

A NATURAL HISTORY OF MUSIC, PART ONE:
INVENTIONS OF INSTRUMENTS, ORIGINS OF ORGANS

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Abstract

A Natural History of Music, Part One: Inventions of Instruments, Origins of Organs

An interdisciplinary synthesis aimed at recovering the basic musicality of oral poetic performance traditions. First, a survey of ethnographic literature demonstrates that music (song, dance, instruments) is panhuman, pervading human cultures. The work then moves to specific times and places around the world to narrate a musically attuned natural history.

Chapters One and Two contrast Aristotelian and Darwinian approaches to art, nature, and chance, discussing the evolution of hearing, voices, and vocal-auditory ecologies in the animal world.

Chapter Three surveys the archaeology and early history of human musical practices, focusing attention on Paleolithic instruments, Neolithic dance cultures, and Mesopotamian, Egyptian, and other early Near Eastern musical cultures.

Chapter Four reads the *Homeric hymn to Hermes* within the context of archaic and classical Greek music; its narrative is an origin myth for the Greek *aoidos* (“singer”). Ritual practices like male initiation and festival contests, the complex symbolism of the lyre, and calendrical concepts are discussed.

Chapter Five reads musical turtle-trickster tales from Africa, North America, and South America. Folklore motif methods of story comparison are juxtaposed with

context-sensitive readings of musical myths and practices in South America, including among Warao, Cuiva, Ayoreo and Guajiro Indians.

Chapter Six considers Bronze Age Chinese musical culture, reading *Shijing*, *Chuci*, and other texts to hear the musicality animating ritual clan feasts, where large bell orchestras summoned ancestral spirits to partake of musical liturgies. Qi of Xia, son of Yu the flood hero, is interpreted as mythical founder of the Nine Songs tradition.

Chapter Seven turns to the metallurgical and musical cultures of pre-Columbian Mexico. The aesthetics of micro-bells and the poetics of “flower-songs” are highlighted against the tragic backdrop of the Spanish Conquest.

Chapter Eight examines the orality and musicality of ancient Vedic songs and ritual practices. In the *Rgveda*, *Samaveda*, *Chandogya* and *Brihadaranyaka Upanisads*, sound, voice, and song undergo apotheosis, especially in the ritual soma-pressing.

Chapter Nine concludes with the musical culture of Nidu in the South Pacific. Here, as elsewhere, communal musical practices are crucial to constituting society, reciprocity, divine cult, and symbolic ecology.

*"Ain't no reason to get excited,"
the thief he kindly spoke,
"There are many here among us
who feel that life is but a joke,
But you and I we've been through that
and this is not our fate,
So let us not talk falsely now,
the hour is getting late.*

— Bob Dylan
All Along the Watchtower

ἀληθείη δὲ παρέστω
σοὶ καὶ ἐμοί, χρῆμα δίκαιοτατον.

— Mimnermus, fr. 8

A Natural History of Music

PART ONE

Inventions of Instruments, Origins of Organs

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Inventions of Instruments, Origins of Organs

“Amphion invented music; Mercury’s son Pan the reed-pipe and the single-reed flute; Midas in Phrygia the transverse flute; Marsyas, another Phrygian, the double flute; Amphion the Lydian modes; Thracian Thamyras the Dorian; Phrygian Marsyas the Phrygian; Amphion the kithara, others say it was Orpheus, still others Linus. The first who played with seven strings, having added three more to the first four, was Terpander; Simonides added an eighth, Timotheus a ninth. Thamyris first played the kithara without singing; Amphion with singing, others say it was Linus. Terpander composed kitharoidic songs; Ardulus of Troezen established singing accompanied by the aulos; the Curetes taught armed dancing, Pyrrhus the pyrrhic dance, both in Crete. Heroic verse we owe to the Delphic oracle. Concerning the origins of poetry there is great debate. It is generally agreed that it existed before the Trojan war.”

Pliny, *Natural History* 7.56.204-05

*Not the stillness of the violin, while the note lasts,
Not that only,*

T. S. Eliot, *Burnt Norton*

Inventions of Instruments, Origins of Organs

. . . Curtains. . . from the orchestra, sounds of tuning . . .

Finding functions for nature's forms is common in the animal world. Hermit crabs recycle snail shells for portable homes. Many animals build elaborate nests of sticks, grass, mud, or sundry materials that humans discard. Otters use rocks to crack open clams and mussels. Some chimpanzees do the same to crack open hard oil palm nuts. New Caledonian crows make rather complex serrated leaf-hooks to fish insects out of holes in trees (Hunt and Gray 2003). In light of these and other parallels human material culture, while remarkable, is neither extraordinary nor inexplicable as a phenomenon of terrestrial evolution. The origins of technology are to be found in the same processes that produce the apparent purpose, so ubiquitous in nature, which evolutionary theory calls adaptation. Living bodies—organisms and their organs—have come into being, and diversified, through the lottery of selection posed by the many variables of environment. Forms that survive the living conditions they face in their surroundings long enough to reproduce pass on their genes to the next generation. Their offspring that inherit the advantageous traits also survive and thrive. And so on.

Adaptation is a powerful principle (among other reasons) because of its scope. It is adequate to explain such diverse phenomena as the evolution of the eukaryotic, nucleated cell (by symbiosis), multicellular organisms, and complex behavior, like mating songs and dances (sexual selection), flexible animal intelligence, and animal

communication and culture, of which human language and culture are unique, but not exceptional subsets (i.e. exceptions to the natural order). It can even help to explain the origins of such “uniquely human” and often mystified manifestations as art, religion, war, visionary experience, altruism, medical therapy, love. Our early instruments were extensions of organic evolution, ingenious “prosthetics” devised, over long periods of time and through trial and error, by intelligent organisms. The intelligence to make tools was an adaptation that helped its possessors succeed. The resulting tools were themselves adaptations to ecological factors and available resources. In the dynamic reciprocal process of a positive feedback loop, the making of tools changed the makers, and some clever prehistoric primate that made tools became Homo faber, the modern Human Toolmaker. And that primate species, apparently from Africa, was the common ancestor of every person living in any corner of the globe today.

Twenty thousand years ago the world was much colder than it is now. In the northern hemisphere ice and snow prevailed down into temperate latitudes. The Bering Strait, now narrowly dividing Alaska from Siberia, was frozen over as it had been for several thousand years. This freeze lowered sea levels and opened a land crossing to vast eastern continents. Animals crossed and re-crossed this land-bridge, including many herd animals adapted to arctic conditions, and their predators, wolves, large cats, and bands of humans. The latter would have been predominantly nomadic, as is the case still today in the arctic. Following the game herds on which their lives depended, they moved as far as and wherever the herds moved. Descending, ultimately, from tool-making, artistic, and talking hominids (Homo sapiens) from further off in western

Eurasia and Africa, these peoples had the survival advantages of knowing how to transform materials into tools of the hunt: spears, arrowheads, clubs, ropes, nets, hooks, etc. They knew the potent magic of making fire, for which they had many uses. They made clothes for warmth and costumes to disguise themselves or to create symbolic identities, status masks, self-images of power. For perhaps most importantly, they possessed one of the great flowers of organic evolution, cognitive imagination enhanced by symbolic vocal language. Given that all New World peoples also engage in musical practices, it is virtually certain their ancestors did too. They sang, made and played bone flutes, chanted and danced to the rhythm of idiophones and skin-stretched drums.

These hypothesized Ice Age peoples, it is believed, arriving in waves, were the ancestors of all native American peoples from Greenland to Tierra del Fuego. At the Museo Nacional de Antropología, in Chapultepec, the wooded hilltop park south of downtown Mexico City, one of the great monumental museums in the New World, the museum narrative begins with this scene: fur-clad hunting bands, with packs of dogs in their train, are crossing a barren snowy wilderness, while herds of caribou, musk oxen and mammoths move off down into a distant valley below. America's first peoples, they bring with them as they spread south and east many cultural traits found widely in the New World, including a marked emphasis on hunting and hunting magic, and strong mythic and ritual ties to animal ancestors and spirit helpers. In particular, the image of a cosmic tree pervades Amerindian cosmologies. The tenor of spiritual life is often individualistic, focused on cultivating awareness of and personal relationships with

animate powers in animals, plants, or in geographical features like mountains, rivers, and caves.

This historical myth, the result of confluent lines of evidence pieced together in imaginative reconstruction, replaces older colonial myths about the origins of Americans from lost tribes of Israel. To sixteenth-century Spanish colonials, the Amerindian was evidence of wanderings long ago of wayward Israelites. In 1581 Dominican friar Diego Durán wrote that the Indians of Mexico were most probably descended from Hebrews, “considering their way of life, their ceremonies, their rites and superstitions, their omens and hypocrisies, so akin to and characteristic of those of the Jews; in no way do they seem to differ. The Holy Scriptures bear witness to this” (Durán 1994: 3). This idea proliferated in Europe throughout the seventeenth century, and several authors drew up long lists of parallels between Indian and Hebrew words, customs, and beliefs. In 1650s England, millennial end-time beliefs and Puritan phil-Hebraism came together when Manasseh ben Israel, a rabbi in Amsterdam, addressed an appeal to Oliver Cromwell to allow Jews back into England, in order to complete their prophesied worldwide wandering before the Messiah’s coming. That Jews had long ago already reached America he supported by relating a story told him by a Jewish traveler, Montezinos, of how he had met a group of secretly practicing Jews, who spoke Hebrew and knew the Old Testament, in some, indefinite, New World location (Glaser 1973).

In the late eighteenth century Thomas Jefferson already supposed that American Indians had entered the New World by way of an arctic Northwest Passage, and he looked forward to in-depth linguistic comparisons to shed further light on the

questions of origins (Jefferson 1955: 100-01). This more secular view did not entirely displace the old myths fabricated on Scripture, however. Such myths were especially popular in the early nineteenth-century northeastern U.S., where the discovery of mysterious native burial mounds fueled revisions of the old theory. Among those who followed these reports was an imaginative young man of Palmyra, New York, named Joseph Smith. As a teen his mother recalled that he would describe “the ancient inhabitants of this continent, their mode of traveling, their cities, their buildings, with every particular.” He even thought of writing a history of the Mound builders. News reports rumored that native histories and texts on brass plates were being found here and there. Smith claimed the same, and wrote his “Book of Mormon,” translated from golden tablets written in “Reformed Egyptian,” which detailed the history of two ancient families of Israelites who wandered out of Egypt to populate the Americas. The golden plates were, according to Smith, written and buried in New York State in 400 A.D. (Glaser 1973: 60-73). Still today earnest Mormon archaeologists pen papers that find evidence in New World cultural remains to “prove” the historical accuracy of the Mormon narrative.

Old myths die hard. By the early twentieth century Euro-American anthropology was dominated by a universal model that combined an evolutionistic picture of fixed cultural “stages,” from savagery to “civilization,” and diffusionist ideas about the origins and gradual spread of all human inventions from one, or a few, early creative centers, focusing on Mesopotamia and Egypt. This model influenced music history in the late nineteenth and early twentieth centuries as well. The prolific German musicologist Curt Sachs (1881-1959) was a pioneer in bringing modernist

ethnology into the study of human musical traditions. In his History of Musical Instruments (1940), he combines the sort of free-associative cross-cultural comparison that Frazer's Golden Bough had made fashionable, with a cookie-cutter—and unabashedly Eurocentric—“historical” typology of cultural “stages.” This fixed scheme enabled him to quickly pass critical judgment on any society's relative level of primitivism based solely on the musical instruments they played. His diffusionism, moreover, was particularly pat. Sachs could find Mesopotamian influences in China, for example, in so simple a concurrence as the use of two sticks to strike a drum (1940: 173).

Sachs identified twenty-three “pre-European” strata of musical instrument technology; all the instruments of indigenous Central America, for example, occupied strata three through six, and “belong to a very early stage of development.” Furthermore, against the common opinion of American scholars, he argued that musical instruments in Central and South America showed many signs of cross-Pacific contact from China and intermediating Oceanic islands. The South American panpipes most of all he saw as clear evidence of influence from Asian models. Further support came from beyond the realm of music; the Cuna Indians of Panama, he claimed, “have a script related to the most ancient Chinese script” (198).

Sachs' crackpot diffusionism is of course rooted in a much older discourse of pseudo-scientific comparativism. For example, Enlightenment Orientalist Sir William Jones (1746-1794), whose work had a formative influence on nineteenth-century linguistics, ethnology and “diffusionism,” wrote in 1784: “We shall, perhaps, agree at last with Mr. [Jacob] Bryant [1715-1804], that Egyptians, Indians, Greeks, and

Italians, proceeded originally from one central place, and that the same people carried their religion and sciences into China and Japan: may we not add, even to Mexico and Peru?" (quoted and discussed in Lincoln 1999: 87, cf. pp. 76-100). Jones' "same people" were complicatedly entangled in the Noachian post-flood narrative of Genesis 10. Jones is no marginal figure. He is, in one common version of the intellectual lineage, the "father" of Indo-European studies.

Such tracing of (dubious) links between Old and New World civilizations represent, in part, secular scientific versions of the older Biblical myths of antediluvian tribal wanderings. But defenders of the Bering Strait-crossing theory argue that, aside from possible empirical merits of such claims (also usually dismissed), attempts to derive New World cultures from those in the Old is patronizing and denigrating to native creativity. To make Amerindian arts and technology dependent on Old World cultures is just another ethnocentric myth by which Europeans rob indigenous traditions of authenticity.

On the other hand, the stiff scholarly resistance to any trans-Pacific contact prior to Columbus, on closer inspection, is itself not entirely free from traditional bias and prejudice. For Polynesians and other Oceanic islanders were also, along with American indigenes, among the "noble savages" of eighteenth- and nineteenth-century ethnology. Noble perhaps, but savages nonetheless, and thus hardly to be thought capable of the kind of effective oceanic seafaring such contacts implied, what with their primitive dugout canoes, rowed to the rhythms of their Stone Age idiophones. To think that such uncivilized peoples sustained links of trade across the Pacific with South America prior to the arrival of scientific, mercantile Europeans is preposterous,

unthinkable, unworthy of serious consideration. And so today, young scholars and schoolchildren alike learn that there were only two ways to America: eastward by land-bridge or short sea-crossing of the Bering Strait in prehistory; in historical times, westward by ship (whether Viking, Spanish, or English).

OVERTURE/ENTRANCE

“Once an instrument had been conceived of—a sort of double of the self, as well as a composite object developed in accordance with a tradition—a rapid evolution followed comparing and contrasting, perfecting and diversifying, its momentum the more unstoppable because the instrument is the means of translating thought itself into something visible, palpable and audible. Only then was it possible for man to have a true dialogue with this interlocutor, this triumph of his ingenuity.”

Lucie Rault, *Musical Instruments* (2000: 9)

On his first voyage round the world British naval captain James Cook visited the distant South Pacific archipelago of Tahiti, only recently stumbled upon by European seafarers. He and his crew were surprised to find there, “among the uncivilized inhabitants of this sequestered spot,” itinerant musicians, similar to those who had been “the subject of such praise and veneration where genius and knowledge have been most conspicuous”—meaning, of course, in Europe. On the evening of June 12, 1769, British mariners were audience as two Polynesian flute players and three singing drummers performed a song for them. Its theme, according to Cook’s journal, was the European visitors themselves: “these were the bards or minstrels of Otaheite. Their song was unpremeditated, and accompanied with music; they were continually going about from place to place, and they were rewarded by the master of the house, and the audience, with such things as one wanted and the other could spare.”¹

¹ Cook 1846 (v.1): 64, or Cook 1821.(v.1): 149-50. Cook’s “journals” were actually quite “cooked” for public consumption, that is, revised, added to, conflated with others’ journals and rewritten by John Hawkesworth to make them a good sell in the London book market. In his own journal Captain Cook makes no mention of this event; Dr. Banks’ account must be the source, since he is referred to in the opening paragraph describing the musicians.

The journal’s claim that the British visitors were the song’s theme may seem to some implausible, a mere embellishing conceit; but compare anthropologist Raymond Firth’s experience in

A generation later Lewis and Clark undertook to explore, at President Jefferson's request, the vast lands the United States acquired by the Louisiana Purchase. In preparation Captain Clark, according to good Enlightenment ethnographic method, set down a long list of inquiries concerning the lifeways and customs of the Indians they expected to meet. Under the heading of "Amusements" he wrote: "do they ever dance and what is the ceremony of their Dance," and "Have they any music, and what are their musical instruments." On their long journey out and back between 1804 and 1806 the U.S. Army captains had many occasions to answer these questions in detail. Many times, among the Yankton Sioux, Mandan, Shoshone, Yakima, Wahhowpum, and Wallawalla, they witnessed and participated in ceremonial gatherings that involved singing and dancing.² In fact, quite early on they learned that their own fiddle playing and homespun merry-making worked as well as anything else in securing the goodwill and hospitality of their hosts, who typically responded in kind.

A hundred and twenty years later, E. Harold Davies reported to the Royal Society of South Australia the results of fieldwork he had conducted among Aranda peoples of central Australia (1927). There he had recorded native song performances which were later released on Columbia Records (PRX 9-11). Analyzing the Aboriginals' songs and their musical abilities, he was surprised a couple times by a rhythmic syncopation that diverged from the "more normal and primitive rhythms" he usually encountered, "indicating a considerable advance in mentality." But he advised caution, since he could not rule out that the "native in question had possibly caught the more difficult rhythm from chance hearing of the ubiquitous gramophone" (1927: 85).

Tikopia, where a native friend honored him and his colleagues in a song composition in 1952, a song that was still in the popular repertoire in 1988 (Firth and McLean 1990: 179-80).

² Lewis et al. 1995: 55-6, 76, 78, 84, 230, 391, 397.

Finding evidence in natives' singing for considerable innate talent for rhythm, melodic structures, tonal recognition, and formal musical composition, he concluded—with that naive cultural chauvinism so characteristic of European ethnographic discourse until all but a few years ago—“Such a development in the expressive sense in so primitive a race is worthy of further enquiry and close study. Vocal utterance of the purely instinctive order is apparently not confined to language only” (1927: 92).

Scenes like these were repeated over and over in the last five hundred years, as European travelers, explorers and colonizers probed lands unknown to them and found that no matter where they went other people already lived there. Moreover, indigenous peoples, no matter how remote from Europe or how apparently “primitive” to European senses, were found to dance and sing, jump, wail, spin, holler, croon, yodel, whoop, and drum. They made musical instruments of everything and of all sorts: drums of a thousand shapes and sizes, flutes, lutes, harps, conch shells, clappers, slappers, bells, bullroarers, horns, whistles, and didgeridus. As the above accounts attest, European observers were not only intrigued in a theoretical way by the musical practices of the others they encountered. Music was also instrumental in negotiating the pragmatic realities of those encounters.

Inevitable tensions and unease about the sudden arrival of strangers, whose motives were, at best, unknown (at worst, by rumor and reputation already suspect) were often allayed and smoothed over, it seems, with diplomatic exchanges of musical performance. Music was a collective show of cultural identity that was the flipside of martial engagement. Working to include outsiders while circumscribing them as visitors, guests, and recipients of local hospitality, music maintains the peace, even if

below the surface lay competitive display and a veiled show of potential collective strength. As the Tahitian account suggests, music was also deeply integral to the cultural economy of native peoples. Just as in the Old World since antiquity, Polynesian musicians worked as specialists in song and sound, making their livings by appealing to patrons who, both entertained by and praised in song, paid for music's pleasures with material gifts of food, clothing, or currency.

Two hundred years have passed since Lewis and Clark's men played Irish fiddle for Native Americans even as they declared U.S. hegemony over them and their ancestral homelands. Thomas Jefferson's humane and sympathetic interest in indigenous New World cultures gave way all too quickly to Andrew Jackson's imperial enterprise. The scene of Lewis and Clark at winter camp with the Mandan is quickly effaced by the Trail of Tears, Little Bighorn, Wounded Knee—shorthand symbols of a decades-long history of treacherous, violent reduction of all American native peoples to "civilization." In this time much of the world's rich musical diversity has been either silenced or hybridized because of the many forces, social, political, economic, pressing for cultural change. It is deeply disturbing but nonetheless true that human musical diversity has been among the many casualties of European colonialism.³

No less disturbing is that academic discourses, far from working against these forces, have often been complicit in their furtherance, regularly profiting from the spoils, material and symbolic, of cultural deprivation undertaken along political, military, and economic fronts. Thus in place of thriving traditional cultures we have fragmentary ethnohistorical records. We can listen to disembodied voices on

³ Cf. Nettl 1985, an extended study on the global impact of Western music. Also see Rydving 1993, just one case study in outright missionary suppression of indigenous music (among the Lule Saami of northern Scandinavia).

decontextualized sound recordings. Museum collections display indigenous instruments alongside the other plunders of material culture undertaken in the name of anthropology and science. And finally, to care for, interpret, and mediate for us these collected records of musical humanity, we have the professional academic discipline of ethnomusicology.⁴

This is of course the shadow side of the current situation. But I would prefer not to overlook the historical processes through which modernity has reached its present (“postmodern”) state, any more than I will try to exclude the many pressing problems and crises of the contemporary world, relegating them to the silent margins of the text in order to construct a “pure” and “academic” textual discourse. But the upshot (if we can call it that) of this far from glorious history is that it is now clearer than ever that “music” deserves to be considered a panhuman phenomenon.⁵ Like language itself, singing and dancing tend to occur wherever there are people. Song traditions and communal dancing are genuine constants of the ethnographic record, and anthropologists continue to focus on oral song traditions and dance performances in local contexts around the world.

⁴ The recently completed 2nd edition, 29-volume *New Grove Dictionary of Music and Musicians* (NGDMM, Sadie and Tyrrell 2001) bears monumental testament to the collective human musical heritage; at the same time, regarded as a culturally situated artifact in itself, it attests to the overriding Western urge to document, classify, and codify everything in textual (silent, visual) form. (The dictionary is also available to subscribers in online digital format.) For ethnomusicology, the classic articulation of the field is Merriam 1964. For narratives of disciplinary history, also see Myers 1992: 3-18; Nettl and Bohlman 1991.

⁵ I prefer “panhuman” (attested in the *OED* as early as 1900; s.v. pan-) to “universal,” because the latter is really a misnomer in its traditional use to refer to “human universals” and, more importantly, because of the quagmire of poor assumptions (e.g. essentializing humanisms) and bad blood that animates the old debate that has raged under that rubric for centuries. The idea of “universals” has always had, at least implicitly, a *normative* force, such that if a supposed “universal” human feature were found or claimed to be absent, a people might be deemed, by this logic, not human. By saying that music is “panhuman,” by contrast, I intend it in only a descriptive and empirical sense, that as far as can be ascertained all peoples known about now or in the past engage in sorts of activities that warrant being called musical.

It is worth pausing for a moment to consider this less-than-settled question of music's "universality," or as I prefer, its panhuman distribution. While some would insist that by now this should be an obvious point (Cross 2001; Brown 1991), others still maintain that such a claim is perhaps meaningless, and would instead remain agnostic on the issue.⁶ But rather than appealing to authority, a move always liable to contradiction by contrary "authority," I have taken a different tack to try and gain some statistical, quantitative data bearing on the question. Using the online database of Yale's Human Relations Area Files (eHRAF), I conducted searches using HRAF's coding system for different cultural elements and subjects (OCM, Outline of Cultural Materials).⁷ Searching all of the 138 cultures and ethnic groups currently on electronic file for the category Music (OCM 533) yielded 39,110 matches in 1,127 documents.⁸ Matches occurred in 131 of the 146 "cultures" (90%) represented in the online database

⁶ So Bruno Nettl, in Wallin 2000: 471-2, concludes after considering the issue (with much hair-splitting sometimes bordering on casuistry) "I am not sure whether it is in fact helpful to try to deal with this question of universals;" yet he does concede that "perhaps the earliest human music was somehow associated with ritual. The use of music to mark significant events is related, and may also suggest its early use in aspects of social organization." I will take a firmer stance on this position in this work: music was intensely important to early ritual and to mark events as significant, and was, on the evidence from many cultures and world areas, integral to social organization. Now Cross 2003 has clearly stated several of the key issues still divisive in the debate.

⁷ The Outline of Cultural Materials (OCM), first developed by anthropologists in the 1930s but since updated several times, is a numerical classification system for cataloging the information in ethnographic sources. The OCM is used to catalog the thousands of primary ethnographic documents that compose Yale's HRAF library.

⁸ Relevant OCM codes are assigned to every paragraph of the documents filed in HRAF. A "match" in a query means that a paragraph in a catalogued document has been coded with that OCM (or, for more complex searches, the multiple OCM constraints assigned to the search). In the online version the full text of these documents are also available to read. The description for OCM 533 "Music" is: "Musical form and structure (e.g., scale, pitch, tone, tempo, rhythm); melody; harmony; vocal music (e.g., singing, humming, chanting); instrumental music (e.g., accompaniment, solo playing, orchestras); occasions for music; song styles (e.g., work songs, drinking songs, dance songs, war songs, love songs, lullabies, sacred music, dirges and laments); musical training and appreciation; composition of music; techniques of playing and performance; specialization (e.g., composers, minstrels, musicologists, musicians); organization (e.g., choirs, bands, orchestras); etc."

(as of April, 2004), including all sixty of the world cultures designated as Probability Sample Files.⁹

What does this search result mean? After conducting forty-one more searches for other general categories, chosen for their probable high incidence in ethnographic texts, the result for “Music” still yielded the highest number of matches. This second search was undertaken in order to test a wide spectrum of cultural concerns as a basis for comparison, and to control for possible biases in the ethnographic record. Thus the seventeen OCM categories yielding under 6,500 matches included (in increasing order): Mythology; Educational Theory and Methods; Childcare; Housing; Eating; Sexuality; Writing; Wood-working; Animism; Legal Norms; General Tools; Weapons; Alcoholic Beverages; Speech; Theory of Disease; Mourning; and Decorative Art. Eight more OCMs, yielding between 6,501-10,000 matches, were: Mode of Marriage; Ritual; Cult of the Dead; Nuptials; Cereal Agriculture; Regulation of Marriage; Domesticated Animals; Puberty and Initiation. Ten more OCMs returned matches between 10,001-14,000: Dance; Warfare; Gift-giving; Burial Practices and Funerals; Dwellings; Kin Relationships; Verbal Art; Magic; Sorcery; and Diet. Only 6 of the 41 additional selected categories yielded more than 15,000 matches: Visual and Representative Arts (15,774 matches); Community Structure (19,601); Status, Role, and Prestige (23,733); Shamans and Psychotherapists (25,178); Prayers and Sacrifices (26,233). And finally,

⁹ The 60 Probability Sample Files were selected by HRAF to “provide primary descriptive information on a representative sample of the world’s traditional and peasant cultures.” Their selection was conducted as follows: “After establishing a worldwide list of cultures that met certain criteria for eligibility, one case was chosen randomly from each of 60 culture areas. Among the criteria for eligibility were the ethnographer’s length of stay in the field, his/her knowledge of the native language, and number of pages of ethnography. This sample is used for both teaching and systematic cross-cultural comparisons” (online HRAF glossary of terms: http://www.yale.edu/hraf/hraf_glossary.htm).

only Spirits and Gods (OCM 776) returned a result on par with Music, giving 33,106 matches in 1,237 documents (see Table 1).

