand this claim, we would need more details on a Subject-Subject model as opposed to a Subject-Object model for knowledge.

Conversing with the heavens, Maffie tells us, involved an “empirical (listening) and nonempirical component (interpreting and understanding).” To listen to the stars, we must be able to hear them and this would involve a recognition that they actually have something to say to us, a recognition that they are dialogue partners of sorts, rather than lifeless objects opposed to the active, knowing subject. I would like to hear more details on the epistemological model underlying the approach to nature embraced by both the Mayans and the Aztecs.

4. Assessing the Contributions of the Mayans and Aztecs

Nuccetelli shows us why the typical moves used to demonstrate the “irrationality” of the Mayans do not work. Yet mere rationality is not enough for good science. Did the Aztecs and the Mayans do good science? Did it have strong explanatory value? Did it consistently predict the outcome of future events? Was it parsimonious enough? Was it testable?

Maffie’s assessment of Aztec science is puzzling in its own right. According to Maffie, perception is theory-laden, and since the Aztecs theory differed from that of Western scientists, Aztecs did not see (in the epistemological sense) the same things when looking at the sky as Western scientist who followed them. Maffie claims that, “Western astronomers see the Sun and Venus; Aztec time-keepers, *Tonatiuh* and *Quetzalcoatl*.” According to Maffie, “Epistemological seeing involves more than being visually stimulated; it involves the *way or manner* in which one sees. And the way in which one sees depends upon one’s prior beliefs and theories”—so even if the retinal images and visual fields, and the images of what is processed in the brain are identical, they are not seeing the same thing, because there is a ‘difference between a physical state and a visual experience.’ Yet Maffie is careful to emphasize that “Western and Aztec skywatchers *do* see *de re* the same objects: e.g., Venus according to Western science’s ontology, *Quetzalcoatl*, according to the Aztec’s. The nonrelativity of *de re* seeing holds for literate and illiterate too.”

In Aztec sky-watching, the nonempirical elements are epistemologically prior to the empirical elements. What the Aztecs saw when looking at the heavens was the joint product of empirical percept and a priori concept. “The positivistic distillation of Aztec time-keeping into culturally “universal” observation versus “culture specific” interpretation is thus mistaken. Was this good science? Johanna Broda claims that “to the degree Aztec time-keepers did “good science,” they did not allow religious, astrological, etc. factors to influence their observations.”

Maffie refers to Broda’s approach as positivistic (p. 8) and goes on to criticize her approach strongly. According to positivistic approach: “as external factors, religion, etc. have the potential to guide and motivate science; as internal factors, they can only corrupt science. In sum, science, on the one hand, and religion, astrology, ritual, and politics, on the other, are epistemologically incompatible.” On this account, given that Aztec sky-watching was embedded in the sacred, it could not be good science.

Maffie's criticism of the positivistic approach is harsh: "I contend that balkanizing Aztec time-keeping into various "dimensions," "functions," and "stages" that presupposed categories commonplace to modern Western thinking yet alien to Aztec thinking violates the internal coherence and integrity of Aztec time-keeping and consequently prevents us from understanding the Aztec's own epistemology of time-keeping."

Maffie claims that "the positivistic approach overlooks the thoroughly *contextualist* nature of the epistemology of Aztec time-keeping itself." In Aztec science: "When observational results did not square with background metaphysics, I suggest Aztec time-keepers rejected them and looked elsewhere until they found results that did so square. In the language of positivism, metaphysics played an indispensable role in both the "external" and "internal" history of Aztec time-keeping."

From this way of putting things, it is difficult to distinguish a search for objective truth from a hunt to affirm previously held beliefs. There is an important difference between moving away from a purely "charts and graphs" based approach to science, away from a vicious empiricism, and the sort of investigation described above. In fact, from the picture Maffie presents, "vicious empiricism" is replaced by "vicious holism," an inability to adjust the background beliefs to help shed light on the movements of the stars and the orbits of the planets. Good science certainly cannot be merely a quest to validate previously held beliefs, for then nothing new would ever be discovered, but that is what Maffie seems to suggest. Bad science can be rational, but it is not terribly valuable.