The high incidence of Shamans and Psychotherapists perhaps suggests the kind of bias in favor of certain interests in ethnographic records; other categories, however, that one might expect to score high, because of biases based on the history of ethnographic interests, scored relatively low, such as Ritual, Puberty and Initiation, Gift-giving, and Kin Relationships. Thus the high incidence of Music seems not merely a reflection of prevailing ethnographic concerns, but rather of real extensiveness and prevalence in cultures worldwide. To be sure, its prevalence is in part because “Music” is such a general concept, covering a wide variety of cultural practices. But considered another way, this is also an index of music’s real pervasiveness in culture. Review the list of categories again and consider how many of them would often contain musical dimensions as well (including Mythology, Educational Theory and Practice, Childcare, Theory of Disease, Speech, Ritual, Mourning, Dance, Burial Practices and Funerals, Verbal Art, Magic, Shamans and Psychotherapists, Prayers and Sacrifices, and Spirits and Gods). Finally, that only Spirits and Gods yielded results on par with Music is a succinct but eloquent confirmation of the widespread general pattern of interrelation between musical cultures and ritual cultus of divinities.

OCM Categories Sampled (total of 42 searched)	# of search matches	# of documents
Mythology; Educational Theory and Methods; Childcare; Housing; Eating; Sexuality; Writing; Wood-working; Animism; Legal Norms; General Tools; Weapons; Alcoholic Beverages; Speech; Theory of Disease; Mourning; Decorative Art; (17 OCMs)	Under 6,500	---
Mode of Marriage; Ritual; Cult of the Dead; Nuptials; Cereal Agriculture; Regulation of Marriage; Domesticated Animals; Puberty and Initiation (8 OCMs)	6,501-10,000	---
Dance; Warfare; Gift-giving; Burial Practices and Funerals; Dwellings; Kin Relationships (6 OCMs)	10,001-13,100	---
Verbal Art (OCM 5310)	13,379	274
Magic (OCM 789)	13,532	912
Sorcery (OCM 754)	13,548	903
Diet (262)	13,551	1,269
Visual and Representative Arts (OCMs 532 and 5311)	15,774	746
Community Structure (OCM 621)	19,601	1,384
Status, Role, and Prestige (OCM 554)	23,733	1,609
Shamans and Psychotherapists (OCM 756)	25,178	883
Prayers and Sacrifices (OCM 782)	26,233	1,141
Spirits and Gods (OCM 776)	33,106	1,237
Music (OCM 533)	39,110	1,127

Table 1. Results for eHRAF sampling survey for frequency of 42 OCM (Outline of Cultural Materials) categories in on-file ethnographic documents.

That music is genuinely pervasive in human cultures therefore seems beyond dispute. But is it also panhuman (“universal”), in the sense that it is found in all societies and reflects a basic human trait, propensity, or practice? To try and answer this further question I conducted an exhaustive survey of the eleven-volume *Encyclopedia of World Cultures* (Levinson 1991), charting the attestation of music, song, and dance in the more than 1,300 cultures it covers (the encyclopedia was produced under the auspices of HRAF). Where lacking I supplemented it with other sources, including eHRAF files, and articles in the 29-volume *New Grove Dictionary*

of Music and Musicians (Sadie and Tyrrell 2001), making use too of the online electronic version of *New Grove*. For Mesoamerica, I also found *Handbook of Middle American Indians* vol. 7-8 (Vogt 1969) useful when the Levinson 1991 volume on Mesoamerica called for supplement.

The statistical results of this survey are summarized in Table 2. Levinson 1991 includes both long articles, giving detailed analyses under a typical sequence of headings of the culture/society/ethnic group, and shorter articles that provide less (but variable) information and background on the culture/society/ethnic group. On a case by case basis these shorter articles sometimes yielded evidence of musical practices. But sometimes they did not, which resulted in the first sorting of the articles into a useable subset (all the longer articles plus the shorter articles which happened to attest music). This sort is given in the Table 2 columns headed “Cultures covered” and “Useable sample.” The percentage of useable articles (table column 3) ranged between 61% (South Asia) and 99% (Russia and Eurasia). In no case, then, is the sample used under 50%, and even in those cases where the percentage is relatively low, this does not constitute a major limitation of the survey since shorter articles in many cases are given to subset groups whose cultural patterns are similar to related groups treated in longer articles. This is true except in the case of East and Southeast Asia, where the lower percentage of useable articles (65.4%) seemed in part to reflect a genuine dearth of ethnographic information for many traditional societies, especially in the uplands of peninsular Southeast Asia (more than one article’s author spoke of an ongoing need for first-time ethnographic fieldwork in these—recently war-torn—areas).

Finally, in this useable sample, I looked for explicit mention of song, dance, music, and musical instruments, accepting any of these elements as criteria for inclusion in the column “Music attested.” The final percentage (%) column is the “Music attested” divided by the “Useable sample.” These ranged from 92.8% (Oceania) to 100% (Europe). The total percentage of attested musical cultures worldwide, out of a useable sample of over 1,100 ethnographic articles, was 95.7%. To my mind, this result provides very strong evidence in support of the claim that music is a panhuman cultural phenomenon.

Region	Cultures covered	Useable sample	%	Music attested	%
Africa	150	139	92.6	135	97.1
Central America/ Caribbean	109	84	77	82 ¹⁰	97.6
China	55	55	100	53	96.4
Russia and Eurasia	106	105	99	99	94.3
Europe	116	85	73.3	85	100
East and Southeast Asia	176	115	65.4	114	99.1
North America	218	215	98.6	203	94.4
Oceania	156	139	89.1	129	92.8
South America	157	124	79.0	117	94.4
South Asia	120	73	61	68	93.2
Total	1,363	1,134	83.2	1,085	95.7% ¹¹

Table 2. Results obtained on the attested extent of musical practices among peoples worldwide from an exhaustive survey of an ethnographic encyclopedia of world cultures (Levinson 1991), supplemented with *NGDMM* (Sadie and Tyrrell 2001), *NGDMM online*, and Vogt 1969.

¹⁰ The two “unattested” were Nahuatl (a group closely related to Nahuatl—“Aztec”), and Yukateko, i.e. the Maya of the Yucatan peninsula, whose archaeological record, if nothing else, attests to a pre-Columbian musical culture (along the same pattern as their other Maya relations).

¹¹ This percentage is the horizontal column value (1,085 / 1,134); the average (arithmetic mean) of the vertical column is 95.83%.

More significant perhaps than the quantitative data, however, is the qualitative sense I got in conducting the survey of music's real ubiquity, and of its patterns of manifestation worldwide. To many specific instances and general patterns of musical practice that the survey made me aware of I make reference throughout this study. But a couple further observations deserve comment here. First, a high percentage, if not all, of the cultures or ethnic groups where music was "unattested," were such because of abstract and generic analytical concepts that actually serve to obscure musical practices. Chief in this regard are terms like religion, ritual, ceremony, cult, festival (and perhaps most perversely, "oral poetry" sometimes seems to supplant explicit mention of music). Take just one example, the article on the "Wik Mungkan," the Wik-speaking peoples of Cape York Peninsula in northern Queensland, Australia, who were traditionally hunter-gatherers in a region especially rich in aquatic resources, with "relatively complex" technology, and who first came into contact with Europeans in the seventeenth century (but extensively only in the latter half of the nineteenth century).¹² The article's sections on religion, ceremonies and arts—never mentioning song, dance, or music—refer to "languages, totems, rituals" being originally the work of culture-heroes; the power of the creation time is "brought into the present through the performance of the various rituals;" there are "ritual specialists" and "ritual leaders" with "knowledge of many of the ritual and initiatory cycles;" "minor ceremonies included those performed at totemic increase sites, but the major ones were those surrounding birth, male initiation, and the complex cycle of mortuary practices;" we hear of "totemic ritual cult cycles" and how land and landmarks, and people's relationships to them, were at "the core of the ceremony and other social practices,"

¹² Levinson 1991 (v.2): 376-79.

and that “women had their own specific rituals,” etc. The “Arts” heading does not mention song or dance, while using the phrases “major ritual cults” and “public and semi-public ceremonies.” Under other headings we learn that healers performed “ritual interventions,” that head men were “knowledgeable in terms of country and ritual” and were “commanding public orators,” and finally that heritable possessions and wealth include “land, its sites, its associated ritual and mythology, its totems,” etc. Clearly, this type of language obscures the likely reality (likely based on comparison to many other indigenous Australian cultures) that the land was a map of songs, that these songs came to the people through musical ritual contact with the “dream” or creation time, and that socialization and regular social life involved learning, practicing, and performing this wealth of traditional songs and dances in their appropriate times and seasons. So too in every case where a longer article did not explicitly mention musical practices, one can detect similar unreflective use of vague general concepts like ritual and ceremony. For this reason I have little doubt that the 4.3% of cultures described where music was “unattested” represents a margin of error and not a statistically significant absence of music in ethnographic reality.

Another pattern revealed in the survey is the correlation between colonial disruptions of traditional cultures and the decline or absence of native musical expressive arts. While many of these articles are inattentive to music in their descriptions of social practices in the same ways as just discussed, there was nevertheless a tendency exhibited in articles about peoples who have been heavily missionized or otherwise culturally assimilated to outsider-imposed patterns, that music also was “unattested” or, in other cases, traditional music was positively

identified as declining or absent. This pattern, attested on a wide scale, and not only with European-Christian influences, but also with the culturally hegemonic Han Chinese and musically suspicious Islam, is consistent with many case studies that might be adduced where concerted campaigns for native cultural change have concentrated special effort on eradicating or modifying native musical arts. That agents of dominant cultures would attack with peculiar zeal indigenous musical traditions is hardly surprising, since songs and dances are both *carriers* of collective memory, as well as among the most potent embodied *displays* of cultural identity and traditional values. In other words, music is both a *medium* of cultural repertoires and, in another sense, culture itself.

From the foregoing, then, I conclude that empirical evidence overwhelmingly supports the assumption that music is panhuman. In addition, its prominence in cultural patterns overall seems to be on par with that of gods and spirits (“religion”), most likely, as this study will explore in later sections, because it is strongly connected with traditional forms of religious cult of divinities (gods, spirits, ancestors).

Sounding out music’s range and depths

The study of language in the last century has evidenced marked shifts on several fronts toward emphasizing and analyzing sonic, aural, oral, and musical dimensions of speech. Indeed, linguists are realizing more and more, as focus continues to shift from texts to speech and from code to social practice, that melody and rhythm are inherent to all human language and integral to how it functions. Thus the constant low-level

“music of everyday speech” makes the stylization of it in song and oral poetry more an incipient than an additive phenomenon.¹³ By this I mean that, in general, song is not speech “plus-something,” like melody, added on from “outside” the system, but a stylized heightening of features like tone and rhythm which are the natural basic constituents of speech, used for emphasis, affect, and in many languages even for grammatical inflection or morphemic indication. Even in normal conversational English, frequency (“pitch”) variations, just one of several relevant dimensions of sound analysis, range from between around 90 to 10,000 Hz (or roughly between one and a half octaves below, and a little more than five octaves above, middle C) (see graph, Geisler 1998: 21). In fact, if one works backwards, exercising a paleoanthropological imagination, it is tonality and rhythm in the human voice that would seem to precede the emergence of lexical deixis proper. Primate singing, like gibbon song, bird song, or whale song today, would be the physical vocal origin of human language.¹⁴ Darwin speculated that this was the case, and several musicologists

¹³ I allude here to *The music of everyday speech: prosody and discourse analysis* (Wennerstrom 2001). For overviews of acoustic studies of the voice and speech, cf. Lieberman 1977, Pickett 1980, Lieberman and Blumstein 1988, Geisler 1998: 230-48. Bolinger 1978 is a provocative study of intonation and its various uses; he concludes (tentatively) that all languages have intonation, but more importantly, certain key functions seem to recur, almost universally, across wide samplings of languages.

¹⁴ Darwin thought vocal song was older and ancestral to language, a theory that curiously has been abandoned in the current recycling discussions in neo-Darwinian discourse (cf. Bickerton 1990 for the semio-centric paradigm that currently holds sway in many linguistic circles; he argues for a dubious “language paradox,” that language must have, but could not have, arisen out of “animal communication”). But important returns to Darwin’s insights are Brown 2000, Richman 2000, Merker 2000, Miller 2000, Dissayanake 2000, Freeman 2000, Dunbar 2003: 176-7. Even more forceful is Vanechoutte and Skoyles 1998, who revive Darwin’s position and argue (against Pinker 1994) that language, rather than being innate per se, owes its existence to innate *music-associated competencies* and is itself largely a cultural phenomenon. See also Cross 1999 (whose work I am in sympathy with, but would hesitate to endorse all of his premises or conclusions, such as “group selection.” Nothing in current evolutionary theory favors actual selection at the group level. Cf. discussion in Sterelny and Griffiths 1999: 34: “Organisms are selected; populations evolve.” On the other hand, different populations do compete, one thriving at the expense of another. If our earliest ancestors did gain advantages through musicality that helped them out-compete other populations that did not enjoy them, then music would be implicated in the long-term success of archaic *Homo sapiens*). But, Cross’ unique

and linguists have recently taken back up his argument as the only compelling perspective from which to narrate a persuasive natural history of language (this train of thought will be picked back up at a later date in Part Three of this series of studies).

Moreover, musical practices as much as language are basic to the types of complex sociality that characterize the human species.¹⁵ It will be the purpose of this book to develop this point by narrating a natural (and cultural) history that holds music as its central theme. My disciplinary position is comparative literature, but my primary interests in oral poetry and performance, as well as mythology, have led to the intensely interdisciplinary discourse of this study. Like others before I have wrestled with the oxymoronic category of “oral literature” and found it wanting. If oral, then why call it literature? But in the end we face another paradox, one which poses real conundrums of method: most of the time, and necessarily so for the ancient world, our entry into oral, lived, performed, musical cultures is through texts and reading. Orality too, in the end, must have its *literary* criticism, but it must be of a different sort than written criticism of texts composed and performed in writing. A shift to musicality offers a way out of the tired impasse of oral literature, since orality is and implies performance and music. Even “everyday speech” is in its way songlike, even the gestures of casual dialogue are forms of dance. The “oral literary” texts I read are like

and potentially ground-shaking insights are in “lithoacoustics,” that is, focusing research questions on the sonic dimensions of stone-tool making (more on this below).

¹⁵ Continuing from the previous note, it is satisfying to find that Cross 1999 has undertaken the necessary task of rebutting Pinker 1997, since the latter’s misconceptions about music make his pronouncements on it disagreeably preposterous. Cross has argued, correctly in my view, that Pinker’s assumptions about music suffer from extreme and unexamined ethnocentric biases: “Despite protestations to the contrary, all the evidence that Pinker presents and the assertions that he makes as to the nature of music in human experience are again most directly applicable to what music has become over the last hundred years within technologized and capitalistic Western society: an aural commodity to be consumed, dispensable on demand. Prior to that, and in almost every other society of which we have knowledge, the relation between music and action—between the auditory and the motoric—was or is much more evident and explicit.”

fragments or fossils of past musics, and in the effort to contextualize them in their times and places of performance I draw inspiration from ethnography, religious studies, historiography, disciplines that have cultivated the thick description of the embodied worlds referenced in our linguistic webs of texts. To put this another way, when dealing with oral performance situations comparative literary criticism must strive to be ethnomusicology, but not necessarily as this discipline has sometimes narrowly been construed. Better, disciplinary definitions must be reimagined, as Lila Wistrand urged from inside that discipline thirty-five years ago, in a discussion of indigenous musical cultures of the Amazon: “They are complicated, and are only fully understood when there is knowledge of the total culture and its structure” thus posing “a cross-disciplinary problem involving aspects of musicology, linguistics, anthropology, and literary analysis” (Wistrand 1969: 483-4). The following chapters are, in the end, part oral literary criticism, part cultural history, part ethnohistorical imaginings, and yet another part elegiac ruminations on the ruins of things past.

The study has a general chronological movement, listening first for the echoes of sound and music in mammalian and hominid evolution, moving then to prehistoric and early historic musical cultures, which will culminate in three text-focused case studies of musical myth, thought, and practice from ancient Greece, China, and India. Two connecting chapters and a coda will bring into play some African, South American, Mesoamerican, and Oceanic histories and traditions. Interweaving with this temporal trajectory, though, especially in the work’s first half but resurfacing throughout, will be a conceptual dialectic concentrating on the interrelated notions of *organs* and *instruments*. This conceptual thread is key to understanding, among other

things, the (ongoing) shift in the last century and a half from Aristotelian to Darwinian biology, the latter providing the theoretical model in which the chronological narrative of evolutionary development makes sense.

Putting the two trajectories together, the temporal and conceptual, certain general patterns emerge with regards to music's place and influence in natural and cultural history. First of all, though playing out in diverse ways, music was always an important element in the articulation of power in early societies. The relationship of those in power to music, its making, and its makers was never without import. Whether rulers were patrons and recipients of musical performance (the usual case), or they themselves performed (less common but with intriguing exceptions), music was a prevalent feature in the theatrics of power in early stratified and urbanized societies. Thus the position of musicians in wider systems of social stratification will be important to watch out for. More specifically, we will see that there was a widespread tendency for musicians to occupy marginal or at best middling social positions, music often being the work of slaves or even the physically handicapped (e.g. the blind, attested, among other times and places, in Sumer, Egypt, China, and Greece¹⁶).

Another emergent pattern is music's strong associations with food, festivity, drinking, and sex. This makes sense on the surface, because music tends to involve energetic and exuberant displays of physical and emotional release, obviously corresponding to festival moods of celebration, relaxation, and enjoyment. On a biological level too this is perhaps not surprising since, as ethologists would argue, the

¹⁶ For Sumer cf. Kramer and Maier 1989: 34, "Enki, seeing the man who could see though blind, decreed his fate, gave him the art of song, named him chief [musician] of the *usumgal*-lyre before the king." For Egypt cf. Manniche 1991: 97-107. Greece is well-known (the *Odyssey*'s blind bard Demodocus). For China, see chapter 6 below.

wide diversity of animal behavior, that of humans included, is woven on the fundamental warp and woof of nourishment and reproduction (with the concomitant third factor, death, the musical dimensions of which will be centered later, in Part Two of this study series). Anthropologists also, though generally concerned to restrict their attention to cultural levels of analysis, can confirm this general pattern. For song and dance are regular features worldwide of social festivity, rituals of eating and drinking, and in rites of passage that circumscribe the sexual life-stages of the individual, such as first menses, male puberty and especially courtship and marriage.

But a complementary pattern appears as well: music's marked involvement with numbers and counting, early mathematics, astronomical and calendrical systems, and divinatory practice and theory. While details of this pattern will arise in the course of discussion, some general remarks here may help draw attention to them as they come up. It should be borne in mind that musical instruments, whether a cast-bronze bell or a multi-hole boneflute, are complex artifacts, often built of diverse parts and materials which have been specially prepared and shaped together to achieve specific sonic effects. It seems that the trial-and-error process of making, improving, and playing musical instruments—i.e. complex *tools* for the performance of musical sounds—led early instrument makers and musicians into theoretical reflections of a mathematical nature. Those who made and played flutes were experimenting with the relationships between hole-spacing and relative pitch. Those who stretched and plucked strings thought and learned, as they tightened and listened to vibrating cords, about the relations between pitch, string length, and tension. Drummers counted as they kept time for dancers who stepped in recursive patterns. In both performative aspects

and in the making of instruments, early music might be aptly described as “Stone Age mathematics.” These were, however, mathematics largely performed, its postulates expressed in rhythmic melodies, its theorems danced in patterned leaps.¹⁷

The numerical aspects of music spread out into other spheres where numbers came into play, including the economics of exchange and the observation of repetitive periodicities in nature: the daily play of dark and light, the recurrent phases of the moon, the annual solar and seasonal cycle, the round of stars and planets (Part Four of this study series will focus specifically on the metaphor of cosmic music and the complex role of music in cosmology and physics). Because divination involved reading secret signs in nature’s patterns, in hopes of gaining knowledge about future events or, what is similar, to guide present courses of action, music often became involved in these processes, whether through the use of music in active and sympathetic magic (to influence or coerce spirits), or else by conceiving of music’s performance of patterned sounds as a divinatory and revelatory method in its own right (akin to scapulomancy, sortilege, or auspices).

Finally, the evidence from ancient and other traditional cultures all converge on the notion that music is related to divinity and is an integral part of “religious” practices. Music pleases, appeases, attracts, compels, allures, and excites the gods, from whom, often as not, music has also derived, whether through gift, theft, or instruction. If the gods make music in myth, this is because humans make music in fact, in their rituals through which they, by their own accounts, encounter and interact

¹⁷ I have been inspired, though unfortunately at a late stage in working on this study, by the theoretical writings on time, memory, and cognition of sociologist Eviatar Zerubavel (1981, 2003).

with the divine, those mysterious powers in the world greater than themselves which call for fear, circumspection, placation, and celebration.

If music is pleasing to the gods, and attracts their presence, then from a skeptical modern gaze, bringing phenomenology to bear and “bracketing” interpretations, would we not be warranted to suggest, at least as a first hypothesis, that the *music* is the divinity, and the felt excitement itself the object of reverence and wonder?¹⁸ Are the gods, at least some of them, apotheoses of our own experience of possession and entrancement by the sounds of our musics? This would make sense of the curious fact that music, so intimately linked to religion, is yet so easily separable from it without losing any of its appeal, and why even in an increasingly secular world (or increasingly secular in certain places) music is still the most popular and most patronized art form.

On nature, culture, and their histories

Our folk categories of “nature” and “culture” (which are sometimes, but not always, more precisely deployed in scholarly discussions) are much too fuzzy and ultimately contradictory to be very useful in understanding what is meant by this work’s title—*A natural history of music*. Despite its continued habitual use in the social sciences and humanities to refer exclusively to *human* thought and behavior, culture as a concept

¹⁸ Culture-internal conceptions often poorly distinguish, intentionally identify, or otherwise blur the boundary between gods and songs. Noting the frequent identity of deity names and songs devoted to them in ancient Greece (e.g., paian, dithyrambos, hymenaios), Rutherford 2001: 12-13 draws attention to how it is often difficult to decide whether the god or song is the primary sense from which the other derives. In his study of Tumbuka dance-healing therapies in Malawi, Friedson 1996 describes ontological conceptions that unite dancer, dance and possessing/afflicting spirit. Besmer 1983 explores comparable conceptions. Other examples could probably be found.

ultimately loses its meaning when an opposition to the natural is pushed too far. What ontological status is culture supposed to possess if it can be cleanly secluded from the “natural” world in which it—i.e. humans who do things “culturally”—is embedded. There is risk of dubious transcendentalism, as well as reassertion of age-old dualisms (whether Cartesian, Christian, Platonic, Gnostic, etc.). Nor do I think the post-Geertzian compromise, that it is human “nature” to be “cultural,” though perfectly reasonable and indeed correct on one level, goes quite far enough to explode the dichotomizing. On another, more fundamental level, everything cultural is also natural—when and if nature is understood to mean everything that happens in the phenomenal world.

More to the point is a distinction between what is inborn and what learned, what is somatic and genetic information, passed on by biological reproduction, and what is taught and acquired in an animal’s own lifetime. While this idea is often what comes into the discussion when “nature” and “culture” appear (nature vs. nurture), it is not always the whole story. Otherwise other, nonhuman animals would not be habitually excluded from the category of culture. But many behavioral biologists (ethologists) are now in agreement that nonhuman animal behavioral repertoires cannot be explained or understood solely by recourse to ideas about instinctive mechanisms. Not all nonhuman animal behavior is “innate.” Other animals also learn, acquiring skills and capabilities not given by genes alone. Not only do they exhibit behavioral flexibility to adapt to changes in their environmental conditions; many nonhuman animals also more or less actively transmit and model these behavior patterns for their young. In other words, many nonhuman animals have long cultural traditions, and

humans are not the only animal whose behavior warrants the concept of culture. Therefore, not to qualify culture with *human*, at least implicitly, when discussing ourselves, is to risk the kind of anthropocentrism that conceives of humanity as a miraculous exception to the order, operations, and mechanics of the natural world. Since musics are phenomena of human behavior, of *human culture*, part of the obstinate urgency of the title *natural history of music* is to insist on a leveling of the dichotomy between nature and culture in the senses just discussed. Like the rest of human behaviors, musical expressions are also natural—phenomena that have unfolded in terrestrial history according to the potentialities created by the natural laws, regularities, constraints, and rhythms that govern the appearance and disappearance of all other things, whether a star, a mollusk, a birdsong, or a church bell.

On the other side of the coin, we should not overlook the tendency for cultural relativism to shade into denials of biology, the body, and innateness in human things. Much in human behavior is cultural, but much is not. No culture can very much alter the need for sleep, or overcome mortality. Culture does not make livers, brains, eyes or ears. To be sure, societies (and not just our own) tend to naturalize their conceptual organizations of things that make up their culture, and even go to great lengths to modify, shape, and transform the physical body in various ways. Still, the profound “givenness” of our being cannot lightly be theorized away. Radical constructivist views are as mistaken in their one-sidedness as biological, geographic, or genetic determinisms.

Still another consideration is needed. In the past, the history of music has tended to take one of two directions. On the one hand, a taxonomical approach to

musical instruments—where classificatory schemes provide some sort of order to what might otherwise be mere cataloging—eventually took on quasi-institutional form as organology, the subspecialty of musicology that studies musical instruments. On the other hand, a rather more historical discipline was consolidated out of practices of critical appreciation and analysis of so-called European “art music.” A literate discourse engaged in both by composer-practitioners as well as admiring aficionados, “music history” only very uneasily began to accommodate within its theoretical gaze the musics of others, both of lower social strata (“illiterate” and “folk” music of their own societies in Europe or America), and of other non-European cultures. Where musical matters did occasionally appear in other discourses and disciplines—anthropology, history, literary appreciation, economics, philosophy, etc.—it was understood and treated as a minor element, perhaps of interest but not the central focus, and thus relegated to a marginal position (footnotes, minimal mentions, interesting asides). By the nineteenth and early twentieth centuries, musical practices had long since ceased, in cosmopolitan centers at least, to seem like anything other than diversion, amusement, relaxation, and this both at elite and popular levels, both “folk” and “art” music. “Music history,” conceived in this atmosphere, was understandably taken as only a thematic history, the historical inquiry into and writing the story of what was but one facet of the much bigger history of “events” (politics, regimes, wars, institutions). Music here was hardly central to history, not like economics, institutions, legal developments, or military events. Beloved by its own historians, it was nevertheless not the “main story,” as proved by the narratives of hardcore historians,

which rarely if ever raised the issue of musical practices in the dramas of history's unfolding events.

But my study of different musical cultures in antiquity leads me to propose another mode of narrative, one that subverts the "history of music" understood as a minor thematic history, by folding it into "natural history" as it has come to be understood in evolutionary theory. In this narrative mode, music is foregrounded in the unfolding of traditional historical narratives usually told with other emphases. History's favorite stories about institutions, politics, battles and wars, are touched on, but their musicological dimensions are amplified. Prehistory's favorite themes of economic developments, the "origins of civilization," geographic and ecological constraints, are retained, but probed for music's role, the part played by collective dance and singing. My aim has been to transform both the history of music and natural history in the process, give them both a good stretching in an attempt to bring them together in what is, admittedly, only one of many conceivable configurations. Thus, a natural history of music—not only music's natural history, but also a natural history in general that is more musical, more attuned to the musics of nature, more deeply aware of the nature of music.

With these preliminary considerations in place, let us begin to trace music's natural history. The appraisal begins by considering the emergence of hearing in a world of sound and, following this, the emergence of voice in a world of hearing (Chapter Two). Thereafter a tentative prehistory of music and its instruments will serve as backdrop for a brief survey of musical culture in early states (Chapter Three), setting

up the more in-depth discussion of texts and cultural contexts in ancient Greece (Chapter Four), ancient China (Chapter Six), and Vedic India (Chapter Eight). These longer studies, the bulk of the work, are linked by two shorter pieces, one an “intermezzo” on turtles and tricksters in Africa and elsewhere (Chapter Five), the other a “contrapunto” on the distinctive musical culture of pre-Columbian Mexico (Chapter Seven). To conclude the work I summon a particular case, the musical island of Nidū in the South Pacific, as an apposite coda with which to draw together the study’s varied findings into a harmonious finish (Chapter Nine).

The aesthetics of the whole has been guided by musical metaphors, but also inspired by the more fragmentary aesthetic of museums, especially the natural history museum (hence this introduction’s title, both a musical overture and an entrance to a museum). In the museum, as perhaps in all products of human endeavor, a process of selection is constant and metonymy reigns. But in the museum especially one selects from what one has on hand, and out of the haphazard fragments making up the local collection some artistic arrangement is composed for public display. The museum elides its obvious gaps with stories, grand gestures and allusions, relying on the implied master narrative, always there in the background, calling on the visitor, if not to consent to, then at least to be willing to entertain in mind, the outlines of the bigger picture of which the pieces on display are but small, enigmatic fragments.

But this “master narrative,” the paradigm of comprehension, is in this case hardly a matter of common consent. Indeed, for many “postmodernism” means precisely the rejection of all grand claims, sweeping epistemologies, and global narratives. To many academics in humanities disciplines, the sciences in particular are

viewed as sources of overweening knowledge claims that deserve a severe, even hostile gaze of radical suspicion. Many others are perhaps less skeptical, but feel that the polite accord of mutual non-intervention that has held between humanities and sciences for some decades could well hold out for several more.

Many indications lead me to believe that this latter hope is a vain one, and that active and creative engagements with scientific discourses are needed now if in the future humanistic pursuits are to avoid any of several less constructive trajectories currently foreseeable. And while I have no real hopes here of convincing radical skeptics of the cumulative value of the basic worldview that binds together much of the world's scientific community, I will attempt to articulate the position I take with regard to the evolutionary naturalistic paradigm,¹⁹ for without it the rest of the study would lose much of its propositional force. Nor is my approach to narratives of natural evolution lacking in the skeptical gaze that comes with a historical and literary critical imagination. The grand narrative of universal and human evolution that has emerged over the last two centuries is in form just that, a narrative, a myth, yet another story we storytelling primates have concocted to make sense of a senseless world. But among those accounts currently available it is among the most persuasive, finding room within its nested explanatory apparatus not only for stars, planets, life, intelligence and beauty, but also ignorance, suffering, mortality, and not least skepticism about its own grounds, reasonableness, and explanatory sufficiency. The naturalistic evolutionary paradigm has proved itself flexible with regards to its own basic postulates in ways that none of

¹⁹ A sample of works by authors whose ideas have informed my thinking over the several years of this studies' genesis would include, in no particular order: Rue 1994; Margulis 1998; Darling 1989; Ihde 1976; Lorenz 1996; Bateson 1979; Ricoeur 1984; F. Turner 1985, 1991, 1995; Sterelny and Griffiths 1999; Hartshorne 1973; Abram 1996; Dennett 1995; Bakker 1996; Hyde 1998; Flaherty 1992; Wallin 1991; Wallin et al. 2000; Robinson 1993, 1994, 1996; Rappaport 1999.

the living world religions have yet shown themselves capable of. Unlike the fossilized dogmas of ancient religions, evolutionary theory is capable of evolving.

But like any religion with its informing system of myths, evolutionary thinking does impart a certain style to experience, giving perceptions a specific quality only appreciable in and through the lens it constructs. For instance, the basic equations of Thermodynamics, combined with Einstein's General Relativity Theorem, give a sense of an intractable cosmic equilibrium even while time and temperature's arrow is pointed inalterably in the direction of entropy (in other words, as time moves forward, the universe as a whole gets colder). But in the short term, and on smaller scales of reference, almost anything might happen, since matter is capable of taking on a virtually limitless number of different complex informational states. It has, on this planet at least, taken life, and by evolutionary natural selection shaped a bewildering diversity of forms; it has come to be aware of itself, and even aware of its own awareness. It has looked into the void of cosmic time and space and for several thousand years now contemplated the possibilities—and impossibilities—of its own creation. It has even, and now we switch explicitly to specific instances of recent human events, hobbled together spacecraft bearing messages, etched on gold discs, of its own strange forms of understanding: vocal utterances, sounds of terrestrial nature and of urban life, songs, instrumental pieces—all hope-filled salutations for some unlikely extraterrestrial encounter with other, no less improbable than ourselves nor less real, creations of this material universe.

There is, as Darwin felt—perhaps the first to appreciate the feeling and who still said it best—grandeur in this view of life that, “whilst this planet has gone cycling

on according to the fixed law of gravity,” the diversity of life forms teeming in a tangled bank “have all been produced by laws acting around us” (*Origin of Species* [1963: 470]). It is in order to add to the subsequent study something of this grandeur—which has tragic overtones, a feeling for the fragility and uncertainty of things, the glorious and comic chanciness of all life’s achievements, the ultimate doom of all that seems to matter—that Chapter One offers some reflections on the radical shift from Aristotelian to Darwinian views of nature. In many ways constructive collaboration and debate between the sciences, humanistic studies, as well as religion, still founders on a few fundamental notions. Among these are ideas about art, nature, and chance. Darwin radically rearranged these concepts as they were understood in the traditional Aristotelian (and folk Christian) model. An appreciation of these differences will serve as a suitable entryway into the textual museum of music’s natural history that follows.

Technê, Phusis, and Tuchê:
Art, Nature, and Chance

So, what skill can't gain, luck will often give

moral, Aesop's *Fables* 22

Accident or design? This question has been fundamental to natural philosophy in the West since antiquity. But the varying answers given serve as an index of basic differences between ancient and modern thinking about origins and nature. Darwin's *Origin of Species* (1859) challenged the conceptual foundations of classical biological theory, derived from Aristotle, on several key issues, not least on the role of chance in natural designs. Darwin's account of adaptation by natural selection inverted Aristotelian doctrine on the roles of cause, intention, purpose, and chance in natural processes and products. Chance and accident, very carefully and consciously excluded by Aristotle from the consideration of causes in nature, now took on a new, startling, and to many scandalous, importance. Descent by natural selection, unlike Aristotelian biology, tied together for the first time ontogeny (the birth and growth of individuals) and phylogeny (the origin of kinds or species). By doing so all of earth's living things became naturally related by descent; the taxonomic arrangement of natural species became a genuine genealogical "tree."¹ Moreover, the realm of nature moved squarely underneath the umbrella of contingent things, as opposed to being necessary and deterministic.

¹ "Our classifications will come to be, as far as they can be so made, genealogies" (Darwin 1963: 467). This has become the case through the increasing replacement of Linnaean with cladistic classification.

In other words, natural *history* no longer meant simply “inquiry” (Greek *historia*) into nature. Instead, nature now had a history and was historical, a specific sequence of contingent events and happenings in and over time.² Put another way, nature as a whole now, in principle at least, had a narrative, even if long chapters in this narrative were unknown. As it turns out, the evolution of mammalian hearing is a perfect case through which to contrast Aristotelian and Darwinian styles of thinking about origins and development of animal organs. In what follows, then, I will first analyze some of the basic shifts from ancient to modern biological perspectives, highlighting especially the role accorded in each to chance and accident. After this I will tie evolutionary styles of natural historical narrative into the history of musical instruments through an example from ancient China. Then Chapter Two will explore the evolutionary origins of the natural bases of human music-making: hearing and voice.

Empedocles’ teeth and Darwin’s dangerous idea

When on the first page of *Origin of Species* Darwin relegates Aristotle to a footnote, it marked a major turning point in the history of ideas in the West, and a nadir for the “ancients” in the debate that “moderns” had long been having with them. The debate had been going on for at least two and a half centuries, and Aristotle had been steadily losing ground ever since Francis Bacon’s unstinting assaults on the ancient “Philosopher” whose authority reigned supreme in the Church and the institutional

² “when we regard every production of nature as one which has had a long history... how far more interesting—I speak from experience—does the study of natural history become!” (Darwin 1963: 467). For the contents of the ellipsis, see below.

centers of learning. It was hardly an accident, it seems, that the sufficiency of Aristotle's reasonings were being challenged in England at precisely the time that new Greek texts were gaining circulation and an avid readership among the intellectuals of the day. Democritus, Empedocles, Heraclitus, and others from among those sixth and fifth-century thinkers we now call the Pre-Socratics, informed, among many other writers' works, Robert Burton's protean *Anatomy of Melancholy* (published under the pseudonym Democritus Junior, first edition 1621). The rediscovery and subsequent circulation among a select few of Lucretius' *De Rerum Natura* was also important in the increasingly skeptical reception of Aristotelian sciences (cf. Hadzsits 1935). Even hoary old Pliny the Elder was being read in a new spirit, as an admirable hero for unflagging empirical inquiry. This new spirit, this innovative reading strategy, was evident both in Bacon's *New Organon* as well as in Philemon Holland's (1552-1637) introduction to his translation of the *Historia Naturalis*, where the physician and scholar championed Pliny as a paragon of natural curiosity even as he defended his author and himself from charges of impiety, blasphemy, and heretical opinion.

By the 1850s European scientific discourse had gained in self-confidence, both with respect to ecclesiastical opinions and in regard to the traditional authority of ancient thinkers. The latter, at least in the realm of biology and the physical sciences, had very nearly reached its nadir. The passage from Aristotle which Darwin cites in his first footnote, from *Physics* 2.8, though only presented as an ancient precursor to his theory, in its turn marks a road untaken by the Greek philosopher, whose own contrary view would become dominant dogma for more than two thousand years. In fact, because it is tangential to his purpose Darwin does not even make it clear that in the

passage Aristotle is merely posing a counterargument against which he will then argue in the strongest possible terms. The passage occurs in a discussion about how nature (*phusis*) is and has causal purpose (*heneka tou*), the argument to the contrary being from Empedocles (fl. ca. 450 BCE). I cite the translation Darwin used (adding Greek terms in brackets):

“So what hinders the different parts [of the body] from having this merely accidental relation in nature? as the teeth, for example, grow by necessity, the front ones sharp, adapted [*epitêdeious*] for dividing, and the grinders flat, and serviceable for masticating the food; since they were not made for the sake of this [*toutou heneka*], but it was the result of accident [*sumpesein*]. And in like manner as to the other parts in which there appears to exist an adaptation to an end [*dokei huparchein to heneka tou*]. Wheresoever, therefore, all things together (that is all the parts of one whole) happened [*sunebê*] like as if they were made for the sake of something, these were preserved, having been appropriately constituted by an internal spontaneity [*apo tou automatou*]; and whatsoever things were not thus constituted, perished, and still perish” (Darwin 1963: xxiii).

Empedocles’ view, as Aristotle presents it, was that material necessities (such as the nature of fire, earth, and other elements) are the real causes for the structural features of animals and their constituent organs. These causes are, with respect to the purposes to which their results are put, blind and fortuitous, rather than intentional makers of purposeful design (as Aristotle will have it). Purpose in the structure of living things is thus only apparent, because those which happen to be such as to survive do so, and those which are not perish. Granted that the theory, at least in Aristotle’s summary,

does not link phylogeny directly to ontogeny through a reiterative lottery of survival (the logic of evolution by natural selection), this passage will strike anyone familiar with the basics of modern evolutionary theory as surprisingly similar. The conceptual starting point of Darwin's "dangerous idea"³ was there, clear as day, in Greece in the fifth century BCE.

But Aristotle will have none of it. "It is impossible that this is the way it is," he says, "for everything in nature becomes what it is either always or most of the time, but nothing that is by chance (*tuchê*) or accident (*automaton*) does so." The arguments Aristotle then marshals against Empedocles are unconvincing and frankly unimpressive, though they do give us significant insight into Aristotle's bedrock assumptions. First he draws an analogy to human art (*technê*): just as when one makes something, so too in nature, a purposeful plan is followed in an ordered sequence from beginning to end (provided that nothing intervenes). Nature (*phusis*) is like art (*technê*) in this way, that there is an orderly progression from first things to last. Note that this argument does not overturn Empedocles' theory, for he admitted that there is *apparent* purpose in nature.⁴

Then Aristotle turns to nature's "mistakes" (*hamartia*), arguing again by analogy to human *technê* that here too sometimes the intended goal is not achieved and

³ A nod to Dennett 1995.

⁴ Writing in the latter half of the fourth century BCE, Aristotle inherited a long tradition of poetic and philosophical juggling with the seductive word/concept pair *technê* / *tuchê* (e.g., see the Aesop's moral at the head of this chapter). Besides the extensive sophistic (and "pre-Socratic") discussions of the nature of *technê*, the most important public forum for conceptual tinkering, in Athens at any rate, was in the theater. A fragment of the tragedian Agathon, for instance, reads: "art is fond of chance and chance, art" (τέχνην τύχην ἔσπερξε καὶ τύχη τέχνην, Incert. Frag. 5). Not only was the agonistic spirit that animated competitive displays (athletics, music competitions) a celebration of fortune, tragedy was a poetic genre that meditated on *tuchê* in human affairs (see note 6 below). An example of the trope, though without *technê*, pairing luck and wit in Herodotus: in response to a Delphic oracle the Spartans were hunting for the bones of Orestes in Tegea, and Lichas finally discovered them "receiving the answer in a stroke of luck and by his wits" (καὶ συντυχίῃ χρησάμενος καὶ σοφίῃ, Hdt. 1.68).

mistakes occur. He is willing to admit that nature is not perfect, but not that such “mistaken monstrosities” (*terata hamartêmata*) might have any role or meaning for understanding nature’s creative processes other than being evidence of a failed *telos* or goal-directed purpose. The theory, he reiterates, “wholly overthrows nature and what is according to nature” (or his teleological view of nature, as he ought to have said). Again note that this argument does not work very strongly against Empedocles, for it admits the variation in nature that the latter makes note of (and which undermines Aristotle’s first point, that nature is constant and regular), while simply excluding any deeper role for natural mutability.

He then repeats his point that things move towards a goal in nature (if nothing hinders!). Then he reviews his earlier discussion of chance (*tuchê*), that it is a cause of things coming about incidentally (*kata sumbebêkos*); but this is not how it is in nature. In a previous chapter he had already subordinated (through oppositional contrast) *tuchê* to mind (*nous*) and nature (*phusis*), arguing—rather speciously—that accident *necessarily implies* antecedent mind and nature of the teleological sort (*Physics* 2.6). Finally he insists that it is absurd (*atopon*, also “strange, monstrous”) to think there is no purpose in things just because the deliberating agent of movement cannot be seen. This is irrelevant to Empedocles theory as well, since it makes no claim based on the invisibility of agency in nature.

In hindsight Aristotle’s refutation of Empedocles is little more than smoke and mirrors. It is also clear that his strong resistance to the idea of apparent purpose through chance fitness is animated by an unusual vehemence, since he risks fallacy to defend his own view that nature is goal-oriented. More precisely, he assumes what he

presumes to prove (that nature is like art in having purpose). He virtually denies in one argument what he concedes in the next (that nature is mutable in its productions). At the heart of this resistance, I would suggest, is the insoluble metaphor between *techné* and *phusis*, the immovable ground of Aristotle's paradigm for nature: nature is *like* art. (As we will see when we come to the *hymn to Hermes*, the concepts of natural and artificial intermingled in archaic Greek thought as well. But in the case of the *hymn to Hermes*, at least, the analogy runs the other way: when Hermes makes the turtle-shell lyre the process is subtly compared to an act of sexual reproduction.) Nature and craft were so strongly linked in Aristotle's mind (as they were in his predecessors and contemporaries) that he equates the two and makes the metaphor run both ways: "if a house were to come to be by nature, it would happen just as it does now by craft, and if things in nature could also be made by craft, they would come to be just as they grow naturally." Biotech engineers might consent to the latter claim. It was also the position of Francis Bacon (1561-1626), who subverted the nature-artifice duality he found in his own culture, and which had been built on Aristotelian foundations (with strong doses of Biblical conceptions of God, Man, and Nature, along with many centuries influence of Ovid and other poets' clever variations on the theme of *ars et natura*). Bacon insisted that "the artificial does not differ from the natural either in form or essence, but only in the efficient [cause]." This was so, since "toward the effecting of works all that man can do is put together or put asunder natural bodies. The rest is done by nature working within" (*New Organon*, Aphorism IV). Underlying Bacon's reevaluation of a nature-art dichotomy, of course, was a more profound disruption of a human-nature (or spirit-nature) dualism.

Chance or *tuchê*, on the other hand, was for Aristotle directly opposed to *technê* and thus also to *phusis*, which he modeled upon it. With respect to causation Aristotle defines *tuchê* as “an incidental result in things that are a matter of choice and which have purpose” (2.5). Since chance is what happens outside of intentional choice, it is indeterminate (*aoristos*), obscure (*adêlos*), and incalculable or unpredictable (*paralogos*). All of these qualities are inadmissible to the order of nature as Aristotle conceives it. Yet before moving to evolutionary biology’s account of mammalian hearing, it is worth noting an interesting cross-disciplinary inconsistency in Aristotle’s philosophy. Chance, as we just saw, is not admitted to the physicists’ arsenal of causes in nature. But in the *Poetics*, when Aristotle discusses what makes good plots (*muthoi*) in tragedy, he says that the most amazing (*thaumasiôtata*) are those plots in which events happen by chance, “since of those things that happen by chance (*tuchê*) the most amazing are those which seem to happen as though by design” (1452a). The term for “design” here, *epitêdes*, also occurs in the *Physics* 2.8 passage above, describing the shape of teeth “adaptable” for grinding. Thus the apparent suitability of chance events is for Aristotle laudably “amazing” in drama (as he says, such *muthoi* are necessarily “more beautiful” [*kallious*]).⁵ But as a cause of apparent purpose in nature chance is “marvelous” in the sense of ridiculous or absurd. The aesthetics of art and the

⁵ It really is a brilliant point in Aristotle’s discussion of tragedy. For since a “plot” (*muthos*) is by his definition a “complete” action, i.e., one where the events are all related by internal causation (or “follow” from one another), and since tragedy is supposed to arouse pity and fear, and these feelings arise most, he says, from unexpected events, then the “apparently fitting” (*epitêdes*) is the perfect sort of event to meet these paradoxical criteria. The main observation here, however, is that Aristotle judges poetic art and natural cosmology by a double standard, failing to realize the role of aesthetic ideals in the model-construction operations of the latter, all the while excluding the aesthetics of chance/apparent cause that he accepts and even praises in the former. It is a sort of schizophrenia—between truth and beauty—that Western metaphysics was afflicted with (poets and visionaries here and there excepted) up until certain trends and developments in the 19th-20th century (phenomenology, etc.). However, already with Bacon, who rejected much of the dualistic conceptual inheritance and chartered experimental science with a very this-worldly orientation, naturalistic theory and praxis has always tended to cast doubt on all such sharp divides between things human and the rest of nature.

appreciation of nature's handiwork Aristotle gauged by a double standard (as do modern creationists). But if we apply Aristotle's poetic standard of aesthetic evaluation to the competing narratives of natural origins, it is evolution by natural selection, and not creation by design, that makes the more beautiful *muthos*.⁶ At the same time, however, it is a more tragic vision of the past than a creationist view (of whatever variety), as Darwin himself felt:

“Judging from the past, we may safely infer that not one living species will transmit its unaltered likeness to a distant futurity. And of the species now living very few will transmit progeny of any kind to a far distant futurity; for the manner in which all organic beings are grouped, shows that the greater number of species in each genus, and all the species in many genera, have become utterly extinct” (1859 [1963]: 469).

Or as Bob Dylan sang in 1965: “What cannot be imitated perfect must die” (*Farewell Angelina*).

Whatever else it might be, evolution is not a story with a happy ending.

⁶ Though a full investigation is beyond the limits of the present discussion, tragedy might without undue violence be described in general as an agonistic contest between the powers of *tuchê* (“chance, luck, [mis]fortune, randomness) and forms of cosmic order (especially *dikê* “[divine] justice”). As such, not only do the extent tragedies (and, in parodic fashion, satyr play) constantly toy with the rich semantics of *tuchê*, the human drama often opens outward to reveal a dangerous cosmic showdown between the forces of chaos (*tuchê*) and order (*dikê*). Prominent instances would include Aesch. *Choe.* 59-61 (“good fortune [*to eutuchein*] is a god to mortals, greater than god, but justice's [*dikas*] tipping scale watches”); Soph. *Oed. Tyr.* 1080 (at a pitch of blind tragic irony, the doomed Oedipus calls himself “the son of *tuchê*”); *Oed. Col.* 607-23 (though *tuchê* is not used, a meditation on time and the endless flux of events in a world of mortality); and Eur. *Cyclops* 605-7 (a satyric prayer for the Cyclops' blinding to succeed, “or else *tuchê* must be thought a god, and divine matters weaker than *tuchê*”). Viewed in light of such tragic conceptions of the cosmic/human order, Aristotle seems to be enshrining this folk metaphysics, manifest in tragedy, in his own ideas about nature as a consummately controlled order that excludes the very possibility of *tuchê*.

Tuchê and history, natural and technical

Turning now to Darwin, the author of the theory of natural selection also approached nature through metaphors of technology, but here too the difference is striking. For Aristotle the dominant idea he has when he speaks of *technê* is the process involved in an individual act of making (like making a shield or building a house); in these cases the artifacts *already exist* in prototype and the process of production is actually reproduction of an extent model. Darwin, on the other hand, often had in mind the historical development of new technologies, especially those of his own time. So in his concluding remarks near the end of *Origins*:

“when we regard every production of nature as one which has had a long history; when we contemplate every complex structure and instinct as the summing up of many contrivances, each useful to the possessor, in the same way as any great mechanical invention is the summing up of the labour, the experience, the reason, and even the blunders of numerous workmen” (1859 [1963]: 467).

Here he envisions the creative process—in the long history of nature as in technological history—as one of trial and error, of guesses, missteps, and lucky finds combined (sometimes) with brilliant insights. It is not, then, a matter of having escaped an analogical connection between nature and artifice, using the latter, which we understand somewhat better (or seem to), to illuminate the basic mystery of the former. Perhaps we cannot escape this trope; perhaps it is an intractable “root metaphor” in

Victor Turner's sense.⁷ But the metaphor has certainly moved some distance from its deployment by Aristotle. For the ancient philosopher, the goal-oriented process of *technê* offered a convenient means by which to theorize *phusis*, nature, as teleological and unencumbered with the discomforts—intellectual, religious—of admitting that *tuchê* plays any role in natural process. For the modern naturalist, on the other hand, not only is nature brought within the contingent and chance-riddled world of historical events, a history of technology is also envisaged, one that is in fact profoundly analogous to nature's history.⁸ Thus *tuchê*, now understood to pervade the history of *technê*, comes back into association with *phusis*, but still through a metaphorical relation.

Art and chance in the making of bell-chimes

An example of how chance can be understood as essential to creative innovation in the history of musical instruments comes from Bronze Age China. The magnificent bronze bell set unearthed in 1978 and belonging to Marquis Yi of the ancient state of Zeng (cf Figure 20 below) reveals a level of musical acoustical knowledge and a precision of

⁷ Cf. Turner 1974: 28-32.