Endnotes

1. *Cosmos: A Sketch of the Physical Description of the Universe*, translated by E.C. Otté (Baltimore: The Johns Hopkins University Press, 1997).
2. *Political Essay on the Kingdom of New Spain*, translated by John Black, edited with an introduction by Mary Maples Dunn (Norman, Oklahoma: University of Oklahoma Press, 1988), 53-54.
3. S. Nuccetelli, *Latin American Thought: Philosophical Problems and Arguments* (Boulder, CO: Westview Press, 2002).

BOOK REVIEWS

Learning from Experience, Minority Identities, Multicultural Struggles

Paula Moya (Berkeley: University of California Press, 2002).

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At a time in which conservatives and not so conservative critics attack Identity Politics, Multiculturalism, as well as Ethnic studies, a light shines through in Moya's monograph, *Learning from Experience, Minority Identities, Multicultural Struggles*, published in 2002 by the University of California Press. This text passionately starts with a quote by the late Mexican writer and thinker Rosario Castellanos, reminding us that "it has become incontrovertibly evident that we also have an obligation to examine what has been presented to us as our dogma, to revise our myths, and to exercise our critical sense"—and indeed Moya heeds Castellanos's injunction as she critically and carefully examines some newly acquired dogmas and myths of identity presented by both postmodernist and neoconservative thinkers.

The overall aim of the text is, according to Moya, to provide a "post-positivist, realist theory of identity that takes seriously the epistemic consequences of identities." Her main goal, then, is to provide a new theory of identity, a "postpositivist, realist" theory, which is to be superior to standard accounts of identities such as the essentialist, postmodernist, neoconservative, and to some extent pragmatist accounts. It is "postpositivist" because it sees objectivity not as context-transcendent but as subjectively mediated; it is "realist" because identities refer outward to the world. As she states,

I understand identities to be socially significant and context-specific ideological constructs that nevertheless refer in non-arbitrary (if partial) ways to verifiable aspects of the social world . . . it is precisely because identities have a referential relationship to the world that they are politically and epistemically important (13).

Moya's first step is to carry out two important critiques: (1) a critique of postmodern accounts of the subject that jettison the concepts of identity and experience and (2) a critique of Neo-conservative accounts, such as those of Shelby Steele and Richard Rodriguez, which call for cultural assimilation. These two critiques constitute a great part of the text, comprising Chapters 1, 2, and 3. Chapters 4 and 5 offer what Moya calls a "realist" proposal for Multicultural education and a realist reading of the work of Helena María Viramontes, respectively. Ultimately, *Learning from Experience*, constitutes a defense of Ethnic Studies scholars who appeal to the experience of marginalized subjects in order to attain a more objective understanding of the world and who appeal to multiculturalism to open the possibility of what Moya, following Mohanty, calls "epistemic cooperation."

Moya's critique of postmodernist accounts takes on both the work of white feminist iconic figures such as Donna Haraway and Judith Butler (Chapter 1) and less well-known Chicana Feminists such as Norma Alarcón and Chela Sandoval (Chapter 2). An important point to be noted here is that Moya

is carving out a space between two well-known, dichotomous, and what she sees as pernicious positions, the essentialist and the postmodernist. For Moya or for any other theorist of color, being in one of these two spaces is not being in the map—it is ultimately to lose agency, to be contradictory and fragmented, to miss one's connection to a real social and natural world, to homogenize or universalize experience, or to miss the fact that some identities have greater epistemic value than others. Instead, Moya is inspired by Cherrie Moraga's view which reconceptualizes the notion of identity so as to show that it is relational and that it is grounded in historical and social categories.