⁸ Of course, a more basic analogical appeal to human artifice informs Darwin's entire discussion: the "artificial" selection (sometimes conscious, sometimes unconscious) involved in selective breeding in agriculture, herding, gardening, etc. Properly speaking, while the results of such breeding (namely, a natural species with traits that conform to human needs and wants) reflect human artifice, from Darwin's point of view it was the *open-ended natural variability* exploited by breeding techniques that deserved the most emphasis, not the agency involved. He needed to combat the prevailing idea that species were eternal and immutable. Agency in natural selection is covered by other concepts (competition for scarce resources needed for survival, differential reproductive success, symbiotic interactions, etc.), and insofar as agency has remained tied to the analogy with artificial selection (for example, in persisting anthropomorphic conceptions of [Mother] Nature as hidden agent of natural selection) it has obscured the issue. Rather, "artificial" selection by humans is an instance of the kinds of selective processes ubiquitous in nature. Other animals, often no more or less conscious of it than humans have been throughout history, also cultivate the species in their environment to their advantage. Such coevolutionary processes are what evolutionary ecology is devoted to studying.

technical skill that simply astounds modern researchers. But as Chinese art historian Robert Bagley hypothesizes, the tonal sophistication of the Zeng bell set might best be explained as the result of a long fortuitous process—perhaps centuries long, but with key moments of rapid discovery and development—of collecting, selection, and finally imitation. “Perhaps,” he suggests, “no foundry was ever able to *design* a musical set of bells.” To explain how bronze-casters learned how to cast bells with such high tonal precision (when the complicated variables involved in controlling tonality in bells poses significant challenges even with modern technological means), he imagines that in the early period musicians collected individual bells that happened to have tonal qualities matching the different notes of their musical scales, thus making up a musically coherent set of bells, which individually had diverse histories and origins. This scenario fits with archaeological finds of assemblies of heterogeneous bells that upon acoustic analysis, however, reveal significant tonal relationships. “The step from heterogeneous assembled sets to sets cast all at once, with matching decoration, is not very large. The moment a musical set had been assembled, a bronze foundry could have cast a new set by carefully copying the old one, one bell at a time. In other words, the first set cast as a set was probably a replica of an assembled set.”⁹ Thus the centuries of cumulative experience, choice, and selection embodied in foundry molds modeled on a bell assemblage would have given Bronze Age Chinese bell-makers the practical means of casting acoustically precise bells, even without possessing explicit detailed knowledge of all the complex variables that *designing* such bells would have entailed. If Bagley is right this case shows that, just as in evolution by natural selection,

⁹ Bagley 2000: 46-50.

the winnowing and refining of selection on initially random variations can result, over time, in marvelous illusions of conscious and deliberate design.

As it turns out, Empedocles' teeth—themselves originating, in evolution's narrative, much as he described—also happen to be involved in the evolutionary history of mammalian hearing. As paleontologist William Stebbins (1980: 424) relates: “It is clear from the evidence that the evolution of such an efficient outer and middle ear conduction system was a *fortuitous outcome* of certain primary adaptations of a carnivore's lifestyle directly related to obtaining food and eating it” (emphasis added). It was due in part to changing needs for tearing and grinding food that the peculiarly mammalian organ for hearing evolved. The next chapter will consider more fully the chance-filled evolutionary trajectory that led first to hearing in a world of dumb sounds, then to many voices in a world of mute hearing. The end result would be the planet's atmosphere teeming with intentional information exchanges, sonic codes made by organic beings for communication, competition, artistic expression, or out of sheer exuberance.

From Sounds Unheard to Hearing Voices

Music is made of sounds. A natural history of music, then, might begin with the origin of its medium. But sound would not be a medium—a channel or signal-carrier *mediating* exchanges of information—if animals did not possess the capability to perceive sounds. From an evolutionary point of view, animal hearing exists *because* sounds were there to be heard, and the presence and nature of sounds helped shape, constrained the shaping of, through natural selection, the perceptive faculty of hearing. Musics are artistic expressions that take advantage of both the sonic properties of things and the auditory capacities of human bodies, the latter being evolutionary products of human sensory ecology in response to the former. Some consideration, then, of the now insoluble bond between sounds, hearing, and animal voices is in order.

First of all, before turning to the evolution of hearing, what is sound? A basic scientific definition is a pressure wave propagated through a medium, and when this medium is air, sound is a fluctuating wave of changing atmospheric pressure. That sound is the result of physical vibrations propagated through air was intuited by Greek philosophers as early as the fifth century BCE. Archytas (late 5th-4th c. BCE), a Pythagorean theorist and friend of Plato, wrote of his predecessors' discoveries: "They noticed first that there can be no sound unless there has been an impact of things upon one another. They said that an impact occurs when things in motion meet one another and collide" (πρᾶτον μὲν οὖν ἐσκέψαντο, ὅτι οὐ δυνατόν ἐστιν ἦμεν ψόφον μὴ

γενηθείσας πληγᾶς τινων ποτ' ἄλλαλα. πλαγὰν δ' ἔφαν γίνεσθαι, ὅκκα τὰ φερόμενα ἀπαντιάξαντα ἀλλάλοις συμπέτη, fr. 1, ll. 21-25). The same passage goes on to say that there are sounds both too small and too great for human ears to hear. In light of current knowledge of infra- and ultrasonic frequency ranges, sounds pitched too low or high for human hearing, Archytas seems to have spoken more truly than he knew.

In the fourth century Aristotle (384-322 BCE) identified air (*aër*) as the medium for sound.¹ He argued that there is a potential (*dunamis*) for sound in things, and that sound is produced when one thing strikes against another. He observed also that water can, like air, act as a medium to propagate sound, and he compared how air rebounds off of confining surfaces, creating echoes, to a bouncing ball.² Furthermore he guessed correctly (though only in part) that hearing functions by means of air inside the ear, which vibrates when sound vibrations reach it from the outside air.³ The (pseudo?)Euclidean text the *Division of the Canon* (ca. 300 BCE?) echoes Archytas in beginning with the “impact” nature of sound: “If there were stillness and no movement, there would be silence: and if there were silence and if nothing moved, nothing would be heard. Then if anything is going to be heard, impact and movement must first occur” (Εἰ ἡσυχία εἶη καὶ ἀκίνησία, σιωπὴ ἂν εἶη· σιωπῆς δὲ οὔσης καὶ μηδενὸς

¹ *De Anima* 2.7 (419a): τὸ δὲ μεταξὺ ψόφων μὲν ἀήρ.

² *ibid.* 2.8 (419b)

³ *ibid.* (420a). In *Thesmophoriazousae* Aristophanes, parodying the natural philosophizing of the fifth-century intellectuals, has Euripides describe how in the beginning *Aither* (“Air/Sky”) gave the animals she made sight and hearing; the eye imitated the sun, for ears she “bored out a funnel (*choanē*)” (*Thesm.* 18). Another case of imagining the body in terms of human artifacts, organs as *organa* (“tools”).

Vincenzo Galilei (d. 1591) in his *Dialogue on ancient and modern music* (1581) used quite vivid language to describe sound and hearing: “sound is the tension of the air” that “almost squirts” out of enclosing instruments, strikes the surrounding air, “ever pushing until the air nearest the sense organ, forced by that motion, almost stabs the cartilages that when struck make one hear. This felt blow is truly sound” (Galilei 2003: 327).

κινουμένου οὐδὲν ἂν ἀκούοιτο· εἰ ἄρα μέλλει τι ἀκουσθήσεσθαι, πληγὴν καὶ κίνησιν πρότερον δεῖ γενέσθαι. ὥστε, ἐπειδὴ πάντες οἱ φθόγγοι γίνονται πληγῆς τινος γινομένης, πληγὴν δὲ ἀμήχανον γενέσθαι μὴ οὐχὶ κινήσεως πρότερον γενομένης, 148.1-6⁴). He goes on to describe “higher” tones as composed of movements that are “more closely packed and more numerous” and “lower” tones of movements “more widely spaced and less numerous.”⁵ As ancient Greek music specialist Andrew Barker notes, this seems to be the first instance in the Greek tradition where the relationship between a sound’s perceived pitch and the “frequency” of vibration is clearly—even if not quantitatively—articulated.⁶

The theory of sound put forward later by Ptolemy (ca. 100-178 CE), the second-century CE polymath scientist, is even clearer in its conception of the physical mechanics of sound transmission: “sound is a sort of continuous tensing of the air, penetrating to the outer air from the air that immediately surrounds the things making the impacts” (Barker 1989: 281). This description, suggesting that it is the continuous tension that moves through the air and not the air itself, seems very close to how modern acoustical science describes sound, as a compression wave of energy that propagates through matter.

⁴ Text available in Zanoncelli 1990: 38.

⁵ Our terminology of “high” and “low” to describe sounds uses a spatial analogy; the common terms in Greek were drawn from the sphere of touch, “sharp” (*oxus*) and “heavy” (*barus*), and not precise opposites (these are preserved in English oxytone and baritone, and compare the musical use of “sharp,” opposed to “flat”).

⁶ Earlier extant texts attribute differences in perceived pitch to the *velocity* of the “impact” transmitted in the air, cf. Barker 1989: 192 n. 2. The speed of sound, however, is constant in a given medium and is not the cause for perceived differences in sounds. Rather, the variables are frequency (“pitch”), intensity (“loudness”), and spectral composition (“timbre”).

Vocal-auditory ecologies

Sounds are everywhere, occurring constantly throughout the environment. Our ears are intelligent processors of this relentless stream of sound information, analyzing in real time the frequencies, intensities, and sources of ambient sounds, as well as synthesizing this information before it moves onward to auditory centers in the brain for further integration and reaction (Plomp 2002). The marvelous behaviors involved in human speaking, language, and music-making are founded upon mammalian primate hearing, which was fine-tuned over millions of years. Parts of the auditory structure (principally the labyrinth or inner ear) serve as organic, anatomical links, among many, to all the other vertebrate species, living and extinct, descended from early fish with primitive hearing organs (Stebbins 1983). Independently from vertebrate hearing, several insects too evolved various means of perceiving sounds relevant to their survival (ibid.: 13-28). Many amphibians, reptiles, birds, and mammals have evolved organs of voice, or otherwise use their bodies to make sounds, for purposes of communication. But this purpose, familiar enough to us, is not the only useful survival function of sound, hearing and voice that animal bodies have discovered. Owls, for instance, nocturnal hunters, can pinpoint with high precision the faintest of sounds, in order to swoop down and snatch an invisible mouse from under a crust of snow (ibid.: 71-2). Even more active, and bizarre, vocal-auditory systems have evolved in bats and cetaceans (whales and dolphins), the two mammalian lineages which made a secondary ecological shift from terrestrial to, respectively, aerial and aquatic environments.

Not dependent on sounds coming from the environment, bats and (among the cetaceans) dolphins broadcast their own streams of vocal sound and by means of the reflecting echoes construct an “auditory image” of their surroundings that is easily as serviceable as sight for navigation and hunting. Difficult for us to imagine, the echolocating sensory apparatuses of bats and dolphins represent the flexibility of natural selection to shape bodies that exploit environmental information like sound to survive in very different ways. To grasp the strangeness of echolocation not only the hearing but the voices of bats and dolphins must be considered. With many differences of course between orders and species, both bats and dolphins emit very brief, loud, high-frequency sounds, which like a flashlight beam out and echo back acoustic images of the environment. The spectral composition of these sounds are often either a very broad band of frequencies (i.e., rather “noisy”), or else modulate quickly over a given frequency range; both strategies apparently increase the quality of the returning echo-image. Some bats, moreover, are known to use in addition a constant frequency pulse with which, exploiting the Doppler effect, they “lock on” to moving prey (cf. Stebbins 1983: 102-24).

I cite these vocal-auditory feats of bats and dolphins in order to counteract the possible anthropocentrism in a discussion of animal voice. Human language and singing are indeed marvelous end products of evolution. But the marvel is relative, and other animals can do things with their bodies that not only are we incapable of, we also have a hard time even imagining. It has taken the very close scrutiny of scientists, designing and undertaking very careful experimental procedures, to secure the modest level of understanding of these animal hearing behaviors as we do possess. For much

of history (in the West at least) most people have been content with the unproved assumption that human mind and consciousness represent the pinnacle of the natural order. It is an assumption based entirely on our profound ignorance of what sorts of things other animals know and how they know it. Indeed, humans, as social primates, have used their voices for communication and social grooming, maintaining the social ties necessary for group-living. Through language we gain a very indirect kind of access to others' thoughts, perceptions, feelings, and insights. Naturally we tend to turn to our own experience of consciousness when trying to imagine how other animals might experience the world. But when other animals have sensory capacities as strange in comparison to our own as bats and dolphins, it only stands to reason that our kind of consciousness should not be the measure for that of all animals. Neurobiologist and experimental psychologist Harry Jerison broached this issue in a classic speculative discussion of dolphin social awareness (1986).

He began the discussion by raising the likely possibility—for which experimental evidence has been gathered in the meantime—that dolphins, being intensely social animals, not only hear and attend to their own echolocations, but also to those of other members of their social group. Given that the sensory information echolocation provides is strongly analogous to a visual representation of the environment, it would seem that dolphins can potentially “see” what their conspecifics “see,” via their vocal-auditory sense. This raises the uncanny possibility that dolphin awareness or consciousness transcends the individual in a way virtually unfathomable for us. Humans may talk, reason, gossip, swap stories, dance and sing to project into the shared social space to themselves and others a sense of collective identity and

consciousness. But dolphins may achieve this in an entirely different way, though one that is also based on vocal sound and hearing. Through the chattering stream of clicks and whistles that a pod of dolphins surrounds itself with, each dolphin may have a cognitive representation of the entire pod, by individuals and as a collective, that is more direct, immediate and transpersonal—perceiving what the others perceive, possibly aware also of being so perceived by the others—than the more mediated quality of vocal-linguistic representation that we experience. Human consciousness, then, may very well not be the only mode of complex animal consciousness that has evolved on the planet.

Emergent hearing, radiating voices

But before the planet had any ears or voices there were only the unintentional sounds of nature—rustling leaves, trees falling, thunder crashing, waves breaking. The first hearing must have evolved only in response to these sorts of “noises,” mere sonic accidents of moving things. The survival value must have been in predatory-prey relations. Hearing would have benefited hunters in detecting prey, and helped prey animals evade approaching predators. Moreover, for vertebrates the original environment for auditory—and vocal—evolution was aquatic. Both sharks (cartilaginous fish) and bony fish hear, using sounds to navigate and to locate prey or escape predators (including fishermen) (see Stebbins 1983: 29-46). It seems too that the secondary development of sorts of voicing—emitting biologically meaningful sounds expressly to be heard by others—also evolved among fish. Many fish grind

bones or teeth to emit sounds that seem to be biologically meaningful, whether for territorial displays or reproductive purposes (ibid.: 45-6).⁷

When vertebrates made the transition from aquatic to terrestrial living, because of the profound shift in medium from water to open air, the vertebrate ear structure changed too, growing more complex in conjunction with changes in the jaw bones.⁸ Most likely, diverse vocal behaviors began to develop early on as well. Hearing in modern frogs and toads demonstrates the intimate link with vocal behavior vital to survival. Discrete structures in the ears of frogs and toads are specifically responsive to the frequency ranges of species-specific croaking calls. Moreover, lower frequency calls of mature adult males attract gravid females for mating, while the higher frequency calls of immature males fail to attract mates (Stebbins 1983: 51-2). Here as elsewhere in the animal world, hearing and voice are integral parts of a single sensory ecology mediating how individuals of a species interact with their own kind to accomplish the ends necessary for survival and successful reproduction.

According to current paleontological reconstruction, during the Triassic period (between 250-210 million years ago), when dinosaurs were rising to the top of the daytime terrestrial food chain, dragonflies with wingspans of two feet or more may still have been buzzing about, and as turtles and the ancestors of birds were evolving, the

⁷ On auditory structures and functions in fishes, cf. Chaps. 1-3 in Popper and Fay 1980: 3-118; on taxonomic difficulties of amphibian auditory organs, and on some peculiarities in frog hearing, cf. Chaps. 4-5 in Popper and Fay 1980: 121-165. Perhaps not surprisingly on account of their phylogenetic diversity, reptilian auditory structures present a high degree of variation as well (cf. Chaps. 6-7 in ibid.: 169-237). All of these articles are highly technical; the accessible coverage in Stebbins 1983 on hearing in the different animal orders will probably be of more interest to non-specialist readers.

⁸ The phylogenetic transition from water to air is recapitulated after a fashion in the ontogeny of frogs and toads. During a tadpole's metamorphosis into an adult amphibian it loses a more fish-like air sac that functioned to conduct water-borne sound waves, and gains a middle ear apparatus more like other terrestrial vertebrates, complete with tympanic membrane and bony sound-conducting organ (columella) (see Stebbins 1983: 49). It is not at all certain that the entire amphibian middle ear is homologous (related by ancestry) with the middle ear of terrestrial vertebrates. Some parts may represent parallel evolution (cf. Lombard in Popper and Fay 1980: 121-38).

therapsids, diminutive relatives of the dinosaurs, kept low to the ground, or high in the trees, and did their prowling by night. The therapsids are of interest because they are the ancestors of all mammals and, thus, of ourselves.

A unique combination of ecological factors and constraints conspired to expand therapsids' brain size, transform their jaw articulation and musculature, and develop the (proto)mammalian middle ear. A nocturnal lifestyle played a major role. While colder nighttime temperatures probably created selective pressures to grow fur and towards an increased metabolism to sustain a better regulated body temperature (homeothermy), and perhaps even contributed to their small size, the darkness favored the enhancement of olfactory and auditory sensitivities. It is thought that the increased pressures for acute senses of smell and hearing in a nocturnal ecology were in part responsible for the increased size of therapsid sensory cortex, and thus in overall brain size, which would become a major distinguishing trait of mammals.⁹

Meanwhile the jaw bones of the protomammalian therapsids were also undergoing a radical streamlining. Canine teeth developed—the cynodonts (“dog-toothed”) are the therapsid lineage considered ancestral to mammals—and a specialized dental complex and occlusion (“bite”) suited for tearing, grinding and chewing. The jaw itself, which had been composed of several bones, underwent a very strange development. The dentary bone, in which the teeth are rooted, became the sole jaw bone, while the post-dentary bones shrank, and eventually were “retooled” to make up the three-bone sound-conducting apparatus that characterizes the uniquely mammalian middle ear. The smallest bones in the body, the malleus, incus, and stapes (appropriately called “ossicles”) together compose a tiny joint, responsible for

⁹ Stebbins 1980; McLoughlin 1980: 100-15.

transmitting sound vibrations to the inner ear. The vibrations passed on by the middle ear ossicles to the inner ear are minute; the vibrations of the ossicles in response to some audible sounds are no greater than the diameter of a hydrogen atom (cf. Geisler 1998: 43).

Other specialized features of mammalian ear anatomy confirm that selective pressures for more finely tuned hearing were intense during its evolution. Only mammals, for instance, have an external ear, the pinnae or visible outer ears that serve as a first-level sound amplifier (some mammals, like cats and dogs, are also able to turn and rotate their pinnae in response to sounds). In mammals too, the tympanic membrane (“ear drum”) is recessed from the surface of the skull, extending the first-stage “funnel” for air-borne sound waves before they strike the ear drum. The result of the external ear’s “funnel” is an increased sound pressure on the tympanic membrane. Connecting the tympanum to the inner ear, the lever action of the three-bone middle ear joint transduces acoustic energy to the inner ear’s “oval window.” In the inner ear, the tightly coiled cochlea evolved. Inside the long, fluid-filled canals of the cochlea the mechanical energy of the middle-ear transmitted vibrations is transformed into electrochemical signals for neural processing and finally behavioral response. The cochlea’s coiled shape is responsible for the wide frequency range and high discrimination of mammal ears. Neurophysiologist Daniel Geisler likens the differential response to sound-induced fluid waves over the length of the cochlea’s coil to a “piano being used as a receiver of sound rather than as its producer.” In such a scenario, he goes on, “incoming air-borne tones of a particular frequency would enter at the treble end and pass over the various strings sequentially, causing the one

particular string tuned to that frequency to resonate and vibrate more strongly than any other string. The lower the frequency, the farther from the treble end this resonant string would be located” (Geisler 1998: 69). The cochlea is similar in that its differential resonant properties over its length are the mechanism through which the acoustic input is analyzed by frequency as it then moves on to sensory cells.¹⁰

A striking detail of ear physiology illustrates yet again the close connection between hearing and vocalization: just prior to vocalization, muscles in the middle ear of mammals contract, thereby attenuating the overwhelming loudness of the voice on the eardrum. In this way, with feedback from the central nervous system about vocal behaviors, the ear is protected from the potentially damaging effects of excessively loud sounds (see Geisler 1998: 49-53).

With pinnae, a tympanic membrane, the three-boned middle ear joint, and the highly specialized cochlear inner ear, mammalian hearing is responsive over a very wide range of sound intensities and frequencies. Mammals are also able to localize sounds with a high degree of accuracy. What these developments mean in general is that over the 150 million years or so of evolutionary changes mammalian hearing became a powerful mode of perception capable of translating in real time the constant, heterogeneous, yet intermingled sounds that reach the ear into an “acoustic image” of the surrounding environment that distinguishes sound-objects by distance, loudness, frequency, etc. Hearing researcher Reinier Plomp (2002) has investigated this remarkable ability of the ear, not only to analyze the “world of superimposed sounds and to separate them according to their various sources” (12), but also to synthesize

¹⁰ Though this is hardly the “end of the line” for the sound-signal, I will not go into further detail. The curious may see Geisler 1998 to follow the longer path “from sound to synapse.”

these various complex sounds into an accurate and meaningful perceptive modeling of external sonic stimuli. Sound reaches the ear in a single, undifferentiated stream of varying frequencies and intensities, and the ear is able to disentangle this stream and reassemble it into a perceptual map of the soundscape. Thus for our sharp sense of hearing we owe no small debt to those furry nocturnal nobodies who got progressively better at hearing by, among other things, listening for, and hungrily homing in on, the clicks, buzzes, chirps, and whirring wings of prehistoric insects flitting about the night.

The miniature early mammals, fur-clad, warm-blooded, viviparous (giving birth to live young), possessing enhanced senses of smell and hearing, somehow survived the mass extinction at the end of the Cretaceous period of the Mesozoic (ca. 65 million years ago). Whatever the cause, a cataclysmic meteorite impact or something else, the dinosaurs, which had reigned on land for more than a hundred million years, went rather rapidly extinct. But mammals (with the other major animal lineages, birds, reptiles, amphibians) survived this global catastrophe, and their descendants started taking over ecological niches that the dinosaurs left vacant. They proliferated and, by the marvelously effective processes of natural selection, speciated as populations exploited this or that possible way of making a living. Some turned into herbivores like elephants, hippos, bovines, deer and the like. Some went to sea and underwent incredible transformations into ancestors of modern whales, dolphins, and sea lions. Others eventually became land carnivores, felines, canines, and ursids. This new Cenozoic food chain replaced the old Mesozoic order of gigantic reptilian animals.

But all the later primates, including all monkeys, apes and ourselves, are descendant lineages of those who stayed up in the trees. They retained the primitive¹¹ mammalian five-digit hand and foot, a feature which other lineages like equids and cetids—horses and whales—lost entirely. It is interesting to think that while other mammals took to land, sea, and air, our primate progenitors simply stayed on in the ancestral arboreal niche, all the while getting better at living there, exploiting it, and defending it from competitors. Our more recent ancestors did not come down from the trees for good until sometime between five and eight million years ago. By this time, the later Miocene and early Pliocene, the diversification and geographic radiation of mammals had reached its height, and a cooling and drying trend was causing reductions of forests and the rise of savanna grasslands. The Mediterranean, dammed up on either end, dried up and became a desert, then, five million years ago, turned into a sea again when the isthmus of Gibraltar gave way and the sea was refilled (Hsu 1983: 173). Fault movements opened up the East African Rift valleys and the Red Sea was coming into existence.

Many mammals, carnivorous predators, herbivorous prey, and omnivorous scavengers alike, lived in social groups as a key survival strategy. All of them sporting mammalian hearing, many exploited the potentials in vocal behaviors for mating, competing for and defending territory, and maintaining group bonds. With the full house of the Miocene/Pliocene bestiary, which in addition to mammals was of course

¹¹ In biology, “primitive” means an *ancestral* trait or structure, as opposed to “specialized” or “derived” traits or structures. One and the same trait can be both primitive and specialized depending on the point of view. So for example the inner ear structure is primitive for all mammal species, but vis-a-vis reptilian predecessors it is a specialization. Put another way, specialized traits are those primitive traits that lineages share through a common ancestor and which in turn mark them off from other, less closely related lineages. (Of course this concept is familiar in linguistics, which borrowed it from biology in the nineteenth century.)

well-stocked with vocally diverse bird and reptile species, the airwaves at the time were surely a raucous cacophony—and mellifluous symphony—of contact calls, seduction songs, distress and alarm cries, grooming chatters, aggressive displays, and defensive postures. Hoots, grunts, growls, moans, squeals, whimpers, sighs, yawns, howls, wails, shrieks, coos, meows, purrs, and barks—all the meaningful sounds of the animal world we know today (*sans* human language and music), plus many others that went extinct with their makers, had developed and flourished in the latter part of the “age of mammals.” With the evolution of vocal-auditory ecologies came a proliferation of acoustic semiotics, biological systems of communication composed of meaningful signs encoded in sound-forms. With its sensory systems every animal body, our own as with any other, “is a sort of open circuit that completes itself only in things, in others, in the encompassing earth,” in David Abram’s eloquent phrase (1996: 62). By the Pliocene watershed the terrestrial environment was thick with meaningful voices transmitting messages from intending organisms to interested receivers, themselves pursuing their own aims and goals. Voices and hearing were organic parts of larger sensory-semiotic ecologies, bodily circuits completed within the surrounding sound-bearing atmosphere.

Seeing as this too was the “Environment of Evolutionary Adaptedness” (EES) during which the anthropoid apes ancestral to modern humans were evolving, it is likely that their vocal repertoire was undergoing its developments in this bioacoustic menagerie. Not only did Pliocene hominids hear and know the other animal voices in their environment, especially those most relevant to their life patterns, they added to this mixed soundscape their own voices. These, since they were social primates, were

probably already diversified for many different uses. No single cause or purpose will plausibly describe early hominid vocal repertoires. Several contexts of interaction would have been relevant for vocal behaviors. Chief among these are mother-infant contact and bonding; male-male and female-female sexual competition; male-female courting and mating; group bonding or “grooming;” hunting, gathering, and food sharing; and inter-group and interspecies interactions (whether aggressive or pacific). If we could go back in time to observe our Pliocene forbears, would they stand out as unique or distinguished in the wider context of their ecological setting? A hominid mating song-display would doubtless be unique and remarkable, like any other facet of animal behavior when regarded with the wide and interested eye of a naturalist. But would it, besides the anthropocentric interest, be *especially* intriguing, more so than the courting dance of prehistoric cranes, an angry mastodon’s vocal pyrotechnics, or the morning chorusing of early passerine songbirds?

A fuller discussion of the implications of evolutionary musicology (Wallin et al. 2000) on the question of human language origins has been planned for a later work and will not be pursued here.¹² The purpose of this chapter has been simply to present a very cursory, indeed almost impressionistic, sketch of the evolutionary depth of music’s physical and biological bases, sound, hearing, and voice. The overriding aim here in my selective process has been to counteract the often tacit, sometimes explicit, assumption that evolution and “biology” have nothing to do with cultural historical developments like human music. To the contrary, from the very beginning (regardless of where one chooses to situate that “beginning”), human music making has rested on

¹² I will only note that it is refreshing to see that song is at last creeping from the margins towards the center of discussion in language origins speculations. Dunbar 2003:176-7 represents a major coup (or at least a thrown gauntlet).

evolutionary developments—of organs of hearing and voice, and a host of other physical traits and behavioral repertoires—that run deep into human phylogenetic history. Some significant things no doubt are relatively recent (tens of thousands of years?); but others, no less significant, are millions, tens of millions, or hundreds of millions of years old. We are liable to overestimate the category of the learned in dealing with human things. But the senses are, at a profound level, not learned, but innate, built-in—because “built-up” over time—competencies. The ear, “designed and prepared for its task in life” (Plomp 2002: 144), is so because it has been designed by several hundred million years of evolutionary natural selection, through sex and death in a world of vital and lethal sounds.

Admitting that some basic mysteries of how we, or any animal, for that matter, “hears” (i.e. constructs a coherent world of sound objects out of a single complex acoustic wave-signal), Reinier Plomp concludes his discussion of the “intelligent ear” by gently mocking some naive hopes of those who have sought to design speech-recognition systems (2002: 150-53). Their frustration at setbacks and difficulties, he suggests, may come from underestimating the complexity of the organic auditory system they attempt to model and even rival. “There are no compelling reasons why our brains might function similarly to a technical tool working at a much lower level of sophistication” he observes, adding as an aside, “it is shocking to see how crudely robots perform even in accomplishing what are for us very simple tasks such as grabbing an object” (2002: 152-3). These comments ring true. For although our bodies may be “survival machines” constructed to perpetuate our (selfish) genes (to use Richard Dawkin’s infamous turns of phrase, [1976]), they are nevertheless machines

that have assembled their makeshift ensemble of organic tools, contrivances, and tricks over almost unimaginable stretches of time, and in constantly changing, thicket-like ecologies of organisms. Nor is the organic body's survival toolkit a wholly "logical," made-to-order, master-designed assembly. Much is hold-over and retrofitted, incidental vestiges and fortuitous devices. The mammalian middle ear was made out of discarded jaw bones. Because of it, wildebeest snorts and hyenas' laughter still echo in our limbic nerves.

THREE

The Archaeology and Early History of Music

“Dancing and praying—it’s the same thing.”

(Lame Deer and Erdoes 1972: 258)

From trees to grasslands to caves our ancestors, over the long term, moved. If the archaeological record has shown anything it is that modern humans are descendents of primate artisans, who made a momentous ecological turn by applying their wits to shaping stone, shell, and bone into things for other uses. If we add an acoustic dimension to how we imagine these hominid tool-smiths, we begin to hear an incessant clacking rhythm of stone on stone, stick, and bone—the same insistent rhythm that can be heard today among chimpanzees in West Africa at their stone-tool industry of cracking oil palm nuts.¹

The sonic dimension of hominid stone-tool manufacture has usually gone unnoted in the study of prehistory, because the sounds produced in their making are not preserved in the traces of the event: those tools themselves which archaeologists find, catalogue and classify. But given some thought, it is clear that the two million or so years over which developed the behavioral habits for making tools—the beginnings of our material culture—are not likely to have left the auditory faculties of those tool-pounding hominids untouched. The daily exercise in rhythmic pounding would have exerted specific selective pressures as well on their auditory psychophysiology and

¹ See Stanford 2001: 112; Boesch and Boesch 1982, 1989; McGrew 1992.

neurochemistry. The manufacture and use of stone tools clearly became a factor influencing our hominid ancestors' success. Therefore whatever skills favored successful making and use of tools were being unconsciously selected for.² Such skills, we can speculate, might have included the simple willingness to make and handle tools, attentive observing of others' technique so as to learn by imitation, and a perceptive awareness of the physical qualities of rock, stone, and other materials used.³ These and other traits were evolving generation by generation as our ancestors chipped flint and stone to do whatever it was they happened to do with them. But at the same time they probably learned to appreciate rhythm, to vary and control it, and most of all to enjoy it.

Though just how long is still uncertain, humans have been making musical instruments for quite a long time. At the dawn of "civilization," as cities were developing between the twelfth and fourth millennia BCE, musical instruments were already diverse and complex, as the archaeology of Egypt and Mesopotamia has long since attested. Finds of real instruments and evidence from pictorial iconography both prove that all the basic types of instruments—idiophones,⁴ membranophones,⁵

² I wrote these tentative suggestions before encountering Cambridge musicologist Ian Cross' ongoing work on "lithoacoustics." His research can be accessed at <http://www.mus.cam.ac.uk/~ic108/lithoacoustics/>. Also Cross et al. 2002 (preprint: <http://www.mus.cam.ac.uk/~ic108/lithoacoustics/BAR2002/BARpreprint.pdf>).

³ All three of these general faculties relating to tool-making, use, and learning, have been found in abundance among wild chimpanzees and bonobos.

⁴ Idiophones, in which the material itself is the sound source, would be the oldest non-somatic sound-makers, going back to the sounds of the first stone industries just considered. Early body ornaments, such as strings of shells, teeth, and nuts, are also usually discussed in the context of early music. Braun (2002: 51) shows a female pelvic bone with a fox teeth string rattle (dated 11,000-9000 BCE). It should be recalled that even chimpanzees drum on tree trunks that they pass along their forest pathways. Male gorillas drum on their chests in their dramatic defensive charges.

⁵ Drums are harder to identify conclusively in iconic forms; Braun (2002: 55-8) points to several possible early examples dating between the late fourth and early second millennia BCE.

chordophones,⁶ and aerophones—were already in use when humans began to build cities and to congregate into states.

A most wonderful series of finds has come from Henan province in north-central China, where in the 1980s at the Neolithic site of Jiahu some thirty ancient boneflutes were unearthed. They are crafted from the wing bones (ulnae) of red-crowned cranes.⁷ Some of the flutes are in nearly perfect condition and they are truly lovely to behold (Figure 1). Six of them have been reliably dated to 5,700-7,000 BCE.⁸ Furthermore, their far from rudimentary construction argues that these are hardly new inventions, but fine examples of an older tradition of flute-making. (The importance of the fuller contextual evidence for Neolithic musical culture at Jiahu will be taken up in a later section.)⁹

⁶ Currently among the earliest evidence of chordophones (stringed instruments) is the Megiddo rock etching (southwest of the Sea of Galilee) dated to ca. 3300-3000 BCE, showing a female figure with a triangular frame harp having at least eight strings (Braun 2002: 58-65)

⁷ *Grus japonensis*, a sacred bird in many East Asian cultures which, with a current world population of less than 2,000, is deemed in danger of extinction.

⁸ Similar boneflutes have been found at other sites in China, e.g. at Hemudu, Zhejiang, where in the 1970s over a hundred 5th millennium flutes were excavated, also of avian tibias and in grave contexts (cf. Liu Shi-yue 1988). Ocarinas or globular flutes (*xun*) also occur in site-finds, ranging in dates from Neolithic to Bronze Age (5000-1000 BCE) (DeWoskin 1988).

⁹ [Photo source: Brookhaven National Laboratory website, <http://www.bnl.gov/bnlweb/pubaf/pr/1999/bnlpr092299.html>]

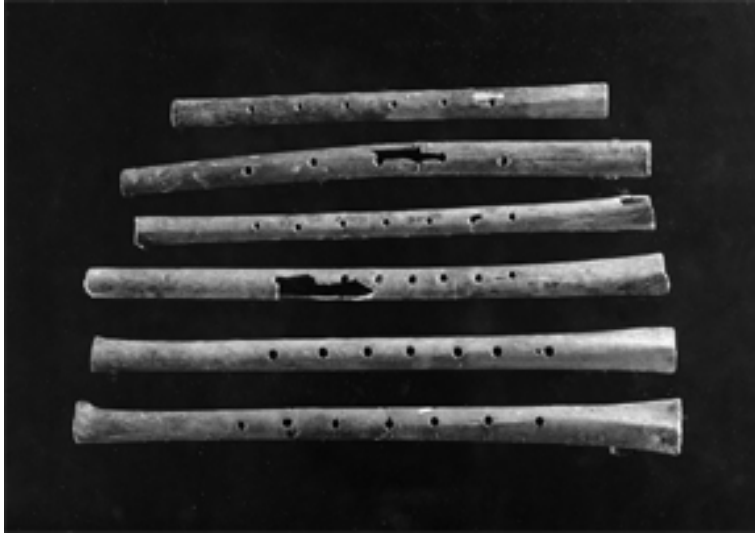


Figure 1. Jiahu boneflutes (Chinese Neolithic, 5700-7000 BCE)

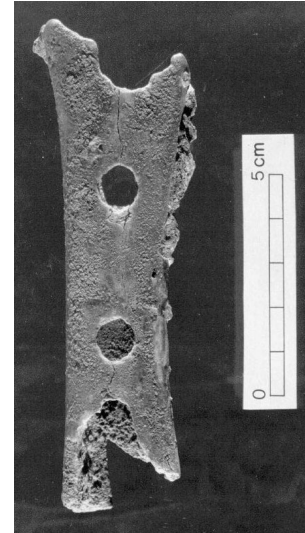


Figure 2. Divje boneflute

But the making of musical instruments predates the rise of human communal sedentarism exemplified by the first Neolithic village communities. Late and middle Paleolithic boneflutes (or what very much appear to be boneflutes, at least) have been found at many sites over the last century. One such example was found in 1995 at Divje cave, a Neanderthal(!) site in Slovenia, and was dated between 50-35,000 BCE (Kunej and Turk 2000: 239; see fig. 2¹⁰). Despite some lingering dissent and controversy, the piece is probably of human artistry—no hyena, bear or panther makes holes like that when gnawing a bone—and, almost as certainly, a sound-making device much like later flutes.¹¹ Thus our Paleolithic ancestors were not only painting beautiful

¹⁰ [online photo source: <http://www.zrc-sazu.si/www/iza/pis16pr-220gama.jpg>]

¹¹ Cf. Kunej and Turk 2000; d’Errico et al. 1998; Cf also the discussion of early flutes and whistles in Rault 2000: 29-34. Also of note are prehistoric artifacts similar to more modern bullroarers and bone scrapers (cf. *ibid.* 34-41), but that the artifacts were used musically is even harder to establish than it is with prehistoric boneflutes.

A slight expansion on a controversy is necessary here: d’Errico et al. 2003 have published a paper that represents overall a praiseworthy synthesis of archaeological research bearing on the emergence of human language, symbolism and music; but therein they reject (following d’Errico et al.’s 1998 conclusion) the Divje boneflute as a product of human artistry, opting instead to present Upper

scenes of herd animals on cave walls, honoring their dead relatives with ritual burials, and making a wide variety of intricate tools, ornaments, and portable objects of art. They were also crafting complex wind instruments like flutes; possibly they were experimenting with the natural relationships between finger-hole placement and tone pitch; possibly also they were crafting other kinds of instruments to make the rhythmic and tonal noises they happened to find pleasing, spine-tingling and numinous to hear.

Our Paleolithic ancestors lived in caves, and the echoing resonance of cavern acoustics was an unavoidable sensory dimension of their daily lives. French ethnomusicologist Lucie Rault, for one, has emphasized the natural soundscape—the acoustic qualities of the living environment—of our prehistoric forebears. “In these places of absolute silence and total darkness, disturbed only by the sound of dripping water magnified out of all proportion, imagine the effect of the human or animal voice amplified by what was in effect a resonating chamber of stone.”¹² Experiments testing the acoustics of French caves containing Stone Age murals have shown that in some cases at least paintings occupy nodes of peak sound resonance, supporting the idea that their painters associated their pictorial representations with the natural sound effects of their parietal media. Combining symbolic sign with natural sound effects into a

Paleolithic (ca. 36,000 BCE) boneflutes from sites in France and Germany as the earliest certain specimens of musical instruments. The difference in dating between these and the earlier Divje artifact are not really important for any argument being offered here; indeed, as the authors argue, the Upper Paleolithic flutes are technically advanced artifacts that clearly imply some period of development. But the authors of d’Errico et al. 2003 fail to make a convincing case that the Divje bone is *certainly* a product of animal gnawing. In fact, I was ready to accept their dismissal of the Divje flute, despite certain holes in their reasoning and lack of presented evidence for claims they make, being in no position to contradict their expertise; but the controversy is indeed still raging, and their arguments have been rebutted in the latest updates of the webpage dedicated to the Divje bone (<http://www.webster.sk.ca/greenwich/paypiper.htm>, see 2003 updates near bottom). Needless to say I cannot settle the dispute, but having read both sides I find myself in agreement with Fink et al. that the Divje bone, if it is the product of chance, represents a bedeviling trick of Hermes. More likely, d’Errico et al. on whatever grounds, have an axe to grind at the expense of fair reasoning.

¹² Rault 2000: 14; also Dams 1985 on stalagmite lithophones.

dynamic whole, these earliest of ur-texts are also, after a fashion, multimedia hypertexts.¹³

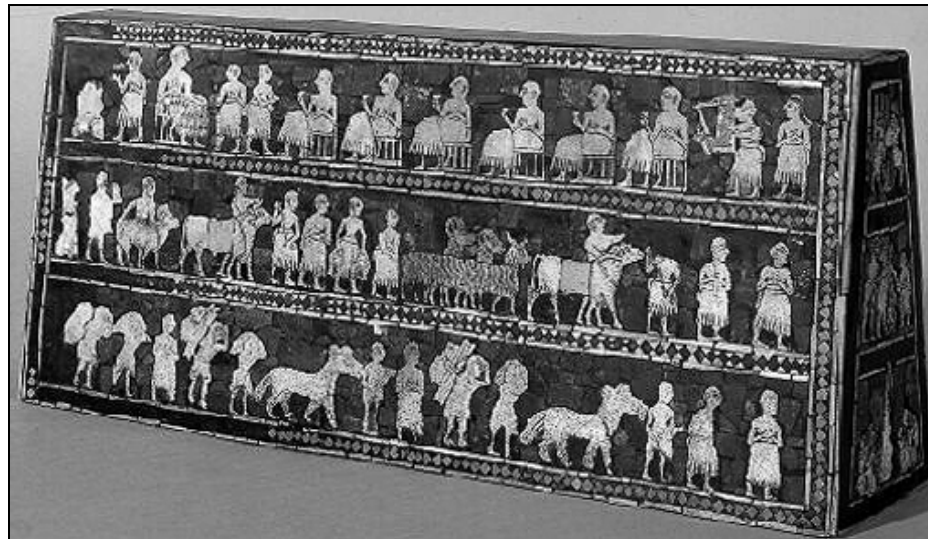
All later ancient civilizations known to us, from Mesoamerica to East Asia to the Mediterranean, were musical cultures. I mean this in a strong sense, that the cultivation of musical practices was deeply embedded in religion, ritual, the operations of political power, and the cultural economy more generally (both daily and festival life). As a fine case in point, listen to the boasts of King Shulgi of Ur, from the Sumerian Third Dynasty (c. 2100 BCE), concerning his endless talents, powers, and achievements. The passage opens with the refrain, then expounds on his limitless musical prowess:

“Let me boast of what I have done. The fame of my power is spread far and wide. My wisdom is full of subtlety. Do not my achievements surpass all qualifications? I, Culgi, king of Urim, have also devoted myself to the art of music. Nothing is too complicated for me; I know the full extent of the *tigi* and the *adab*, the perfection of the art of music. When I fix the frets on the lute, which enraptures my heart, I never damage its neck; I have devised rules for raising and lowering its intervals. On the *gu-uc* lyre I know the melodious tuning. I am familiar with the *sa-ec* and with drumming on its musical soundbox. I can take in my hands the *miritum*, which I know the finger technique of the *aljar* and *sabitum*, royal creations. In the same way I can produce sounds from the *urzababutum*, the *harhar*, the *zanaru*, the *ur-gula* and the *dim-lu-magura*. Even if they bring to me, as one might to a skilled musician, a musical instrument that I have not played previously, when I strike it up I make its true sound known; I am able to handle it just like something that has been in my hands before. Tuning, stringing, unstringing and fastening are not beyond my skills. I do not make the reed

¹³ Rault 2000: 14-22.

pipe sound like a rustic pipe, and on my own initiative I can wail a *sumunca* or make a lament as well as anyone who does it regularly. I bestow joy and gladness, and I pass my days in pomp and splendor. But people should consider for themselves -- it is a matter to keep in one's sights -- that at the inescapable end of life, no one will be spared the bitter gall of the land of oppression. But I am one who is powerful enough to trust in his own power. He who trusts in his own exalted name may carry out great things. Why should he do less?¹⁴

To judge both from literature and iconography, music was a key component of the civilian (as opposed to martial) pole of Sumerian life, and the elite at the top of society reflected this polarity in their self-representations. Thus on the “standard” of Ur, one side is devoted to a scene of military might and conquest, while the other side shows the king on his throne at the top left, with a lyre-player and a singer opposite him, while on the lower panels a train of animals and people bearing gifts attend him.



¹⁴ Text from Oxford's Electronic Text Corpus of Sumerian Literature (ETCSL) <http://www-etcsl.orient.ox.ac.uk/section2/tr24202.htm>; cf. Castellino 1972: 47-49.



Figure 3, 4. The royal “standard” of Ur, with closeup (ca. 2650 BCE) [Penn. Museum]

These images of courtly throngs attending to the banqueting king and nobles evoke a space resounding in a lively multitude of sounds and voices. A comparison might be made to contemporary traditional cultures, like that of the Bemba in northeastern Zambia, where the boisterous uproar of sounds, songs, and celebration are the constant defining sign of a Bemba chief’s village compound. In such a *Musumba* or “royal place” one “heard the drumming and singing of the royal poet crying out from the court, and the royal war drums pounding...and the people partying with singing and dancing to drums. Such a great din from various sources in the royal city!...And right here, this is where the sun dawns, where all roads meet” (Mushindo 1976 cited by Maxwell 1983: 86). As anthropologist Kevin Maxwell relates: “Noted for its noise, the *Musumba* connotes life, power, and throngs of talking, boisterous people in celebration. The chief moves in an arena of sound sometimes supplied by the *Imishikakulo*, an almost incomprehensible verse....It is cried out by the tribal elders in high pitched and rapidly paced voices acclaiming the chief. These beautiful songs flow

along producing sound for sound's sake, populating the royal presence with a crowd of voices" (1983: 86).

When reading the "literature" of ancient Sumer and Akkad, with their effusive praise songs full of epithet and repetition, we should make our best efforts to translate these back into their oral context, and perhaps the Bemba example is helpful in that regard. Putting iconography and literature together, it is hardly far-fetched to see and hear in the Sumerian cult of royalty something of the Bemba's *Musumba*, where sound is a forceful expression of royal power, vigor, and fertile might, a sacred center of the world toward which all praises flow and from which all of life's sounds emanate.

The bull-headed lyre depicted on the Ur "standard" has its match in the actual bull-lyre found in the royal tomb at Ur in southern Iraq (Figures 5-7). This magnificent chordophone demonstrates the fine artistry of instrumentation already highly advanced in the third millennium BCE.¹ In one instrument we find employed the technical handicrafts of gold-crafting, shell and ivory inlay, and marvelous pictorial skills. On the ivory inlay that adorns the front of the sound-box are four zoographic panels, of which the second from the bottom is perhaps most interesting here. It portrays a donkey playing the bull-lyre itself (shown with eight strings) as a bear dances and a jackal plays a sistrum rattle and a drum. Is there a lost myth of origins behind this silent but eloquent, and even comic, animal cartoon? In any case, the self-reflexivity the figure embodies, in depicting in performance the very artifact it adorns, is a characteristic that one encounters in narratives of music origins as well (cf. Chapter Four on Hermes below).

¹ All together eight bull-lyres have been excavated; Cf. Kilmer 1995: 2601-2.

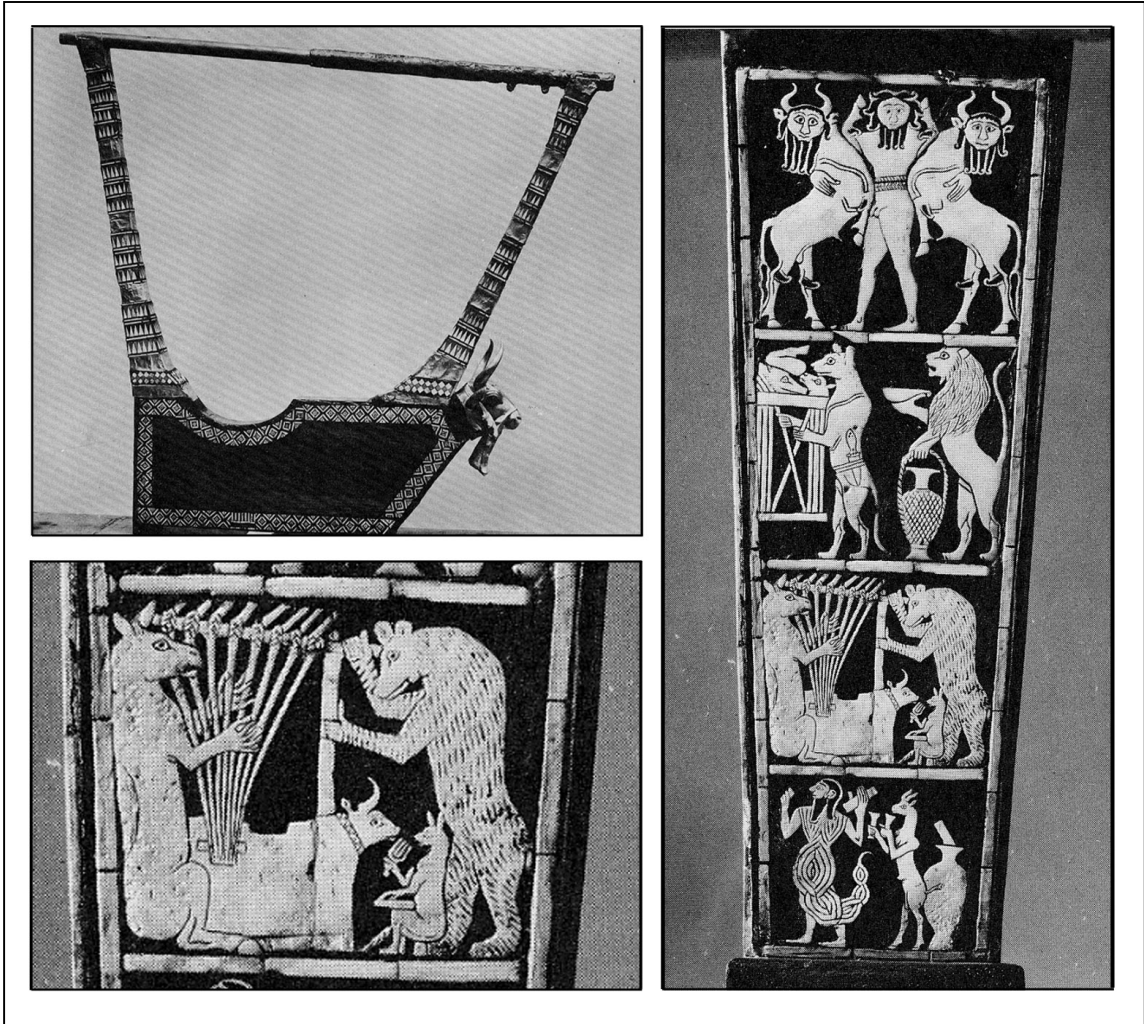


Figure 5, 6, 7. (Clockwise) Bull-lyre of Ur; shell inlay on front of soundboard; closeup of musical panel.



Figure 8. The “animal orchestra”, a stone relief from Tell Halaf, Iraq, early 3rd mill. BCE.

This remarkable scene of animal musicality has been found elsewhere and earlier in ancient Mesopotamia, including this stone relief from Tell Halaf, excavated in the 1920s, called, quite aptly, the “animal orchestra” (Figure 8) The scene—a little difficult to make out—is fantastic yet rich in realistic zoological detail. To the left a lion plays a lyre, his feet resting on the back of a jackal or fox. Dancing on hind legs before him are several animals, including a donkey with a large phallus, a bear playing what looks like a drum, and some species of horned herd animal like a gazelle or springbok. The cast and roles of animals differ, but the design and plan are the same as on the bull-lyre panel, suggesting, along with proximity of cultural provenance, a common iconographic origin.

On balance, the sum total of literature from the Sumerian and later Babylonian civilizations attests that communal life was a richly orchestrated song and dance of the seasons. The extensive ritual calendars of the city centers prescribed the recurring performances of musical ceremony through which the divine order was brought into festive communion with the human community. In this the early city-states of Mesopotamia and Egypt were continuing the “dance at the dawn of agriculture” which Yosef Garfinkel (2003) has found in the archaeological record of the latter Neolithic (eighth to third millennia BCE) in a large area (from west Pakistan to the Danube basin) in and around the Levant. Over this span of more than five thousand years the dance scene was by far the artistic motif most commonly depicted, on fine pottery vessels and on stamp and cylinder seals. From an extensive, multi-leveled analysis of these objects showing dance scenes Garfinkel concludes that community dancing was

the main instrument for creating and maintaining the emergent village communities of the Neolithic (after 12,000 BCE).

In this period it seems that the dance was the communal ritual play which dramatized a human understanding and sympathy with the seasonal progression. The long-term human adaptation to the diversity of ecological demands and opportunities was made possible largely through the creation and coordination of cultural memory (p. 81-2). The “main mechanism of this system” for creating and coordinating long-term cultural memory “was congregational ceremonies in which entire communities actively participated in dancing” (Garfinkel 2003: 96). Dance created a “communo-centric” situation (93) which, by bringing individuals together in time, space, with common decoration, physical posture, movement and rhythm, functioned to socialized individuals in a collective discipline “in a period with no police, army, or prisons” (80). The circle of the dance comes to share a common horizon with the circles of recurring seasonal economic activities (cf. 87-9). The dance of culture was no less a “celebration” of life as it was the preservation through ritual reproduction of the means to sustain life, the sum total of difficultly acquired knowledge and know-how—ecological, technical, moral, physical, psychological—required to keep the dance going.

That the dance keep going meant most of all that bodies continued to eat and reproduce, and for that to happen they also had to work, accomplish the very many necessary tasks which the post-Neolithic economic regimen had come to involve: gathering, planting, watering, weeding, harvesting, threshing, pounding, hunting, killing, cooking, weaving, tending flocks and herds, birthing young human and animal,

disposing of and tending the memory of the dead, defending territory, chopping down trees, curing skins, making, painting, and firing ceramics, smelting and working metals, preparing mud and thatch and stone for building supplies, and with these constructing cities and their ambitious temple centers, and so on. That the “earliest songs” were work-songs is an old musicological commonplace that has had supporters and detractors.¹⁶ But the evidence of early literature in Mesopotamia and Egypt (and China, as we will see) proves that singing did accompany work as well as provide a respite from it. And when we consider the rigors of the “daily grind” already in the Neolithic, we may be less inclined to dismiss with skepticism the thesis that human music has deep roots in the realities of work and labor.