Moya attacks the work of postmodernists Haraway and Butler on a main front: their inability to acknowledge the link between identity and social location. She discusses Haraway's account of women of color and claims that she both misappropriates and misreads the myth of *La Malinche*. Haraway, according to Moya, follows the work of some Latina writers who have transformed *La Malinche* into the "literate mother who teaches survival" (31) and thus reads the myth in a positive light and connects *La Malinche's* marginality and ability to survive with the identity of cyborgs and women of color. Moya, however, believes that Haraway does not pay attention to the complexity of both the myth and the way in which some Latina writers appropriate it, and that consequently Haraway "conceals the painful legacy of the Malinche myth and overinvests the figure of Malinche with a questionable agency" (31) by having us believe that marginality and survival are positive characteristics. Haraway, then, effectively misses the importance of specific historical, material facts associated with the myth itself and Latina's re-appropriation of it. Moya insists that many actual Chicanas do not consider the myth or marginality and survival as necessarily positive. Moya here does well in reminding us that thinkers such as Haraway need to be careful in appropriating the myth of *La Malinche*, which, no matter how creatively we can interpret it, remains a painful story filled with negative aspects of being a woman, which countless Latinas here in the U.S and in Latin America continue to face. But while Moya's reminder is valuable, she needs to be careful not to imply that white feminists cannot and should not use the work of women of color. Moya's point is that all of us concerned with questions of identity should not miss the importance of the groundedness, the *reality*, of our experiences and identities.

Moreover, when looking at Haraway's association of women of color with cyborgs, Moya claims that Haraway makes it possible to interpret identity as a *choice* and to suppose that it is not connected to specific historical, social circumstances; thus, any creature who transcends and who destroys boundaries, regardless of whether she is a person of color, can be considered a woman of color. The category of "woman of color" consequently loses its importance. According to Moya, "Haraway's refusal to grant women of color grounded identities has the effect of rendering all claims to a woman of color identity equally valid" and thus allows her to assume the position of "authoritative speaking subject with respect to women of color" (33). Moya, then, sees Haraway as speaking for women of color and as dismissing women of color's interpretations of their experience of oppression and their claims to a politics of identity. Again, Moya here is correct in emphasizing the importance of the causal connection between identity and social location as it pertains to the identities of women of color—not everyone can be considered a woman of color and some indeed suffer more than others—yet she needs to provide more support for the claim that Haraway is trying to speak *for* women of color.

Moya's attack against Butler rests primarily on the claim that her view of the subject does not see the subject's politics as having a basis in experience. According to Moya, Butler, like Haraway, does not see a connection between identity and a specific social location. However, here Moya does not carry out a careful analysis of Butler's views. Instead, she simply associates Butler's views with Haraway's and claims that their main fault is not to see the connection between social location, identity and knowledge. She also alludes to the view that, for Butler, people live on an entirely abstract or discursive realm. If we follow Butler's view, Moya thinks that we are going to be left with the position (similar to Haraway's) that "we are really the same after all" (36). Contrarily, Moya wants to show that some definitely suffer more than others and that "The effects that the 'physical realities of our lives' have on us, then, are what need to be addressed—not dismissed or dispersed—by theorists of social identity" (37). Although Moya is making a crucial point here, she nonetheless does not carefully analyze Butler's position. Here, Moya should follow her own advice to look at the connection to specific histories and social locations. Before we carry out a critique of postmodernist positions, we should understand the differences, the debates that led to the positions of the likes such as Jean-Francois Jacques et al. We should also be very aware of the spaces in which views are being posited, the disciplines that take on certain movements. Perhaps Moya's quick dismissal of postmodernist accounts is better understood when we see that she is reacting to the influence of postmodernism in literary criticism.

Moya devotes more time to the views of Alarcón and Sandoval whom she sees as having a more ambivalent relationship to postmodernism. Nevertheless, Moya still aims to show that there is an inconsistency in their adherence to postmodernism while at the same time appealing to what she calls "some form of identity-based agency." Moya discusses Alarcón's view of Chicanas as "subjects-in-process" who are discursively constituted and contradictory because of the contradictory nature of the discourses that form them. Moya aptly reveals the problems that arise when subjectivity is understood as a function of discursivity. She shows how Alarcón's subject-in-process view does not leave room for Chicanas for a transformation of their self, or to become political agents. Most importantly, according to Moya, Alarcón's position fails to take into consideration the relationship between the production of subjects and biological attributes such as skin color. As she states: "Unless we can acknowledge that embodied human beings have at least some preexisting properties that are interpreted, but not 'produced,' by the discursive contexts in which they live, it would seem to be purely arbitrary that for example, I, as a native-born New Mexican, have been 'produced' as a Chicana, rather than as, say, a Native or Anglo-American man" (72). In the end, Moya's aim is not to claim an essentialism but to push the important question, what she calls the problem of identity, "the problem of accounting for how and why certain people are 'subjected' to certain discourses" (72).

While being more sympathetic to Sandoval's theory of "oppositional consciousness," Moya also casts doubt on it primarily by criticizing what she sees as a postmodern drive to consider oppressive any type of project interested in truth and knowledge acquisition. According to Moya, the positive aspects of Sandoval's view are (1) her attribution of self-consciousness or reflectivity to women of color, and (2) her recognition of the importance of the role of U.S. Third-World feminists in politics. Moya, however, thinks that Sandoval's view has some crucial problems: (1) the claim that differential consciousness (oppositional consciousness) is now available

to all first-world citizens; (2) the view that a shift in consciousness involves a shift in identity and/or ideology; and (3) the claim that epistemic projects are suspect. Moya claims that Sandoval, like the rest of postmodernists, undermines herself when she claims both that there cannot be a truth for everyone and that her own claims should be regarded as true (claims such that some groups have engaged in systematic oppression, that white feminist have illegitimately appropriated the work of U.S Third-World feminists, and that some oppressed groups have developed successful oppositional ideologies).

This last criticism of Sandoval, however, is a standard criticism made to so-called postmodern positions and does not really come to the crux of the issues that Sandoval is bringing to light in her discussion of oppositional consciousness, the radicality of the strategies that oppressed peoples must follow. As Sandoval states:

The 'truth' of differential social movement is composed of manifold positions for truth: these positions are ideological stands that are viewed as potential tactics drawn from a never-ending interventionary fund, the contents of which remobilize power. Differential consciousness and social movement thus are linked to the necessity to stake out and hold solid identity and political positions in the social world" (Sandoval, *Methodology of the Oppressed*, p. 60).

Sandoval is not interested in getting at the truth; she is interested in providing the best tactic for survival and conversion for oppressed people, regardless of whether it can be said to be universal truth. Moya's point that Sandoval's own statements are true is well taken. Yet it places Sandoval's position into a framework that is being questioned in the first place. Although Sandoval herself needs to say much more about how her view of oppositional consciousness leads to "egalitarian social relations," her point is that people of color deploy this oppositional consciousness everyday and that it is a promising tool for social change. Perhaps Moya should have concentrated more on Sandoval's claims about this type of consciousness being a "performance," a move that puts her dangerously close to claims that the oppressed always have the chance to choose their consciousness, when in fact we know that given certain societal, material, and economic conditions, one is most likely going to be pushed toward certain identities or ideologies (a claim, that can be well-supported by Moya's realist theory of identity). Moya does make a gesture in this direction when discussing the idea of *la facultad* (a new type of consciousness promoted by Sandoval, following Anzaldúa), but does not provide an enough in-depth argument.

Despite some shortcomings in Moya's treatment of the postmodernist views, we should not forget her main point: that indeed there is a link between identity, knowledge, and social location. This is the main point that stands behind her postpositivist, realist theory of identity. Social location here should be understood as how one experiences race, gender, sexuality, culture, history, material conditions, etc. Experience, in turn, should be understood as mediated. As Moya states: "experience in its mediated form contains an epistemic component through which we can gain access to knowledge of the world" (41). In other words, the way in which I know the world is dependent on how I experience my social location in that world and the way in which I see myself is also dependent on my social location. To summarize her view, Moya provides the following six main claims about the postpositivist, realist theory of identity:

- (1) A person's social categories are causally related to her experiences.
- (2) An individual's experience will influence but not entirely determine the formation of cultural identity.
- (3) There is an epistemic component to identity that allows for the possibility of error and of accuracy in interpreting things that happen to us.
- (4) Some identities have greater epistemic value than others that the same individual might claim.
- (5) Our ability to understand fundamental aspects of our world depends on ability to acknowledge and understand the social, political, economic, and epistemic consequences of our own social location.
- (6) Oppositional struggle is fundamental to our ability to understand the world more accurately.