For some five thousand years Neolithic village communities both created and expressed their collective or ethnic identities through the dance. While related to and interfacing with the economic regimen, it was also a dramatic or festive space apart, where energies were invested in symbolic activities, the making of masks and costumes, body painting, and of course the extravagant release of energies into the dance itself. In the fourth and third millennia the dance motif actually declined, a decline Garfinkel correlates with the rise of centralized, highly stratified state powers (75-84, 93-7). State formation is associated with the appearance of elite groups for whom art “was used as a tool for enhancing authority, political propaganda, and economic interests” (82). Corresponding with state development as well is the

¹⁶ E.g., Bücher 1899, dismissed by Sendrey 1974: 26; see also Nettl 1956: 62-3. The real problem is with the word “earliest,” very often a signpost for origin myths. After all, where does one draw the line? As with everything else human, music prehistory slides backwards on an unbroken continuum into paleoanthropology. In this context the “earliest songs” were much more likely to have been “courting” songs than work songs (that is, involved in mating, sexual display and competition). But then again, our ancestors have also been tool-makers for almost two million years. Sendrey’s (ibid.: 25-6) dismissal out of hand of Darwin’s thoughts on singing and sexual selection are as ill-informed as they are misguided; but arrogant disregard of Darwinian thinking pervades 20th century texts on the history of music.

emergence of writing technologies. As elite groups consolidated power over both productive and expressive arts for the purpose of group prestige and interests, a social bifurcation seems to have occurred between lower status makers or producers, on the one hand, and those, the elite, for whom things were made. The repertoire of cultural production becomes focused on powerful patrons, while those involved in production, by far the larger population of people, are subordinated to patronizing masters.

In line with this reasoning Garfinkel proposes that the banquet scene in the early states is the successor of the dancing scene of the Neolithic. In the banquet people eat and drink together, thus presenting, as in the dance, a positive interaction between people; but it also configures social hierarchy in a new way, with elites as partakers and audience of a large number of subordinate servers: herders, butchers, cooks, preparers of alcoholic drink, cup holders, waiters, dancers, and musicians. The “standard” of Ur, discussed and shown above, exemplifies this point perfectly. “There is no pretense of egalitarianism in these scenes: the king is depicted larger than the other, less significant participants” (ibid: 83). A concomitant development with the elite banquet, Garfinkel suggests, is the recasting of the dance as a “folk” genre, a “proper activity for the lower classes” (ibid). The working and dancing classes now largely overlapped, while elites enjoyed both the fruits of manual labor and spectacles of musical performance. Scenes in Egyptian Old Kingdom tombs (latter half of 3rd mill. BCE) portray the interactive role of music and dance in the lives of daily laborers. Harvest scenes show flutists playing in the fields, while their texts record what appear to be call and response songs. One reads: “Where is the one skilled at his job?”—“It is I!” Another variation runs: “Where is the hard-working man? Come to me!”—“It is I. I am dancing” (Manniche

1991: 17-8). Other scenes show groups of men dancing while grain is being taken to the granary (ibid.: 19).

In the modern American imagination it is Egypt where ancient world drudgery on behalf of the elites of an all-powerful state has found perhaps its most persuasive icon. The endless toiling of humble workers, under a merciless desert sun, to build by sweat, blood, and sinew, the monumental pyramids of divine Pharaohs, their masters—this image has attracted a large audience, in a populist era with a taste for history as recreated (or confabulated) moral spectacle.¹⁷ Behind the sway of this popular image, of course, lies the Biblical narrative's version of Egypt as the land of cruel servitude and forced labor (*Exodus* 1:8-14, 5:6-23, etc.). In Biblical terms, to come out of Egypt is to gain one's freedom, a glorious emancipation from slavery.¹⁸

But ancient Egyptian culture supported at least one artistic arena where the logic and ideology of social hierarchy was probed and subjected to a kind of critical gaze. This was in the "harper's songs," occasional pieces composed and sung for elite audiences, and which after the 18th Dynasty (16th-14th c. BCE) are to be found written on the richly decorated tombs of nobles. While effusive praise of the divine king may have prevailed on many or most occasions—"How great is the Lord of his city! He is

¹⁷ Historians of ancient Egypt paint a different picture of Egyptian labor conditions than our popular image nourished on the Bible. E.g., David 2003: 212-14, describes a work community in New Kingdom Deir el-Medina where rations included bread, fish, wicks, timber, charcoal, gypsum, oil, and jugs of beer; wages in goods were paid to workmen at the end of each month, men with families receiving more than bachelors; poor treatment and delayed pay could lead to strikes; workers worked two four-hour shifts with a break at noon, eight days on, two off, with other free days for holidays, festivals, etc. (Many daily workers in the world today should have it so good). Fuller accounts in David 1986 and Lesko 1994.

¹⁸ The thematic pairing of Egypt and slavery arises also in a contrasting configuration in the Old Testament: when Solomon dies his son Rehoboam succeeds him. Jeroboam, who had revolted and then fled to Egypt to escape Solomon, returns and tells Rehoboam that the peoples of the northern tribes will serve him only if he lightens the heavy yoke of labor Solomon had imposed on them to build his temple and city. Rehoboam responds: "My father made your yoke heavy, I shall make it heavier still! My father controlled you with the whip, but I shall apply a spiked lash!" Thus the issue of forced labor led to the political and religious division of the kingdom into north and south (*I Kings* 11:26-12:33).

exalted a thousand times over; other persons are small...He is a sunshade to help keep cool in summer...the mountain which blocks the storm in a time of raging sky” (Foster 2001: 95)—and serving the Pharaoh’s eternal bliss as a resurrected deity was the pious orthodoxy surrounding the pyramid culture, harpers’ songs suggest other orders of meaning in life, and draw different, more universal morals from life’s experience.

*One generation passes, another stays behind—
such has it been since the men of ancient times.
The gods of long ago rest in their pyramids,
and the great and blessed likewise lie buried in their tombs.
Yet those who built great mansions, their places are no more.
What has become of them all?
There is no return for them
to explain their present state of being,
To say how it is with them,
to gentle our hearts
until we hasten to the place where they have gone.
So, let your heart be strong,
let these things fade from your thoughts.
Look to yourself,
and follow your heart’s desire while you live. ...
Follow your heart’s desire and what you find good;
act on your own behalf while on earth!
And let not your heart be troubled—
that day of mourning for you must come;
And Osiris, the Weary-Hearted, will not hear our wailing,
weeping does not save the heart from the grave.
So spend your days joyfully
and do not be weary with living!
No man takes his things with him,
and none who go can come back again. (Foster 2001: 179-80)*

This was the harper's wisdom, using the charm of instrumental music and song as a medium to express doubts about the promised afterlife, pierce the pretenses of the powerful founded upon it,



Figure 9. Mural of female musicians in a Theban tomb (18th Dynasty)

and formulate a leveling moral on the theme of universal mortality. After all, the imagination of otherworldly bliss as painted in elite tombs focused on scenes of very this-worldly pleasures, of feasting, music and dance (as in Figure 9¹). The harper's wisdom of life's dear but fleeting pleasures flies in the face of the religious ideology of afterlife encoded in elite tombs in which they are depicted. So too, the lavish, erotic scenes of musicians remind the departed soul of life's joys to which "there is no return."

Old Testament texts also present strong links between music and the theatrical performance of sacred and political power. When king David's son and successor Solomon completes the first Temple in Jerusalem, the Ark of the Covenant, holding the two tablets of the Law given to Moses on Sinai, is borne into its new, magnificent sacred abode. Large numbers of sheep and oxen are sacrificed, and singers from the

¹ Lise Manniche 1991: 42 (the scene is from Theban Tomb no. 38 of Zeserkaresonb. 18th Dynasty.) Cf. also Manniche 1988 on the erotic associations and uses of the double oboe in Egypt.

Levites, the hereditary priestly tribe, provide music suiting the solemnity of the occasion:

“all the Levite singers, Asaph, Heman, Jeduthun,²⁰ their sons and their brothers, dressed in fine linen, holding cymbals (*mešiltayim*), harps (*nēbel*), and lyres (*kinnôr*), were standing to the east of the altar, and with them were one hundred and twenty priests who blew trumpets (*ḥašōšerâ*). The trumpeters and the singers joined in unison to praise and extol the Lord; and as the sound of the trumpets, cymbals, and other musical instruments, and the praise of the Lord, “For he is good, for His steadfast love is eternal,” grew louder, the House, the House of the Lord, was filled with a cloud. The priests could not stay and perform the service because of the cloud, for the glory of the Lord filled the House of God.” (*2 Chron.* 5:12-14; New JPS version)

Here at one of the most significant points in the Hebrew sacred history, when Yahweh first enters the Temple built for him, the entry is orchestrated by a grand musical welcoming, after which the Lord fills the house in a cloud. The divine epiphany is heralded, even effected, by sounds of music, and the cloud (of smoke from the sacrifices?) is combined with the overwhelming sonic exaltation of the Lord.

As lovely a text as this is, though, it is problematic as a source for *early* music history, since the *Chronicles* are a late composition, probably from the third century BCE—around three hundred years after Nebuchadnezzar’s armies sacked the Temple in 587. Its image of the original Temple liturgy is an idealization, since its source in the earlier histories (*1 Kings* 8:1-66) does not mention music on this occasion. But the idealized picture is not far out of step with the other evidence for religious musical

²⁰ The heads of the three hereditary lines responsible for liturgical music (cf. *1 Chron.* 25:1-31).

culture, both elsewhere in the Old Testament, from archaeology, and from the wider cultural patterns of the ancient Near East. Several of the Canaanite city-states, Hazor, Megiddo, and Ugarit for example, were renowned centers of musical learning in the 3rd-2nd millennia, exporting (slave) musicians and dancers to royal patrons in Mesopotamia, Egypt, and elsewhere.²¹

For as the preceding discussion has shown, from the Neolithic revolution onward, when settled human communities began to form around the cultus of an emerging agrarian ecology, collective ritual dance was of all-pervasive import for rituals of communal expression. By the end of the Neolithic (fourth millennium) the archaeological evidence for instruments, as well as excavated and received literary texts, inform us of a world of regional cultural diversity, to be sure, but one sharing a common theme of expressive arts of song and dance as major modes of divine worship and, connected with this, the display of hierarchical relations of social power and authority. With this background of pervasive musical culture in mind, the author of *Chronicles* in the Ptolemaic period was hardly being unrealistic in choosing to add music to Solomon's dedication of Yahweh's Temple. Music had been integrated with religion since long before the Temple was built in the tenth-ninth century BCE,²² and any large-scale cult center of its kind would be expected to cultivate ritual song and music as well.

The traditional economy described in the Old Testament calls for every seventh year to be a Sabbath from labor, debt, and agricultural production. At the end of seven periods of seven years, in the fiftieth year a great "release" (*děror*) was to be

²¹ Cf. Braun 2002: 67-188; *NGDMM* 13, s.v. "Jewish Music" II. Ancient Israel/Palestine, 29-37 (also by Braun)

²² Negev and Gibson 2001: 261.

proclaimed throughout the land. This release was the *yôbēl*, or “ram” (English “jubilee”), and it commenced on the Day of Atonement (tenth day of the seventh month) when “the horn sounded throughout the land.” Land is to lie fallow, returning to a wild state; property sold is to return to its previous owner; strangers and sojourners are to be sustained; it is a general time of reckoning, settling, and leveling of affairs (*Lev. 25:1-17*).²³ The “horn” (*šôpār*), announcing the sacred release from service, is the most frequently mentioned instrument in the Old Testament, and it has retained to this day an important place in Jewish liturgy.²⁴ In origin a signal-sounding instrument, it led the Israelites into the battles in which they conquered the Lord’s enemies. It was part of the arsenal of magical warfare by which Joshua’s armies destroyed the walls of ancient Jericho. The troops marched round the walls for six days, with seven priests carrying seven ram’s horns before the Ark. On the seventh day they marched round seven times, the priests sounded the horns and to this sound the people gave a mighty shout. The walls collapsed, they captured the city, and the troops “exterminated everything in the city with the sword: man and woman, young and old, ox and sheep and ass” (*Joshua 6:1-21*).

Thus did many Bronze Age warrior cultures—the Israelites of Canaan along with their contemporaries the sea-pirating Greeks, and like Akkadians, Babylonians, Kassites, Hurrians, and Assyrians before them—clash with Neolithic city cultures, plundering their carefully stored up treasures of animals, grains, and artful goods, leaving death in their wake. In conquest, however, conquerors tended to take up the

²³ Cf. Barton and Muddiman 2001: 107.

²⁴ Cf. Goonenough 1988: 81-115 on the uses and symbolism of the *šôpār* (*shofar*) in Greco-Roman times.

material culture and customs of those they conquered.²⁵ These included the musical cycle of liturgies, the “dance of agriculture” developed throughout the preceding millennia, that coordinated and regulated human labor in its appropriate seasons. The warrior’s dance of violent conquest, when the horn of battle had been the horn of plenty, became the orderly and stately dance of civic seasons (so it was in ideology at least).²⁶ But the wild goat horn remained the signal announcing the festival year of rest from the strict rigors of agricultural economy, with its rigid controls on land use and ownership, its burdens of taxes and tributes; its complex vertical layers of mastery and servitude; and of course the daily grind of work. From this, as always, music was a release, whether at the fifty-year jubilee enjoyed, at most, once in a lifetime, or at more regular, bi-weekly intervals:

²⁵ This characterization of a general pattern in prehistory and early history should be distinguished from the old Johann Bachofen/Erich Neumann theory of an “archaic matriarchy” of the early planters. That idealization was an oversimplified romantic construct based on overlapping oppositions of matriarchal/patriarchal, settled/nomadic, “primitive”/“historic.” By the end of the Neolithic the “economy” of violence, plunder and warfare was one exploited by settled and itinerant alike. But this does not vitiate the point that in the second and first millennia many itinerant warrior societies took possession, and thereby became heir to, the achievements of Neolithic / Bronze Age urban and agrarian cultures.

On the issue of gender and power, there was probably as much geographical variation in how gender mapped onto the structures of power and prestige then as there has always been. Though often going together, I doubt that we should simply equate patriarchal institutions and misogyny. Many anthropologists have discovered intriguing and unexpected disjunctures between explicit gender ideology and the real day-to-day workings of power and authority; “power” also comes in many forms, and is hardly ever total or continuous. An intensely rewarding ethological study, that bears comparative implications for human social diversity, is Hans Kummer’s (1995) brilliant and humane research “ethography” of the different baboon species of East Africa and coastal south Arabia. These “species” differ less in genetics (they form a population continuum with “hybrids” at the border zones) than in certain outward physical characteristics and, most notably, social structure. Among anubis baboons of the savanna, females remain in birth groups and form strong group bonds while males leave, mating is more ad lib and opportunistic for both sexes, and no stable pair bonds form; while among hamadryas baboons of the desert, females leave their birth groups, males remain, strong and stable pair bonds form, and males “herd” harems of many females (cf. Kummer 1995: 12-20, 313-18, et passim). In current ethological terms these constitute “species” differences; but we would do better to widen our culture concept and describe them as *cultural* differences.

²⁶ Theodor Gaster’s classic study, *Thespis: ritual, myth, and drama in the ancient Near East* (1961), rewards rereading within a pronounced musicological framework.

*“Raise a song, sound the drum,
the sweet lyre with the harp.
Blow the trumpet at the new moon,
at the full moon, on our feast day.
For it is a statute for Israel,
an ordinance of the God of Jacob.
He made it a decree in Joseph,
when he went out over the land of Egypt.”* (Psalms 81:2-5)

After a generation of exile in Babylon, in the second half of the sixth century BCE Persian kings began to allow groups of Jews to return to Israel. They set about rebuilding the Temple of Yahweh, and over the course of the fifth century some semblance of pre-exilic institutions and the material presence of the city of Jerusalem were restored. Living under Persian rule until 331, when Alexander the Great conquered the Near Eastern world as far as north India, foreign sovereignty over Jerusalem and Judaea then passed to the Ptolemies. In both situations Jews were allowed to live in relative autonomy and according to their own laws and customs, just as they were also after 200, under Seleucid rule. But under Antiochus IV (reg. 175-164 BCE) factions advocating hellenization in Jerusalem precipitated conflict in the city that eventually led the king to lay it siege, prohibit Jewish practices, and desecrate the Temple, turning it into a sanctuary of Zeus (168 BCE). Resistance to Antiochus' persecutions turned into the four year Maccabean War, ending when Antiochus died on campaign in the east. Afterward, the Jews were again granted their religious freedom.²⁷

²⁷ Cf. Habicht 1989: 346-50

It was in this turbulent period that the book of *Daniel* was composed. Set four hundred years earlier in the time of the Babylonian exile, it relates pious stories of Jewish faithfulness to tradition under forceful pressure to adopt foreign ways and to worship other gods. In one story, king Nebuchadnezzar builds a colossal golden statue in Babylon and commands all peoples to gather and worship the idol. Here music becomes emblematic of the abominable foreign practices to which Jews are being forced to submit:

“You are commanded, o peoples, nations, and languages, that when you hear the sound of the horn, pipe, lyre, trigon, harp, drum, and entire musical ensemble, you are to fall down and worship the golden statue that King Nebuchadnezzar has set up. Whoever does not fall down and worship shall immediately be thrown into a furnace of blazing fire.” (*Dan.* 3.4; *NRV*)

This grand orchestral suite of instruments, repeated verbatim—“like a threatening *ostinato*”²⁸—three more times in following verses, are an important key to the strong contemporary resonances of the *Daniel* narratives. For in contrast to the idealizing ritual orchestra of Solomon’s Temple dedication described in *Chronicles*, these instruments and their names are a mixture of Aramaic, Hebrew, and Greek, and most of them point to Greek instruments. The “horn” is Aramaic *qarnā*’ (Hebrew *qeren*); the “pipe,” *mašrôqîṭâ*, suggests the Greek *syrinx*; *qayṭerôs* “lyre” is from Greek *kithara*; *sabbekā*’ “angular harp” is Greek *sambuka*; *pesantērîn* “angular harp(?)” is from *psaltêrion*; and *sûmpōneyâ* is Greek *symphonia* (“sounding together”). The Babel of this instrumental ensemble is intensified by the fact that of these “Greek” names at

²⁸ Braun 2002: 35

least one, *sambuka*, was originally of Near Eastern extraction and had entered Greek as a borrowing in earlier centuries of musical cross-fertilization.²⁹

Thus the scene of Nebuchadnezzar's idolatrous orchestra, set in the legendary exilic past, aptly reflects the vigorously multiethnic musical syncretism of the later Hellenistic period. Urban culture at this time, all round the Mediterranean, was characterized by eclectic music practices employed in a wide variety of social functions, including sacred cult, secular theater and spectacle, public pomp and private entertainment. Palestine was no different in exhibiting this "rich, syncretistic style of music" (Braun 2001: 191).³⁰ As in politics and religious practice, traditionally minded Jews felt under threat from the cultural hegemony of Greek polytheism, exemplified in *Daniel* by the abominable worship of golden idols to the sounds of a Hellenistic orchestra.

But if Jewish culture was perceived as under threat from Greek assimilation, the Greeks themselves were in the throes of a final desperate battle to retain some semblance of their prized political freedom. In the same years of the Maccabean War, while an anonymous writer was penning *Daniel*, one by one the regions of Greece were forced to submit to Roman power, after the latter won a decisive victory in Macedon that subjected it and the rest of Greece to their might. Hundreds of leading men in Aetolia were put to death. Seventy towns in Epirus, in western Greece, were granted by the senate to the army for plunder—a standard Roman mode of military compensation—and a hundred and fifty thousand people were sold into slavery. A thousand leading Achaeans suspected of anti-Roman sentiments were taken as hostage

²⁹ Cf. Braun 2001: 32-5, for discussion of this passage and the problems of identifying the instruments.

³⁰ Cf. further *ibid*: 189-320.

to Rome, among them the Arcadian historian Polybius. In twenty years time the Romans would sack, burn, and plunder the opulent city of Corinth, and all Greece would be under their effective dominion.³¹ In a hundred years Jerusalem too would come under Roman occupation, when Pompey took the city in 63 BCE—but not before the hellenizing dynasty of Hasmonean kings had turned Judaea, for the last time in antiquity, into a powerful and influential kingdom in its own right.³²

The Romans, whose real art was efficient warfare, were not particularly original when it came to music.³³ What they had they took from Italian Greeks and Etruscans—not to mention Jews, Anatolians, Phoenicians, Egyptians, and others—and their musical culture was adopted, adapted, or imported from the many peoples they conquered (usually with the peoples themselves, who poured into Italy as war-slaves in the 2nd-1st cent. BCE). But as Roman legions put conquered Greeks to the sword or on the slave-dealer's auction block, and the author of *Daniel* was lamenting Hellenistic music culture under the allegory of Babylonian idolatry, an Arcadian in Roman exile remembered fondly his musical mountain home. It is there the next chapter will begin.

³¹ Cf. Derow 1989.

³² Cf. Rajak 1994.

³³ Latinists may object to this statement, which admittedly sounds the old stereotype of Romans as passive cultural borrowers. It is true that such borrowing is better regarded as a creative—or at least active—process of acquisition and adaptation (cf. Feeney 1998: 1-20). By way of placating authorities for my simplifying narrative that casts Romans as (only) imperialistic conquerors, I will grant this: they did take up and further many technological features of the musical cultures they borrowed from. For example, the technically impressive *hydraulos* (“water-organ”) became a fixture in the circuses and theaters; the Roman legacy here would eventually lead to medieval church organs. Perhaps among the most interesting examples of the Roman technological bent is the theater sound-amplifying schemes discussed by Vitruvius, which involved mounting an array (ideally a tuned array) of bronze vessels in the banks of seats in a theater, the theory being that they would resonate with, and thus amplify, the songs being performed (cf. Vitruvius *de architectura* 5.4-5; and Thorp 1991: 62-5).

Hermes meets Tortoise at the Threshold

*Laugh in the sunshine, sing,
cry in the dark,
fly through the night*

Birdsong, The Grateful Dead

Arcadia, the north central portion of Greece's Peloponnese, is only about half as large as the state of New Jersey, or a tenth the size of Ireland. But unlike the former and even more so than the latter, it is a terrain dominated by breathtaking mountains, rugged volcanic uplifts (recent in geological terms) rising sharply to as high as Mt. Kyllene's 2376 meters (7795 feet) from sea level only a few miles away. To most Greeks Arcadia was a marginal and mysterious interior, a highlands whose people, though Greek, were pastoral hill folk living slow traditional lives in small village society. Urbanization of sorts only came to Arcadia in the 360s BCE with the founding of the city of Megalopolis in the south. The Arcadian dialect had peculiar affinities with the Greek spoken on Cyprus, strongly suggesting that the Arcadians were pre-Dorian descendents of the Bronze Age Mycenaeans (ca. 1400-1100 BCE). Named for Arkas, the "bear," a legendary king as well as the constellation of Ursa Minor, Arcadia was a land of "mountain[s] covered over with forest," and "deep-shadowed hollows of rock" where "pleasant odor[s] rolled through heavenly hill[s] and many long-legged flocks grazed the grass," as it appears to Apollo in the *Homeric hymn to Hermes* (ll. 227-32).

Even long after literacy and political developments had fundamentally altered the socio-cultural values and practices in many parts of Greece, Arcadia remained a

place where oral song still formed the backbone of early pedagogy and public culture.¹ In the second century BCE, while Roman legions were busy taking over the Mediterranean world, Arcadians were still renowned for their old and rigorous musical culture, as the historian Polybius, himself a native of Megalopolis, tells us. Explaining why the people of Cynaetha, whom the Aetolians massacred, burning their city, in 220 BCE, had fallen into such a state of lawlessness, he attributes their civil chaos to the fact that they had abandoned the ancient Arcadian musical training:

To practice music, that is real music, for most people is advantageous, but to the Arcadians it's a necessity. For one should not hold, as Ephorus says in the proem to his history, tossing off words not at all concordant with himself, that music was introduced to humankind for purposes of deception (*apatê*) and sorcery (*goêteia*). Neither should one think that the ancient Cretans and Lacedaemonians replaced the *salpinx* [the long pipe] with the *aulos*² and rhythm for warfare without reason; nor was it without reason that the first Arcadians used music throughout the whole of their social constitution (*politeia*) to so great an extent that not only boys but also young men up to the age of thirty were required to make a constant habit of it (*sunthropos*), while in other matters of life they were most austere. As is well known to all, the Arcadians are nearly alone in that, first, their sons from infancy are taught to sing the traditional tunes

¹ Robb 1994: 253, in his study of the advance of literacy in ancient Greece, concludes that literacy did not come to predominate in law or education until the 4th century, and even this assertion must be understood against a backdrop of the continuing importance of practices of oral/musical acculturation. In areas like Arcadia that were more culturally conservative than, say, Athens, preliterate patterns of social life can be expected to have continued much later than Robb's 4th century turning point. Cf. also Havelock 1982; Ford 2002 for some of the literate transformations that led to literary criticism.

² The *aulos*, or double oboe, is not emphasized in this chapter, not however for any marginal status in Greek music culture. On the contrary, it was used throughout Greece and in a very wide range of social contexts, including funerals (it was the instrument for *elegos* "elegy"), feasts, music festivals and contests, etc. Especially of note are the 7th-cent. BCE fragments of segmented bone "flutes" excavated at the Spartan Artemis Orthia sanctuary, two of them etched with inscriptions, "to Orthia" and "Achradatos" (cf. Dawkins 1929: 236, pl. clxi-xii). On the contentious debate in late classical Athens on the status of the *aulos* and its music, cf. Martin 2003.