These claims constitute the bulk of the postpositivist, realist theory of identity which, according to Moya "insists that we acknowledge and interrogate the consequences—social, political, economic, and *epistemic*—of social location" (44). Claims 1-5 clearly point to the relationship between one's experience, one's knowledge of the world and oneself, and social location, a social location that for Moya is neither absolutely fixed nor random. For Moya social categories are *real* and have very real effects in our lives and understanding of our world. She believes that, contrary to postmodern positions, her view shows that "There is a non-arbitrary limit to the range of identities we can plausibly 'construct' or 'choose' for any individual in a given society" (45). For her, identity is not just the result of construction, discursivity, or performativity. Rather, identities are both real and constructed (86) and it is possible for women of color to be non-fragmented beings (95).

People of color, according to Moya, do not need to assimilate, as neoconservatives such as Richard Rodriguez and Shelby Steele suggest; rather they can be *asimilao/a*, they can be part of a "process of multi-directional cross-cultural acculturation" rather than jump into the "melting pot" and becoming indistinguishable from whites. Moya provides an interesting, strong, and much needed analysis of the problems with neoconservative minorities' positions and demonstrates their mistake in adhering to an essentialist view of identity. She skillfully shows the mistake that thinkers like Rodriguez and Steele make in setting "the bourgeois heterosexual Euro-American male subject as the standard of universal humanity" (108), and shows their inability to see or to recognize how material conditions impinge upon minorities and thus undermine their agency (hence missing the link between identity and social location). Most importantly, she points out their main mistake, that of setting collective racial identity in opposition to individual identity. Here, Moya hits the nail on the head. She is right in seeing that identity is relational, that collective identity cannot be set in opposition to individual identity. As she says, "all identities, including racial ones, are inescapably relational: to know ourselves as *selves* requires us to know ourselves in relation to *others*" (110). But given her claims, she herself needs to say more throughout her book about the role of community and collective identities in her postpositivist, realist theory of identity.

Her insightful chapter on Multiculturalism (Ch. 4) does get to some of the issues that arise when asking about the role of community in her theory of identity. Entitled, "Learning How to Learn from Others," the chapter is a welcome addition to her theoretical account of identity. It analyzes recent programs of multicultural education and shows the main pitfalls that plague them due to their emphasis on the benefits that minority students will get from them and due to their limited

understanding of “culture.” Here we can see that Moya is not just interested in theorizing about identity but that she is committed to practice, to making a difference. After going over the studies on multicultural education, she notes that one of the principal mistakes of the programs is that teachers themselves, even well-intentioned ones, are not aware of their own social location—they do not always understand that they come from a dominant culture and that consequently there are definite political, social, economic, and epistemic consequences of their social location. Thus she presents us with a realist proposal for multicultural education that includes

- (1) Studying the concept of “culture” as an integral part of a multicultural curriculum.
- (2) Promoting that educators have an understanding of the relationship between culture and identity.
- (3) Encouraging educators to acknowledge that the concept of “value” is always determined with respect to a particular reference group.
- (4) Having the goal of creating the conditions in which students feel empowered to work toward identifying those aspects of different cultures that are most conducive to human flourishing.
- (5) Asking educators and students to approach cultural others with the “Principle of Charity.”
- (6) Structuring the curriculum to give greater emphasis to the cultures and views of non-dominant groups.
- (7) Encouraging educators to incorporate an awareness of the power dynamics of the classroom.
- (8) Encouraging educators to recognize that conflict is inevitable and necessary and that it serves as a potentially creative force, not just a destructive force.

According to Moya, a realist can use this program of education in order to promote a more democratic and culturally diverse society. Such a program is not to be set on stone; it involves a series of modifications and revisions depending on empirical data pertaining to specific social locations.

In the last chapter of the book, Moya seemingly shifts gears and offers a realist reading of the work of Helena María Miramontes’s *Under the Feet of Jesus* in order to elaborate on the relationship between identity, interpretation, and agency. This chapter points to one of Moya’s contribution to literary criticism: her claim that hermeneutic exercises are not necessarily bound by the discipline’s standard interpretative contexts. Instead of placing Miramontes’s novel in the context of Chicana writing, Moya skillfully places it in the context of American social realism and compares it to the work of William Faulkner, John Steinbeck, and Rivera. More interestingly, Moya sees the character of Estrella in the text as illustrating major points about the postpositivist, realist theory of identity explained earlier. Estrella is the subject who through a series of interactions with Perfecto, Petra, and others comes to consciousness of herself and attains a more critical understanding of her world. Through an interpretive analysis of the narrative, Moya wants to underscore once more the epistemic importance of social location by showing how Estrella changes as she reacts to her environment. As Moya states: “Estrella’s transformation of consciousness . . . posits an adequate understanding of the social world as a necessary precursor to effective social action” (214).

The relationship between knowledge and effective social action is precisely the right issue with which to conclude an impressive work and is precisely the question that lingers after closing the book. One wishes that Moya had said more about social action, but already she has said so much about the importance of the relationship between identity and social

location and one can see that she is clearly not merely interested in doing theory while sitting comfortably in the academic tower. An analysis of social action in light of the postpositivist, realist view of identity would be an appropriate next step for Moya. There she could take on two important issues.

First, Moya urges us to recover the experiences of oppressed people. This recovery includes the re-examination by oppressed peoples of their own lives. Contrary to so-called Standpoint Theory (Harding), Moya does not think that nonoppressed people should start from the lives of the oppressed. Instead, she proposes that after an examination of their own lives (a careful analysis of their identity *vis à vis* their social location) oppressed people can *share* their experience with those who have not been oppressed in the same way (132). Presumably, the sharing of these experiences should help members of dominant groups have a better understanding of the oppressed. This is all part of effecting the social change so badly needed in our current society. Yet what does *sharing* mean? Under what conditions can a member of an oppressed group say that she has successfully shared her experiences? What does it mean for a member of the dominant group to say that she understands the oppressed’s experiences? Is there an implicit optimism here that in fact the members of the oppressed group will be able to understand the oppressed experiences? Consider Ofelia Schutte’s important claim that there is a certain cultural incommensurability.¹ Moreover, if conflict should be seen as a potential for creativity, as Moya suggests, to what extent can it be seen as resolvable and to what extent can groups understand each other given these conflicts?

Second, given the lack of an appropriate treatment of the relationship between knowledge, identity and social location in various theories of identity, Moya’s view is refreshing. But the obvious dilemma needs to be considered: What good does knowledge have if one does not have the material conditions that will allow for social change? In other words, the reality of social location is indeed important for one’s understanding of identity, but it is also important for one’s possibility of effecting social change. Yet, it is clearly not enough. It is worth asking why so much currency is given to knowledge? Here, we are reminded of Nietzsche’s “Who in us wants truth? Why not untruth? (*Beyond Good and Evil*). The point is not that it is better to live a lie but that there are times when some oppressed people cannot afford knowing about their circumstances. There might even be other times in which ignorance might serve a better purpose (as when a minority strategically performs the role of the naïve, ignorant minority because that is what is expected of her). Here, the emerging work on epistemology of ignorance would be helpful.

Finally, given phenomenologists’ extensive work on the question of the self/subject, a question that merits attention is how Moya’s postpositivist, realist view of identity compares to existential phenomenological views of self such as Martin Heidegger’s and Jean-Paul Sartre’s. While these thinkers do not explicitly write about social categories such as race and gender, their views, like Moya’s, are committed to doing justice to experience. Thus, they provide accounts that analyze the relationship between selves and the world. It would be interesting to see how Moya’s realist position fares in a phenomenological context and how these phenomenological positions could benefit from Moya’s extensive analysis of the relationship between identity and social location.

As can be seen, Moya’s book adeptly handles questions of the utmost importance and opens doors for more serious research on identity. It is an ambitious step into a difficult but promising space, the space between essentialism and

postmodernism. There is no doubt that *Learning from Experience* is a major contribution to the literature on identity. It is also a major contribution to the small but growing number of texts by Latina theorists. In addition to offering her important thoughts on identity, Moya also offers one of the few texts that attempts to analyze the work of other Latina theorists in a more in-depth manner than it is usually done. It is also one of the few texts that provides the reader not only with a theoretical approach to the question of identity but also with a more practical approach. To come back to Rosario Castellanos's words at the beginning of Moya's text: Arte por el Arte? No. nunca. Arte para la vida, arte para el entendimiento, arte para la acción . . . (Art for art's sake? No, never. Art for life, art for understanding, art for action . . .) If we can call a thinkers' work art, then Moya's work is indeed art for life's sake.