(*nomous*) of the hymns and paeans in which each group, according to region, praise in song (*hymnousi*) the local heroes and gods. After this they learn the songs (*nomous*) of Philoxenos and Timotheos,³ and every year with great rivalry for honor (*philotimia*) choruses sing in the theaters to the accompaniment of the Dionysian *aulos*-players, the boys in the boy's contest (*agôn*), the young men in that for the men. And so also through their whole life, in conducting their social gatherings they do not bring in outside singers but do this for themselves, calling on one another to sing in turns. And while for other areas of learning they do not consider it shameful to deny knowing anything about them, for song neither can they deny it, since they all learn perforce, nor admitting that they know it can they refuse to perform, for this they consider very shameful. The young men also practice military marching songs to the *aulos*, and they exert great efforts on dances, with common concern and cost, when every year they put on performances for the citizens in the theaters. (Polybius 4.20.5-12)

This intensive musical culture, encompassing every facet of life and each phase of the life-cycle, had been the common pattern throughout Greece going back for many centuries. Music (conceived as multi-media performance, including dance) was the basis of educational training, instilling both physical and ethical habits.⁴ It was also the communal focus for social, political, and religious gatherings.⁵ Song and dance were so central to traditional notions of upbringing and community that Plato in the *Laws*

³ Both fifth/fourth-century composers, representatives of the "New Music;" as Barker 1984: 285 notes, the irony here is that "daring and iconoclastic innovators of the fifth century have thus become the children's classics of the second, even in the most conservative of Greek societies."

⁴ In the *Laws* (809e) Plato sets it down for his ideally conservative and prosperous city that boys of 10 years will study written literature for three years, then at 13 devote another 3 years to learning to play the lyre. Further, all song and dance should be consecrated to gods and connected to festival worship (799a-b), and once the proper songs and dances have been allocated to their appropriate festivals all innovations should be avoided at all costs (816c-d).

⁵ A fine recent study is Lonsdale 1993, who opens with Polybius' notable passage.

(654a-b) defined the educated person as one who had been trained as part of a chorus.⁶

These practices, Polybius reasons, were introduced of old to counteract the endless hard work and austerity in the lives of Arcadians, hardships compounded by a cold and gloomy climate. Thus to soften and temper the ruggedness of nature the early Arcadians encouraged festivals and sacrifices, with dances of young girls and boys, to make the national spirit more gentle and mild. (This is why the Cynaetheans, Polybius reasons, having ceased to cultivate the traditional musical customs, had reverted to the natural savagery which the Arcadian landscape induces⁷).

The *Homeric hymn to Hermes* (hereafter *Hermes*), at 580 lines the longest of the surviving archaic Greek hymns (*hymnos*),⁸ celebrates the newborn god of Arcadia's Mt. Kyllene. This mountain in northeast Arcadia was known also as the birthplace of the Peleïades (modern Pleiades), the seven daughters of the Titan Atlas by Pleione and the star-cluster of the same name.⁹ One of these seven is the mountain nymph Maia, and Hermes was her son by Zeus. As a dominant feature of the landscape Kyllene was a sacred mountain (*oros*).¹⁰ Touching the stars as they turned in their seasons, it was a

⁶ “For us the uneducated will be one who is ‘un-chorused,’ and the educated, one who has been sufficiently ‘chorused’” (ὁ μὲν ἀπαιδευτος ἀχόρευτος ἡμῖν ἔσται, τὸν δὲ πεπαιδευμένον ἱκανῶς κεχορευκότα); a choral performance is then defined as a combination of song and dance (χορεία γὰρ μὴν ὄρχησις τε καὶ ᾠδή τὸ σύνολόν ἐστιν).

⁷ Behind Polybius' theory of geographical determinism as the source of musical customs, there is some good sense in his account. He says the Cynaetheans had become overly fixated on internal political rivalries and partisan wrangling, which finally led to the worst of crimes. Musical contest, however, functions in part to vent and subvert aggressive tendencies into nonviolent competitive display. Take these ritual outlets away and one probable result is civil strife, war, and chaos. A similar concomitant pattern of minimal arts or public ritual and endemic violence and warfare seems to hold among the Dani tribe of Irian Jaya on New Guinea.

⁸ On the genre of *hymnos* cf. Janko 1981; Clay 1989; Nagy 1990b: 54-6.

⁹ Cf. Apollodorus 3.10.1; Simonides fr. 555; Hesiod *Astronomy* fr. 1.

¹⁰ On the Greek conceptions of a mountain (*oros*) cf. Buxton 1992; an *oros* was a height outside inhabited and cultivated space of the plains; it was the pasture, a source of raw materials (like stone and timber), and of course the abode of gods, spirits, and the “wild” where one goes to hunt. The *oros* is often the locus of meetings and encounters, especially numinous encounters with gods, and thus also of metamorphoses. For all these reasons and more the *oros* was also the space for male initiation rites, trials, training, and tests; points that will be important for understanding *Hermes*. There is also the

cardinal point in a sacred geography which included in the wider Greek world Mt. Erymanthos to the west, Sparta's Mt. Taygetos to the south, Delphi's Mt. Parnassus north across the Corinthian Gulf, and towering far to the north, in Thessaly's Pieria, Olympus (2917 meters), home of all the gods and especially of Father Zeus "who thunders on high" (*hupsibremetês*). Indeed, from certain vantages several peaks at once might define the visible horizon. For instance, from central Boeotia (e.g. in the region of Onchestos where the "old man" sees Hermes stealing Apollo's cattle, *Hermes* 86-92) looking to the northwest one might glimpse far off Parnassus, then, scanning southward, the nearer and shorter Helicon, then distant Kyllene, then finally the nearer and shorter Kithaeron to the southwest.¹¹

According to the myth told in *Hermes* it is from this sacred, mountainous center of Arcadia, a numinous height that touches the heavens, that the *chelys* or tortoiseshell-lyre comes, a preeminent instrument in early Greek music culture. Even the tortoise from whose shell the lyre was made was linked to the landscape: a peak nearby Kyllene was known as Chelydorea, the Turtle's Shell.¹² Perhaps the hill was shaped like a turtle's back (a likely enough geological formation). We can only surmise that the hills were also good hunting grounds for the tortoises needed to make lyres.¹³ In Pausanias' time (second century CE), Arcadia's Soron grove was home to tortoises of

potential pun between *oros* (neuter) "hill" and *oros* (masc.) "boundary, landmark," (possibly not unrelated anyway), relevant with respect to Hermes, who is the boundary marker personified (cf. Burkert 1985: 156-59).

¹¹ So Sansone 1975: 117.

¹² Pausanias 8.17.5; the meaning Pausanias suggests for *-dorea*, from *derein* "to skin," is possible but not necessary: *LSJ* gives both *dora* and *deros* as variants for "skin, hide," the more common form being *derma*, which Aristophanes uses in the sense of tortoise-shell (e.g. *Ar. Wasps* 429). The verbal sense of "skin a hide" is clearly derivative in any case.

¹³ It is worth noting here that in scientific nomenclature, a "tortoise" is any terrestrial species of the family *Testudineae*, "turtles" are saltwater species, while "terrapin" is commonly reserved for freshwater species (or specific species associated with that name). Though personally more fond of "turtle," I have decided to use "tortoise" throughout the discussion of *Hermes*, since lyres were usually made from terrestrial species.

great size (Paus. 8.54.9), and Mt. Partheneios just to the south was known for its lyre tortoises, but “the men on the mountain are always afraid to take them, and do not allow strangers to catch them, because they hold them to be sacred to Pan” (Paus. 8.5.7). At the temple of Apollo Epikourios (“Protector”) in Bassai, southwest Arcadia, archaeologists have found tortoise shells, pierced with holes for the lyre, as also in excavations at Argos.¹⁴ The relation between mountain and tortoise was apparently reciprocal: a fragment of Empedocles calls turtles “stone-backed” (*lithorinos*, fr. 233)—they carried the element of earth (*chthôn*) on their backs.¹⁵

Hermes is a major document for early Greek musical culture, as well as our earliest, fullest poetic portrait of the intriguing and enigmatic god Hermes. Thanks to critical attention in the last thirty years *Hermes* and its anonymous composer have been rescued somewhat from the verdict of inept and slipshod storytelling that previous generations of classical scholars had passed on them.¹⁶ From a folkloric point of view Lewis Hyde (1998) has read *Hermes* as a consummate trickster tale, striking thematic chords concerning chance, creation, clever intelligence and the origins of culture that recur in trickster mythologies worldwide. Like other tricksters, Hermes creates and establishes boundaries by testing and probing limits. Simply doing what he wants he trespasses on other’s domains, and in the resulting conflict new borders are negotiated, new categories formulated. The trickster is a culture hero, a primordial and amoral being who by trial and error, theft and bungling, brings into existence the conditions

¹⁴ Cf. West 1992: 56 n. 34; Phaklaris 1977; Courbin *BCH* Supp. 6 (1980) 93-114;

¹⁵ Perhaps just coincidence, but the same line pairs turtles with “triton-shells” (*kêrukēs*), another meaning of *kêruks* “herald, messenger,” Hermes’ function (cf. Hes. *WD* 80, *Theo.* 939, etc.). In any case, the triton or conch was probably known as the “herald” for its use as a sound-signal instrument.

¹⁶ See Van Nortwick 1975; Kaimio 1974; Janko 1981; Shelmerdine 1984; Clay 1989.95-151 (who also charts the text’s critical history); Hyde 1998.

and the instruments of human and animal life. This is certainly true of Hermes in the hymn, who invents the *chelys*-lyre and its music, institutes the Olympian fire sacrifice, and establishes deeds of barter and exchange.¹⁷

Jenny Strauss Clay's analysis (1989), still the most extensive and persuasive overall, has established that the narrative events in *Hermes*, when viewed within the wider conceptual logic of the Olympian system of divinities, result in a final harmonious stabilization of that system. As the last born of the fully divine Olympians (Dionysos, born after him, is half mortal; cf. Hes. *Th.* 938-39), Hermes' incorporation into the order of gods completes the trajectory of cosmogony begun with Chaos and Gaia at the beginning of time. *Hermes* reflects this mythological scheme in a powerful way when it has Hermes, at the critical denouement of the narrative, sing a Hesiodic theogony and cosmogony to the music of his homemade lyre, a song that bewitches its hearer Apollo and causes him to put aside his anger at his thieving newborn brother. "The birth of *epos*, then, is coeval with Hermes' theogony" (Clay 1989: 139). Thus, as Susan Shelmerdine has rightly argued, the hymn's main theme is the power of music and song; as an origin myth for the music of the lyre the hymn is deeply self-reflexive, in effect "celebrating its own origins."¹⁸

I believe we can take this further and say that *Hermes* is an origin myth for the archaic *aoidos*, the oral singer in whose mind, actions and voice the traditional oral lore of the Greeks was preserved and reproduced in ritual performance. As such, the hymn is a veritable wasp in amber, for it preserves themes and an esoteric view of the singer's craft which are deeply traditional, going back to common Indo-European

¹⁷ On Hermes as trickster also Doty 1994 is an important synthesis of scattered myth materials.

¹⁸ Shelmerdine 1984: 202, 208.

myths attested in India and in later Celtic and Germanic traditions.¹⁹ It reflects the Indo-European singer's view of the world—as opposed to the king's or the warrior-hero's—that what makes the world is song, the singer's secret knowledge of formulaic poetic language and musical persuasion, and the cultural economy of praise and wealth exchange in which these are operative. By stealing Apollo's cattle, then gifting to him the *chelys*-lyre in “exchange” for them, Hermes the newborn singer dupes his older brother—the owner of wealth and the warrior-hero, in Greek the *ephēbos* or mature martial male, the “second function” in Georges Dumézil's tripartite scheme of Indo-European ideology²⁰—into giving away his cattle for a song.²¹ In the words of the hymn, the myth's theme can be abbreviated to a line: “finding tortoise there [Hermes] gained endless bounty” (*entha chelun heurôn ektêsato murion olbon*, 24). Unpacking this idea—the transformation of a mountain tortoise into a musical source of endless wealth—is what the anonymous composer of the *hymn to Hermes* seems to concentrate on throughout his narrative, from the birth of Hermes to his final reconciliation with Apollo.

Clay's analysis, a close literary reading in a basically structuralist framework, does a good job of making sense of the entire narrative sweep of *Hermes* within the wider conceptual system of early Greek mythology and theology. Hermes, in this symbolic system, is the embodiment of exchange and mediation, as well as the principle of motion across and through the various boundaries—vertical, horizontal, existential, spatial, temporal, social, somatic, etc.—that define the cosmos. Without

¹⁹ So too Nagy 1990b: 59-60.

²⁰ Cf. Hermes' comparison of Apollo and himself; while he is a babe born yesterday, Apollo “has the tender bloom of glory-loving youth (*philokudeos hêbê*)” (375-6).

²¹ Clay 1989.145 aptly characterizes the ironic situation at the hymn's critical exchange: “the cows were first stolen, and Hermes retained them in his control until he “traded” them for the lyre.”

disputing this abstract level of understanding, I believe we have sufficient evidence to enable a reading of the hymn's mythic narrative that comes closer to referential levels more grounded in actual practice, ritual, and experience.

Accordingly, I will argue that the hymn operates on at least three other levels than the mythical. First it articulates a sacred geography and ritual calendar of ancient mainland Greece. This dimension can be understood as a refraction in mythic language of the symbolism of space and time that provided the framework for the pan-Hellenic cultural economy. Then there are two other dimensions of experience, one general and one more specialized, that the *Hermes* narrative refracts into mythical terms. The first is the experience and the ritual elaboration of the archaic Greek male life-cycle, punctuated as it was by a course of difficult, confusing, and transformative initiation trials and rites of passage. Music was a key element in this ritual upbringing, as the passage above from Polybius attests. Finally, the more "specialized" level of reference in the hymn is an insider or esoteric plane of meaning that articulates the viewpoint, even as it aims at an audience, of skilled singers, *oidoi*, those who participated and competed in the musical contests all round Greece, and especially at such pan-Hellenic festivals as Delphi and Olympia. It was the itinerant specialists in music and song who most of all understood from the inside the fundamental antagonism between Hermes, the god of being "on the road" (cf. his epithet *enodios*²²), and Apollo, the lord of settled sanctuaries, powerful priesthoods, civic cult, and the patron of musical contests where

²² Cf. Theocritus *Idylls* 25.4; *enodios* is also used of other roadway figures, Hecate, Persephone, and even alone as an otherwise unnamed "Spirit of the Road" (*Daimon Enodia*). (Cp. also *Prometheus Bound* 487, "symbols [perceived] on the way" (*enodioi sumboloi*) in the context of Prometheus' description of his invention of all human arts including divination; also interesting is the epic simile of the wasps (*Il.* 16.259-65) "on the road" (*einodioi*) which boys always "goad" (*kertomeontes*), and which if a "wayfarer" (*oditês*) happens to disturb *on accident* they will fiercely defend themselves and their offspring.)

wealth and prestige are to be gained through virtuoso performance.²³ At its upper or inner levels of significance, then, the *Homeric hymn to Hermes* is a song-text that “speaks to those who know.” It is, like Hesiod’s “parable” of the hawk and nightingale in the *Works and Days* (202-11), an extended riddling *ainos*²⁴ on the life and times of the *aidos*.

Singers, strangers, and beggars

Like Hermes, the archaic *aidos* was a liminal figure, in Victor Turner’s sense, someone who stands outside, or “betwixt and between,” the normal categories of rank, status, and power that articulate a social system.²⁵ But liminal *figures* are even more paradoxical than those who may be in states of *temporary* liminality when, for example, they are undergoing a rite of passage, in as much as they are more integrally and fundamentally outsiders; they systematically stand outside the system, so to speak. The Greeks often expressed this special marginal status for the *aidos* in terms of “hospitality” (*xenia*). The *aidos* was a *xenos*, at once a “stranger” and a “guest,” a position which made singers simultaneously dependent upon and a beneficiary of their host’s or patron’s hospitality and goodwill.²⁶ This position of subordination, however,

²³ Cf. Hermes’ ironic comment in Aristophanes *Wealth* 1162-3: “For Wealth nothing is more profitable than to put on music and athletic contests.”

²⁴ On the meanings of *ainos* cf. Nagy 1999: 22-52, 1990c (s.v. *ainos* in Index of Greek Words); Ford 2002.

²⁵ See Turner 1974: 52-3.

²⁶ Cf. Pindar *Nemean* 7.61, addressing his patron concerning the song-singer-patron relationship, “I am a guest-friend” (*xeinios eimi*), and comments at Nagy 1990c: 147; also Benveniste 1973: 278 for the reconstructed Indo-European inheritance of *xenia*, foreign-guest-friendship. Note that Benveniste discusses the social category of the *xenos* “stranger” in the same context as that of *doulos* “slave”; each is structurally marginal in the social layout, whether vertical or horizontal, and the two are liable to interchange, foreigners (e.g., war-captives) being a principle source of slaves in the ancient world even

brought with it a freedom and privileged status as well, one in which the singer might, within bounds (defined by the host's *philoxenia*, "love of guests, hospitality" and patience for an *aoidos*' liberties), voice social and cultural commentary, criticism, observation, even veiled (or not so veiled) blame and rebuke, usually within a ground-level register of thanks, praise, panegyric, and other pious and well-meaning utterance. But like Hesiod's nightingale (*aêdôn*), the loose-tongued singer (*aoidos*)—no matter how beautifully he sings—is always liable to the power of the stronger (figured in parable by the sharp-taloned hawk). The art of the musical *xenos* is one of considerable circumspection, swift thinking, and tact.²⁷

Hermes shows many signs of Hermes' marginal, even underclass status. He is a concealed, bastard child of Zeus (6-9). He lives in a highland mountain cave with his mother who "shuns the gathering of the gods" (5-6). He has associations with darkness, night, and the moon. He is a thief, a liar, and a breaker of oaths. He deals in death, slaughtering, butchering, and the tending of fires. He is servile, in other words, a servility further marked by his dealing with handicrafts and manufacture (the lyre, the panpipes). At the hymn's end, the status and divine honors he achieves deal with

as wandering strangers—"outsiders," "outlaws," and "wretches" (cf. OE *wræcca* "exile, wanderer")—would inevitably enter into any social system, at least initially, at the bottom and entirely at the mercy of local authority. Note also Hesiod's description of good kings as "those who render straight judgments for/upon **foreigners and natives**" (*hoi de dikas xeinoisi kai endêmoisi didousin // itheias*, *WD* 225-6), where the *distinction* between the two social categories hinges on place of origin, while their collocation emphasizes their *equivalence* with respect to subordination beneath the jural powers of the king (*basileus*).

²⁷ Among many other works, Segal 1994 has many acute observations on the *Odyssey*'s representation of the *aoidos* and related figures (like beggars).

commerce, exchange, trade, and herd tending and breeding. Hermes is in every regard a working-class figure.²⁸

Along the same lines early *epos* consistently connects the *aoidos* with other sorts of humble (non-elite) and specialized productive labor.²⁹ In *Works and Days* Hesiod asserts that there are two forms of strife (*eris*) on earth, one destructive, the other productive. The latter, born of dark Night (*nux erebenne*), which Zeus rooted in the earth, is good because it “rouses even the helpless to work; he desires to work when he sees another, a rich man who speeds to plow and plant and order well his house; neighbor vies with neighbor hastening toward wealth. This *Eris* is good for mortals; potter contends with potter and craftsman with craftsman, beggar vies with beggar and singer with singer” (*Th.* 20-26). Similarly in the *Odyssey*, the swineherd Eumaeus lists among the *demioergoi*, “common workers, craftsmen,” whom one might summon as a foreign-guest (*xeinos*), a seer (*mantis*), a healer of ills, a carpenter, or an “inspired singer who delights by singing” (*Od.* 17.382-85). Indeed, the thrust of Eumaeus’ speech to one of the unruly suitors is that the stranger who has come to the hero’s halls with him (the disguised Odysseus) is not a beggar but one of these *useful* workmen. The collocation of begging and singing in both the *Odyssey* and Hesiod suggests, however, that to some at least the distinction was a fine one, and an *aoidos*’ worth was probably not always taken for granted; he would have to prove his skill, charm his audience, win their acceptance and admiration.³⁰ And just as in Hesiod singers are

²⁸ Cp. Aristophanes *Wealth* 1100-1170, which plays with Hermes’ many epithets and functions—herald, luck god of shopkeepers, prince of thieves, opportunist, deserter, gatekeeper, businessman, schemer, guide, patron of games—ending at last with servant (*diakonikos*).

²⁹ Cf. Segal 1994: 142-63.

³⁰ In the pseudo-Herodotean life of Homer, the blind singer Melesigenes (Homer), having gained fame in the men’s hall, appealed in the assembly for public support; one of the councilmen opposed him though, arguing that if the public provided support for *homeroi* (supposedly “blind-men” in the local Cymeian

paired with beggars, and elsewhere singers are strangers, so too strangers and beggars (*xeinoi te ptôchoi te*) are frequently mentioned in the same breath.³¹ The *aoidos* thus occupied a ragbag social position, an unknown outlander whose occupation could seem like a kind of begging and who was treated in accordance with traditional conventions of hospitality (*xenia*).

Song vs. speech

Though early Greek distinguished between song (*aoidê*) and speech (*muthos*), the voiced word (*epos*, pl. *epea*) was inherently musical even in speech, because Greek had a tone- or pitch-based accent as well as an audible pattern of long and short syllables providing the rhythm.³² This point renders somewhat meaningless the claim, encountered in various forms (and at any rate dubious on other grounds) that the oral formulaic epic hexameters were “recited not sung” (so Comotti 1989: 14). If recited means little or no marked, and felt, difference between everyday speech, this is certainly incorrect.³³ Though Nagy also uses *recitative* to describe the performance of hexameter, elegiacs, and iambic trimeter, he clearly defines this as an absence or reduction in melody (from the Greek’s point of view, but even more so from our own melodic preconceptions about song), while still formally and functionally distinct from

dialect), there would soon be a large and useless throng on public subsidy. Singing and outright begging are thus combined in this origin myth for the name Homer.

³¹ As noted by Segal 1994: 150; cf. *Od.* 6.208, 14.58, 17.10-11, 18.106, 21.292.

³² Crucial discussion with references in Nagy 1990c: 17-51.

³³ Thus the famous remark at *Ar. Poetics* 1449a27-28 that the epic hexameter differs from the *tonality* of speech (*lektikê harmonia*); critics, even noting the specifically musical phrasing, have weakened this testimony by interpreting it as referring only to the *meter* and *rhythm* of speech. Nagy (1990c: 36) does the same, though it would strengthen his specific argument—that the medium of epic is able to imitate songs—not to make this unnecessary reduction.

everyday speech by rhythmic stylization and patterning of pitch (and, we should add, performance context) (1990b: 20-1). As becomes clear in his discussion, poetry, derived from song, is even *further* removed from speech, in that it is specialized by a (conscious and artistic) reduction of features that distinguish song from speech (ibid.: 45).³⁴

An operatic recitative need not be our only, or even best, comparison; American talking blues fits the description as well. When Woody Guthrie performed his talking blues he was still “singing,” and any ethnomusicologist would describe it as such. Many critics of the blues tradition have noted its deceptive naturalness, its apparently artless expression of emotions via the voice. But this is an illusion, consummate craft masquerading as spontaneous utterance of intensely emotional speech. Any toddler can mime the melodic ups and downs of “Twinkle, Twinkle Little Star,” but only a very few can pull off the vocal style of a Bessie Smith or Blind Willie McTell. The same goes for the archaic *aoidos*, who “put into words” (*enepō*) the stories he learned from the Muses. But, whether accompanied or unaccompanied, he also “sang” them (*aeidō*).

Four, seven, fifty: archaic festival calendrics

Like Odysseus disguised as a beggar, Hermes has similar troubles with his social “betters.” Also like Odysseus, Hermes brings this trouble on himself, by deviously scheming to achieve ulterior ends and gain the upper hand. “Born at dawn, at midday he played the lyre, and at evening he stole the cattle of far-shooting Apollo” (17-8).

³⁴ Nagy’s terms are much more precisely defined than indicated here. His distinction between SONG and *song*, though crucial to his argument, is beyond the needs of my brief discussion.

The lyre he plays is his own invention, made after he finds a tortoise outside his cave, a scene we will look at shortly. But first, the antagonism between Hermes and Apollo needs to be seen against the background of astronomical myth it encodes.

Just as Apollo was early on associated with Helios, the sun (cf. his epithet Phoebus, “shining”), so too is Hermes linked with the moon. After singing his first lyre song he plans his attack, “such as thieves carry out in the black nighttime” (66-7). “Helios went down under earth towards Ocean” (68) when Hermes came to Pieria in Thessaly where Apollo’s cattle were grazing. When he drives off the cattle back to the Alpheios River “gleaming Selene [the moon] had climbed to her lookout point anew” (99). (Earlier Hermes himself had “leapt to a lookout point” [*skopiên*, 65].) After he completes his Olympian sacrifice, “night-long the lovely light of Selene shone down” (141). Then when “early-born Dawn bearing light to mortals rose from deep-flowing Ocean” (184-5), Apollo sets out looking for his stolen herd.³⁵

The moon, a thief, has rustled cattle from the sun, a wealthy owner of herds. As the clever knave Dromio reasons in Shakespeare’s *The Comedy of Errors* (IV.II.):

“Time is a very bankrupt, and owes more than he’s worth, to season.
Nay, he’s a thief too: have you not heard men say
That Time comes stealing on by night and day?
If Time be in debt and theft, and a sergeant in the way,
Hath he not reason to turn back an hour in a day?”

If Hermes the thief is the moon, and his antagonism with Apollo the sun be read as a calendrical metaphor, then we can begin to understand how symbolically and

³⁵ Also in Hermes’ version of events before Zeus: “he [Apollo] came into our place seeking his shambling cattle at today’s new rising of the sun” (370-71). The poet makes it patently clear, even to the sleepy, that he is making the equation Hermes: Apollo :: Selene: Helios.

mythically the recurrent waxing and waning of the moon, with the just out-of-sync cycling of the seasons, was perceived. The moon as it waxed “stole” light from the sun, its constant antagonist and opponent. Its horns, in the crescent phase, slowly filled up into the full moon, when the thief’s light (its property, its herds) equaled the sun’s from whom he was pilfering. In the longer period of the year the moon was always just behind (354 days in twelve lunations vs. 365.25 in a solar year). But it was also slowly creeping up on the sun, so that after fifty monthly cycles of thieving from the sun’s light their periods (almost) came into phase at last. This could be seen as a showdown, a dangerous and peril-fraught confrontation, a dramatic standoff, before the whole cosmic drama begins again. We hear echoes of such a myth, apparently of Indo-European antiquity,³⁶ in an alliterative Old English riddle from the Exeter Book:

I saw a creature wonderful
between his horns bearing plunder,
an air-vessel light-like cleverly adorned,
plunder to his home from the war-raid.
He wanted in that fortress to build his chamber
establish it skillfully if so he might.
Then came a wonderful creature over the wall’s roof,
he is known by all earth-dwellers:
then he rescued the plunder and back home he drove
the wretch against his will, he left to the west thence
in enmity going, forth he hastened.
Dust rose to heaven dew fell on earth,
night went forth. No one afterwards
of men knew that creature’s path.