Endnotes

1. "Cultural Alterity: Cross-cultural Communication and Feminist Theory in North-South contexts," *Hypatia* 13 (2): 53-72.

Telling To Live: Latina Feminist Testimonios

The Latina Feminist Group
(Durham, North Carolina: Duke University Press,
2001).

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Testimonio has been a long standing tradition of Latin American discourse and political history. Used as a means of counternarration that lends visibility to communities visited by political violence and personal trauma, often in attempts to suppress contesting voices from historical records, such accounts can range from the poetically inclined work of Alicia Partnoy's *Little School* to the downright autobiographical text of Rigoberta Menchú's, *I, Rigoberta, an Indian in Guatemala*. What such disparate texts retain in common, however, is their imperative to testify and bear witness to acts that would be otherwise be erased from political record, such as the Argentinian torture camps Partnoy's work depicts, for instance, or the Indian massacres Menchú sheds light on.

Locating themselves in, but diverging from the tradition of Latin American *testimonio*, the Latina Feminist Group raises new questions about the power of witnessing as they attest to the struggles of Latina academics in *Telling to Live: Latina Feminist Testimonios*. The book is the product of relationships nurtured over a seven-year period by women self-identified as "daughters of field, domestic, factory and service workers, secretaries, military officers, technicians, artists and professionals" (7). They all hold Ph.D.s in their respective fields, and their ethnic identifications are as diverse as their socio-economic backgrounds. Sharing the common experience of being academics and women of color, their self-professed goal is to highlight the internal differences among women of color, including Latinas, while mutually validating each other's struggles and providing a new research and comparative model.

Distinguishing itself from market counterparts by stating that it is the result of "a conscious and collaborative testimonio, face-to-face theorizing, and production" (6), this anthology seeks to set itself apart from the onset. And it is perhaps the process of this work's evolution that is its greatest contribution. The works presented grew out of face-to-face interactions at

the groups yearly retreat center, Camp Baca, and evolved into the compilation presented to us in *Telling to Live: Latina Feminist Testimonios*. The writings shared at these retreats were initially deemed "papelitos guardados," or, as the group defines it, "protected documents, guarded roles, stored/hidden papers, preserved documents" (1). Indeed, for much of the work presented the feel of a closely guarded secret being revealed is not lost upon the reader. Tracing the group's growing consciousness, the book opens with a collection of essays subtitled "Genealogies of Empowerment," and ends with "Passions, Desires, and Celebrations." From this beginning to the end, and everything in between, we are taken on the trajectory of personal growth from home influences to self-evolution in the lives of these writers. The framing of knowledge in personal experience is the basis of this anthology. Central to the anthology is the validation of the multiple roles women play, and the role of the "I" in these women's evolution is forceful. This act alone sets these works in strong opposition to the cool and "rational" detachment typically required to do one's work with validity within the world of academe. But while their courage to support each other and maintain a dialogue across racial and socio-economic lines is commendable, even these ideal circumstances encounter limitations.

Alongside of the proudly authored texts collected, for instance, are several contributions signed "Latina Anónima" that have a jarring affect on the reader. "Jarring" because in the midst of a laudatory communal celebration of voice are shadowy figures speaking from positions of self-imposed anonymity. Granted, the group proclaims, "the testimoniantes (subjects of the texts) admit that they withhold secrets about the culture or details of their personal lives that, for political reasons, are not revealed in the stories narrated" (13), but to what effect? Identifying *testimonios* within the Latin American tradition as focused on the collective identity of a particular group and often detailing violence done to these communities, these "testimoniante" admittedly set out to create their own testimonial process. And yet, I remain unclear as to exactly how this process is different. Admittedly, these women do not purport to speak on behalf of their countries of origin in the vein of Rigoberta Menchú's now infamous "I, Rigoberta Menchú: An Indian in Guatemala," but they speak to a communal violence nonetheless. Several of these anonymously penned essays, for instance, are graphically violent. "Night Terrors," details the trauma of sexual abuse suffered by a woman at the hands of her father. Likewise, "La Tra(d)ición" details the sexual misconduct a woman experiences at the hands of family member and doctor. Still others like "Between Perfection and Invisibility" deal with the politics of erasure within academe as experienced by women of color, and I am left asking—does the choice to remain anonymous perpetuate such erasure(s) of self?

As readers, we are called upon to witness these events as we immerse ourselves in their narrative terrain. As witnesses, we are no longer in the privileged position of bystander, and we are faced with moral conflict. Judith Herman elaborates:

When traumatic events are of human design, those who bear witness are caught in the conflict between victim and perpetrator. It is morally impossible to remain neutral in this conflict. The bystander is forced to take sides. It is very tempting to take the side of the perpetrator. *All the perpetrator asks is that the bystander do nothing.* He appeals to the universal desire to see, hear, and speak no evil. *The victim on the contrary, asks the bystander to share the burden*

of his pain. The victim demands action, engagement and remembering (8-9 emphasis added).

But while the “testimoniante” are welcomed in a community of dialogue and protected by the safeguards instituted at Camp Baca, we, as readers, are left to our own devices. Clearly, we are not victims. We have the power to simply turn the page, or more conclusively, shut the book. But to what end? If our experience leads us to shut out and push away, then how successful has the narrative been? I suppose my question comes down to this — What does this lack of self-disclosure do to a book that celebrates this very process? And what does it say about the safety deemed necessary, but unavailable even in the context of communal processes as those presented in this anthology? Hence the limitations I alluded to earlier.

I must grant, however, that had these authors boldly signed their names, one would have no greater assurance than we have at present as to the efficacy of these works. One need only look to my previous example of Rigoberta Menchú and her detailed testimonial which has been widely maligned and remains controversial. What does it take to convince a reader, especially when she or he is safely coddled in blanket of denial? Theories of reception differ. While such graphic and detailed accounts may leave some readers looking for a way out, it may be exactly what is needed to convince yet others. Though I remain suspicious of those who fall into the latter category lest such personal trauma turn into a voyeuristic pleasure trip. And then there remains the issue of privileging the needs of the survivor over those of the reader. Do we have a right as readers to expect that our needs be prioritized? Certainly, these essays were not composed without risk. The act of revisiting such painful memories and laying them bare with details that could potentially serve as telling indicators to be identified by the perpetrators is not without consequence or accompanying psychic pain. Clearly, there is no one most effective method, no one truth, but in the case of Rigoberta Menchú, we are at least assured that we are not alone in the burden of witnessing. In laying claim to her experiences and assuming a public identity, she helps to breakdown the bifurcation typically set up between theorist and survivor. In her work, they are one and the same. And perhaps, most importantly for us as readers, we are aware of the risky and emotionally challenging terrain we are committing to when engaging her narrative. The same cannot be said for those encountering essays such as “Tra(d)ición” where we can only guess at what is meant by the title’s play on the Spanish words for betrayal/tradition. Without a surrounding context or further discussion, we are left to digest the painful memories of a woman sexually abused during a routine doctor’s visit.

While these issues loom large in my mind as a reader, Latina and academic, I can appreciate the profound collaboration that went into composing the range of diverse works collected in this anthology. And it is certainly not my intention to overshadow this work’s contribution by solely focusing on the questions it raises. It is in fact the sign of rich and diverse work that allows such disparate voices room to be heard, clash, and feed each other. A rich resource for the classroom and beyond in its shift to authorize the self in our postmodern age, it remains a valuable testimony to the struggles faced by Latinas when negotiating knowledge. By providing an understanding of the diverse and often contradictory roles Latinas must play, it is crucial to our student’s understanding that what gets taught in the classroom is often decided outside of it, and the ways in which this affects the continuing struggle for self-representation. Such fruitful use of this text, however, will remain in large part in the hands of the instructor. For while it leaves us with a variety of questions on issues of voice,

and the sovereignty of the author, such questions might too easily be overlooked by our undergraduate students in the course of their reading. Too wrapped up in the alarming details, they may miss the larger questions such accounts demand of us.

References

- Herman, Judith. *Trauma and Recovery: The Aftermath of Violence —From Domestic Abuse to Political Terror*. New York: Basic Books, 1997.
- The Latina Feminist Group. *Telling to Live: Latina Feminist Testimonios*. Durham and London: Duke University Press, 2001.