(Exeter Riddle #29, my translation)

³⁶ Cf. Lincoln 1976.

The answer is the moon, figured as a war-raider driving plunder away from the sun, who then comes with daybreak to rescue his stolen goods.³⁷ The moon here is a “wretch” (*wreccan*), the outcast or outlaw, one who wanders “driven” and expelled, usually for manslaughter, and who is therefore fleeing blood-guilt and due vengeance. This Old English riddle, where the moon is a thief and outcast, is a remarkably illuminating comparandum for *Hermes*, which likewise narrates a “cattle-raid” type theft, by a figure with lunar connections, from a god with even more obvious solar associations.³⁸ Hermes’ raid on Apollo’s cattle thus has astronomical dimensions, dramatizing the endless conflict of light and dark, sun and moon, months and years. But this conflict is indeed endless, and like the Old English moon who escapes undetected, Hermes too gets off in the end: “without regard he plunders through the misty night the tribes of mortal peoples” (577-78).

³⁷ Cp. *Rgveda* 5.75.9: *abhūd uṣā ruśatpāśur*, “Dawn arose with herds of light.”

Ralston 1872: 345-430 discusses the traditional Slavic *zagádki* (riddles), closely allied with their more sacral and magical counterparts the *zagovóru* (runic spells or incantations), describing them as “condensed myths” in which the peasantry, even through Christianization, have preserved the traditional mythology of their ancestors (the *zagovóru*, on the other hand, did not fare so well). What is merely an amusement in most seasons, during Christmas festivals, “resumes something of its old dignity, and to some extent claims to be performed as a duty of an almost religious character” (346). Many *zagádki* reflect astronomical lore and figures, Ralston relates, including “A black cow frequently represents the night, and a white one the day, as in the following instance:--‘A black cow has overthrown the whole world but a white cow has set it up again’” (349). He continues: “perhaps the most interesting of the mythical *zagádki* are those in which the sun and moon, the dawn, the thunder, and the storm, are likened to human beings. In some of them the dawn (*Zaryá* [=Skt. Surya, Gk. Helios]) is represented as a fair maiden who has lost her keys. The moon takes no notice of them, but the sun picks them up. The keys are, of course, the dew, which the moonlight does not affect, but the sunbeams dry up. In one variant they are lost by the *Zaryá* when she shuts the (heavenly) gates. In this case she probably is the after-glow of sunset, which is called in Russian the *vechérnaya* (or evening) *zaryá*. Here is one of the many forms of this *zagádka*:--‘The fair maiden, the Dawn, went wandering through the forest, and dropped her keys. The moon saw them, but said nothing. The sun saw them, and lifted them up.’ **Sometimes the moon is a shepherd and the stars are his sheep**, or they are goats which hide when they see the dawn:--There were goats crossing a bridge. They saw the dawn, and plunged into the water” (349-50).

³⁸ Incidentally, as several scholars have noted, the entire *Odyssey* plays on the same meteorological/calendrical symbolism; e.g., his men kill the cattle of the Sun; he returns home to establish “a new order in place of chaos ‘at the waning of the old moon, and the start of the new’” (Burkert 1983: 133; *Od.* 14.162, 19.307).

But why is Hermes the thief—and a mythic mask of the moon—also the musical culture-hero who invents the tortoiseshell lyre? What do these two myths, one calendrical, one musical, have to do with each other? To answer this question the Greeks' time-reckoning methods must be taken into account. The early Greeks were, by our standards, notoriously poor time-keepers. By long tradition they were devoted to a lunar calendar, and each locale had its own conventions for keeping its lunar reckoning in some workable alignment with the solar and seasonal year. For a common, inter-city measure of time, however, the Greeks relied on the recurrent schedule of their pan-Hellenic festivals, most importantly the Olympic Games held every fourth summer at Olympia, in Elis on the Alpheios River, west of Arcadia. According to an Elian-Arcadian tradition, Olympia's early king Endymion was taken as lover by Selene ("Moon"), who then gave birth to the fifty Menai ("Months").³⁹ Why fifty? Because that was the number of months in the lunar count of the four-year cycle that defined the pan-Hellenic Olympic Games, the principal time-calibrator from the early archaic period on (legendary date for the first Olympics was 776 BCE).⁴⁰ The

³⁹ In the account Pausanias relates (5.1.3-4), the first Elean king was Aethlius, son of Zeus and Protogeneia ("First-born," given as daughter of the flood-hero Deucalion), and his son was Endymion, who was loved by the Moon and fathered fifty daughters.

⁴⁰ Since this "equation" of fifty months with four solar years is off by a whole fourteen days (!), later a unit of eight years (two Olympiads) was defined as ninety-nine months, yielding an interlocking lunar-solar cycle with a discrepancy of only a day and a half. But there is evidence to suggest that in practice even the half-month discrepancy of the 50-month scheme may not be merely the product of fuzzy, primitive time-reckoning. Pindar, in an origin myth about the Olympic Games and the altar of Zeus, situates "the great games in the fifth year" at "the midmonth (*dichoménis*)" when "the moon, eye of evening, shone out full in her golden chariot" (*Ol.* 3.19-22). If the festival and games were held at the full moon of the fiftieth month—which could have served both aesthetic-religious and practical ends, since the full moon would provide light for nighttime activities—then the equation of fifty months and four years would be almost exact; only the next Olympiad's cycle would have had to have begun earlier at the *new moon* of the fiftieth month.

Much of the testimony on Endymion is late, and his story often gets rationalized: the 11th cent. Byzantine author Michael Psellus calls Endymion "a philosopher who investigated (*zêtôn*) the motion of the moon and slept during the day, not at night; stories say that as a herdsman he would search (*ezêtei*) the loftier mountains, and he surpassed at the Lydian harp (*pêktis*) on account of his musical arrangements (*harmonia*, a difficult word to translate)" (Mich. Ps. *Opusculum* 55 ln. 721).

Olympics were the commencement and culmination—the chain’s central link—of a ritual cycle of games (*agôna*), that included the Nemean, Isthmian, and Pythian games, the latter showcasing musical contests in honor of Apollo (more on this below).⁴¹ With this tradition in mind it is probably no accident that Hermes steals a herd of *fifty cows* from his brother Apollo (74). Fifty months equals *four* years: four is Hermes’ number.

Recall now that Hermes’ mother Maia was one of the Pleiades. The seven Pleiades were as early as Homer and Hesiod connected with the star-group by that name. Conceived of as a chorus of seven young sisters, daughters of Atlas, their stars were key features in the celestial calendar by which the seasons and the agricultural year were reckoned. The Pleiades’ rising marked the time to harvest, and when they set it was time to plough, according to Hesiod (*WD* 383-4).⁴² The lyre Hermes makes in *Hermes* has seven strings. Hyginus, of a much later period, says that some relate the number of the lyre’s strings to the seven Pleiades “since Maia, his mother, was of their company” (*Astronomica* 2.7). This looks like later rationalization of myth, but there is reason not to dismiss it outright. Bronze Age kitharas (though not tortoise-shell lyres, which do not appear), both Minoan and Mycenaean, are usually depicted with seven strings (Maas and Snyder 1989: 1-23).⁴³ Seven stars, seven strings.

⁴¹ Pindar *Ol.* 3.

⁴² Throughout the archaic period (ca. 750-500 BCE) the Pleiades were rising in the evening towards the end of September, and setting in the evening around the middle of April. To judge from later practice, both the Olympics and the Delphic festival most likely took place sometime in August or early September, perhaps after the grain harvest in May-July and before the grape harvest around mid-September (cf. Morgan 1990: 41).

⁴³ Based on the musical inventors lore that made the archaic lyric poet Terpander the one who added three strings to an originally four-string lyre (see frontispiece quote from Pliny), it has sometimes been assumed that the seven-stringed instrument was a late innovation. West suggests that there was a vogue of three and four string kitharas before the seventh century, when he says seven-string models “begin to appear more regularly” (1992: 53).

So far we have the numbers seven and fifty. There were other ways these could be configured as cosmically significant. In the *Odyssey* the cattle and sheep of Helios come in fifties, and there are seven herds and seven flocks “which neither increase nor perish” (*Od.* 12.127-31). This is almost certainly an archaic image for the days of the year, $7 \times 50 = 350$ —the lunar year that is, since twelve months is 354 days. This is still four days off: again, four is, by solid archaic testimony, the number sacred to Hermes.⁴⁴

Thankfully we have Hesiod’s lore about the month’s days in the *Works and Days*, because it provides us the necessary background to appreciate the next level of calendrical allusion in *Hermes*. As Hesiod relates, the first, fourth, and seventh were sacred days of every month, the latter because it was Apollo’s birthday (*WD* 770-71). Other early sources establish that the new moon, the first, was also sacred to Apollo.⁴⁵ The fourth, on the other hand, was Hermes’ birthday, as *Hermes* tells us (l. 19; cf. also Aristophanes *Ploutos* 1127). The fourth has other associations which flesh out its connection to Hermes. It is a good day to lead home a bride, taking the bird-omens which are best for this deed (*WD* 800-01). We know that Aphrodite was also often honored on the fourth (cf. West *WD*, p. 352). Thus there seems to be a connection with fertility and sexuality, a day for good unions, and for propitious openings and beginnings: on the fourth begin to build ships, Hesiod says (*WD* 809), and open a jar

⁴⁴ At *Hermes* 195 we learn that there were four watchdogs of Apollo’s cattle (and a bull, all of which Hermes has eluded in his theft), a detail that seems relevant in regard to the lunar significance of the cattle of the sun. Dogs, as herd guardians, were akin and dear to Hermes; cf. Chittenden 1948. Hesiod advises feeding your dog, lest the “day-sleeper” (*êmerokoitos*), i.e. a thief, steal off with your goods (*WD* 604-5).

⁴⁵ Cf. *Od.* 14.162, 19.307, 20.156, 276-8, 21.258; West 1978: 352 on *WD* 770. In Sparta Apollo received sacrifice on the first and seventh of the month, Hdt. 6.57.2.

(819). But at the same time it is day to guard one's heart against cares that gnaw the breast, for it is a very fate-filled day (*tetelesmenon hēmar*; ll. 797-99).⁴⁶

It is an ambivalent day then, one of accomplishment and commencement, finality and opportunity. It is intriguing in this context, then, that Hermes' day is the midpoint (*mesê*) between two Apollonian days, the first and seventh.⁴⁷ For as the earliest, though later, music theory attests, on a seven-string lyre the fourth or middle string (*mesê*) was one of the three "fixed" notes. The usual tuning was comprised of two overlapping or "conjunct" tetrachords (a scale progression of four notes).⁴⁸ The first and seventh strings were each pitched the interval of a fourth above and below the middle string, which was therefore shared between the two scales, the highest note of one, lowest of the other: a perfectly Hermetic ambivalence. Though *Hermes* does not articulate either tuning theory or its possible symbolism explicitly, it does show signs of a link between lyre music and the middle. For instance, Hermes is born at dawn, at evening he steals Apollo's cattle, but *at midday* he plays the lyre (*mesôi hēmati enkitharizen*, ll. 17-8). So too it is at the threshold (*oudos*) in between cave and outdoors that Hermes runs across the tortoise (ll. 23-8). Thus it seems possible that the

⁴⁶ The *Works and Days* calendar lore gives us a glimpse of a potential bit of joking irony in *Hermes*. Hesiod says to "avoid fifth days, they are harsh and dreadful (*ainai*)" for it was on the fifth when the Furies assisted at the birth of Oath (*horkos*), born of Strife as a pain to the foresworn (*WD* 802-4). In *Hermes* it is on the day after his birth—the fifth—that Hermes causes Apollo so much anguish with his lies and swearing of false oaths.

⁴⁷ This is preserved, even after several major calendrical transmutations, in the day names of our own seven-day week: in the middle falls Wednesday = Mercurii dies (Sp. Miercoles, Fr. Mercredi, etc.).

⁴⁸ Cf. West 1992: 160-3; Mathiesen 1999: 243-47; Barker 1989 contains the major surviving texts relating to Greek music theory including the recondite treatises on harmonic theory. When an eighth string was added, a common tuning was two "disjunct" tetrachords separated by a whole tone (thus approximating an octave).

fourth string of the seven-string lyre, the tone linking the upper and lower tetrachordic scales, was also Hermes' string.⁴⁹

These possible hints at an archaic musicological symbolism in the poem are in line with Kaimio's conclusion about music in *Hermes*, that its poet pays "much more attention to the description of music and its effects than we find anywhere in Homer, even in the *Odyssey*, which is far richer in references to musical matters and their aesthetic value than the *Iliad*" (Kaimio 1974: 42). But whereas Kaimio sees in *Hermes* an archaic lack of verbal and conceptual resources for describing musical sound, the above considerations suggest that this is compensated for with a mythical and symbolic richness surrounding music and instruments of a sort rarely attested in later poetry or texts on music theory.

On a level of cosmic symbolism then, *Hermes* dramatizes the conflict and interplay between day and night, darkness and light, lunar and solar fluctuations, as a constant contest between two brothers, encoding allusively the numerical lore involved in traditional time-reckoning. This time reckoning, unlike our own, was lunar-focused, agriculturally vital, and tied to an interstate ritual cycle of communal gatherings for contests, games, and music, to honor the Olympian gods and ancestral heroes. This calendrically significant numerology is then available for mapping on and into the musical instrument of the singer singing the tale. For remember, the *hymn to Hermes* is

⁴⁹ Later, when planetary astronomy came to prominence, correlative schemes devised by Pythagoreans connected the sun with the *mesê*, an appropriate cosmic center, and Mercury with the *paramesê* string below it (for Nicomachus' scheme, cf. Barker 1989: 250-53). Another case of the Apollonian devaluation of Hermes discussed below?

A comparable Mesopotamian case of string-god associations is a nine-string musical instrument of which the fourth string was called "Ea-creator" (the Babylonian god Ea = Sumerian Enki). In another text the goddess Ishtar also praises herself, "I am the first string, I am the last string" (cf. Kilmer 1965: 264-5).

an origin myth for Greek *epos*, that is, oral narrative song that celebrates the deeds of gods and heroes; it also sings the origin of the *aidos*, the singer who knows the secrets of this wondrous art, whose status in life is *therapôn Mousaôn* “servant of the Muses.”

Lucky finds and the birth-craft of symbols

On another level, *Hermes* reflects through myth the high-stakes drama of the Greek male lifecycle, from birth in the female world, through education and initiation, and finally access into a young adult male’s status. Underneath this generalized male scheme as well runs the more particular story of the Greek *aidos*, the itinerant musician whose livelihood and honor (*timê*) was singing, telling stories, and winning fame (*kudos / kleos*) in the festivals by conferring poetic fame (*kleos*) on gods and heroes. *Hermes* tours the reader through the sacred geography of the pan-Hellenic festivals, which moves from Olympia to Olympus, while between these outer sites to the south and north were the mountains and sanctuaries sacred to the two brothers and sons of Zeus, Apollo at Delphi and Hermes at Kyllene.

Born there on the fourth of the month, Hermes, “after he’d leapt from his mother’s immortal womb, didn’t lay for long in his sacred cradle, but jumped up to hunt Apollo’s cattle, overstepping the threshold of the high-roofed cave” (20-3). A plot has been announced, he is hunting Apollo’s cattle, and he has left the cave, crossed its threshold⁵⁰ (the verb here, *huperbainein*, is also used of trespassing, scaling mountains, overstepping laws and oaths, and omitting details, all of which he will also do), BUT:

⁵⁰ The proposal that crossing a threshold and finding something is an action pattern especially indicative of Hermes finds confirmation at *Od.* 7.133-43: Odysseus enters king Alcinoos’ house concealed in a

“*There* finding a tortoise he gained endless bounty.
Hermes, you know, first made tortoise a singer;
She happened across his path at the courtyard gates
grazing before the house on budding tender grass,
walking on swaggering feet. Zeus’ luck-swift son
gazed and laughed and straightway voiced a speech (*muthos*):

Meeting and finding are revelations, epiphanies of Hermes, as Carl Kerényi noted (1976: 23). But even more in Hermes’ nature, I would argue, is *seeking x and finding y*, an action pattern that highlights the intrusion of contingency and accident into a course of events which has already set its sights on some other goal. Indeed, to find y “on the way” to seeking x is a fitting figure for a god who is himself “on the way” (*enodios*), a wayfarer, one who marks the way and for whom the road itself is home. The narrator could hardly make a better introduction of Hermes, because it is at this narrative swerve in a plot already announced and commenced (the hunt for Apollo’s cattle), that Hermes is first named in the nominative case, as the subject of action. This “epiphany” of a focalized agent of action by the nominative form of their proper name is always significant in Greek epos.⁵¹ He first becomes himself, and is revealed to the audience, precisely when a long-range plan is diverted by objects encountered in the here-and-now.

mist, “straightway he *crossed the threshold* into the house, and *found (heure)* the Phaeacian leaders and rulers pouring libations from cups to the sharp-eyed slayer of Argus [Hermes], to whom they pour the last (*pumatōn*) libation, when they are mindful of bed.” Thereafter, Odysseus *just appears* out of nowhere, a marvel to see (145).

⁵¹ Cf. Bakker 1996. Up to this point Hermes and his epithets have appeared in the accusative, whereas his mother Maia is the nominative focus of action; five lines before he is named, at line 20, Hermes first becomes the grammatical subject, but only with the definite article or deictic pronoun (*hos*); this serves to set up an expectation for the nominative “epiphany” that is fulfilled five lines later.

Further diction reveals that a element of chance has occurred: *antebolein*, used of the tortoise, means “to run across, happen upon, befall.”⁵² She crossed his path, and it is this twist of fate that makes all the difference. Nor is the fact that tortoise is a *she* a neutral point—even if it is, linguistically, an accident of the arbitrary sign in a language where all nouns express gender; still, the singer makes the most of this “coincidence” too, and turns the encounter between newborn god and lumbering reptile into a scene of seduction. Even the grass she grazes on is *eri-thêlea* (“lush”), the second half of which means “female.” With the sexual innuendo now in plain view, the reverberating semantics of birth and making also sound forth. Twice already we have heard that Maia “bore” Hermes, *teke* (3, 19). In between these mentions of birth we heard that notable deeds “were done” *erga tetukto* (12). So now we hear that Hermes “made” tortoise a singer, *tektênato*. These are only the first instances of such punning interference and transference of the language of sex and of crafting. Principally we see it throughout the hymn as it plays with the *teknon*, “offspring” of Zeus (in reference to Hermes) and the *technê*, the “craft” of Hermes (indicating the lyre).

The equation of birthing and fashioning is made most explicit after he makes the lyre: “But indeed after he had made it, carrying his desirous plaything” (52). The two verbs, juxtaposed in the center, are *teuxe pherôn*, the first meaning “built,” but playing still with the already ambiguated sounds (*teke*, *teknon*, *tetukto*, etc.), and the second meaning “carry,” but as a weaker form of the stronger meaning that “to bear” has also in English, that is, to bear *a child*. Finally, before we watch it being made, we

⁵² It occurs two more times in the hymn, each time clearly connoting chance occurrence, first, after he has sacrificed the cattle and returns home “nobody on the long journey *encountered* him, neither blessed gods nor mortal men, nor barking dogs” (143-5), and again when Hermes boasts that he will break in and plunder the treasures of Delphi itself, “I think another, even greater thing *will befall* him” (177).

can note in anticipation that after he has sung his first song, he “lays the lyre down, bearing it [*pherôn* again!] into his sacred cradle: the same sacred cradle he laid in (though not for long) after he had leapt from his mother’s womb. It is as though he is laying his own “child” in the cradle after giving it birth.

So outside the cave Hermes has made a lucky find, as he is quick to declare it:

“An omen (*sumbolon*) already for me, great profit, I won’t overlook it.
Greetings, lovely creature, chorus-sounder, dinner escort,
your appearance is most welcome. Where comes this beautiful plaything,
the glittering shell you wear, a tortoise living in the mountains?
But I’ll take and bear you in the house, you’ll be some advantage to me,
nor will I dishonor you. But first of all you will profit me.
In the house is better, since it’s dangerous out of doors.
For though alive you may protect from painful sorcery,
if you die, then you might sing most beautifully.”

Worth noting is that Hermes’ very first word, *sumbolon* (“omen”), is also the earliest surviving occurrence of what would become an enduring key concept in Western philosophy, religion, literature, aesthetics, and cultural theory.⁵³ Clifford Geertz’s widely cited anthropological definition of human culture is as “a system of significant symbols” with and through which individuals understand their world and interact, each person using them in their own way “to put a construction upon the events through which he lives, to orient himself” in the daily course of life’s activities. Such symbols are diverse in nature, composed of “anything...that is disengaged from its mere actuality and used to impose meaning on experience” (Geertz 1974: 45-5; also 87-141).

Looking back toward its origins, we find that *sumbolon*, from *sumballein*, “throw, cast

⁵³ Symbol and its derivatives have been made to mean many weighty things by many people over the last 2,500 years. Besides its more obvious imports in contemporary discourses, the various entries in the *OED* on and around “symbol” make for interesting reading.

together,” referred primarily to a tally or token of exchange, *identifying* by its marks or form its complementary half. In this as in other occurrences it forms part of the language of divination, which *reads* the signs of natural occurrences for their import into future events, sees through the visible to the invisible and, in the case of birdsong and divine voices, hears the inaudible in sounds that strike the ear.⁵⁴ In both its divinatory and economic senses,⁵⁵ it implies the pregnant idea of an *absent presence*, some connected thing elsewhere, in time or space, that is indicated here by its counterpart, which stands in for it as a reminder and proof.

In this instance *sumbolon* functions, at first pass, as an ironic comment on the narrator’s previous presentation of tortoise’s appearance as being a chance encounter—*antebolein*. Instead, Hermes regards the tortoise and sees her otherwise, he *foresees* a trajectory of events, projects the hypothetical upon the real, and that foresight is registered in his laugh of recognition and his declaring her a *sumbolon*. He sees the lyre—the *daitos hetaire* “companion of the feast”—in the still live tortoise. Thus, he is perceiving a symbol of himself, his other, since later he too will be hailed as *daitos hetaire* by Apollo (436). Revealing his nature as the god of communication, he greets her, queries her about her lovely shell, then barter with her seductively—“you profit me, I won’t dishonor you”—then finally announces his proposal for exchange: instead

⁵⁴ Cp. perhaps the second or third earliest occurrence, Pindar *Olympian* 12: “Never yet has any man on earth found (*heuren*) a reliable token (*sumbolon piston*) of what will happen from the gods. Our understanding of the future is blind. And therefore many things fall out for men contrary to their judgment, bringing to some reversal of delight, while others, having encountered grievous storms, in a short time exchange their troubles for high success.” Pindar here confirms the traditional theme, diction, and phrasing encountered in the Hermes hymn, even as he denies the purport of its action (for humans, at least). Cf. also Soph. *Oed. Tyr.* 221.

⁵⁵ For an interesting economic example, cf. Plato *Rep.* 371b, and an ironic one, Arist. *Ploutos* 277-8; for its use to mean a symptom of disease, cf. Soph. *Philoc.* 404-5. Also, Plato *Sym.* 191d, Aristophanes’ infamous myth of the human soul’s natural emptiness and longing: because “each of us is a *sumbolon* of a human (*anthropos*)” and we are always in search of our other half, our counterpart *sumbolon*.

of life and counter-sorcery, death and beautiful song.⁵⁶ Later Sophocles, in his satyr drama *Ichneutae* (“Trackers”), plays on the same opposition. “How am I to believe the voice of something dead is making so much sound?” the chorus of satyrs asks the mountain nymph Kyllene. “Believe it,” she answers, “for dead it has a voice, though alive the beast was speechless” (*Ich.* fr. 314, ll. 299-300). Yet again a riddling sympotic couplet in the Theognidean corpus takes up the theme: “Already it has called me home, a corpse from the sea, // though dead it speaks with a living mouth” (1229-30). The answer to the riddle, it seems, is the conch-shell, used as a signaling instrument, one name for which was *kêrux* (“herald”), a functional epithet for Hermes (cf. note 15 above).

That this “exchange,” of life for song, is a transformation of equivalence, where what seems to be lost is actually recuperated in what is gained (except the life of the tortoise, which will soon be gone), becomes clearer in the context of Hermes’ coming contest (*neikos* 269) with his older brother Apollo, the “far-shooter,” the god of healing and disease, of binding sorcery and pains dealt from afar.⁵⁷ Seen in this light, Hermes is actually weighing his choices. We know he already plans to thief from Apollo, and thus has probably already considered the possibility of painful punishment if caught. In this case a talisman, a good luck charm against painful assault might be useful. But even better, he reasons, would be lovely song—it too has the power to ward off malevolence, because it goes to the heart of the problem, the very causes of sorcery:

⁵⁶ There is the point here, made by others, that Hermes’ claim not to harm the turtle is disingenuous. This sort of disarming verbal deception is not uncommon in hunting magic; cp. the hunting magic song from the Tule of Panama: “Tell the turtle that the man who sent you is not going to kill him, Tell the turtle I will only take off his shell and send him back where he came from” (McNamee and Urrea 1997: 17).

⁵⁷ Cf. the plague in *Iliad* 1.

anger, rage, resentment, and revenge.⁵⁸ Such feelings as these grip Apollo when he loses his cattle: he “is angry” (*chôomenon* 236), “at odds” with Hermes (*dioisometha*), and “bitter with gall, wrathful” (*choloumenos* 308). As we learn later, the music Hermes makes with the tortoise wields against these malevolent emotions the powers of convivial good-cheer, sexual desire, and sleep (*euphrosunê, eros, hupnos*, 449). This magical instrument, more powerful than an apotropaic charm against binding spells, also comes at a higher price, requiring a blood sacrifice.⁵⁹

Having announced his *muthos* (“plot”) of action, he picks up the desirous plaything (*erateinon athurma*) that, like immortal nymphs, lives in the mountains (*oresi*), carries her back inside his mother’s cave, the dark and hidden lair of Titanic sexual reproduction. Cutting off her limbs⁶⁰ with a carving knife of gray iron, he “pierced out the life-marrow” (*aiôn’ exetorêsen*) of the mountain tortoise (*oreskôioio chelônês*). The tortoise’s connection with nymphs is crucial for hearing the sexual undertones to this scene of creative death-dealing. As we learn in the *hymn to Aphrodite*, the mountain nymphs (*numphai oreskôioi*) who inhabit hills (*oros*) are neither mortals nor immortals. But they live for a long time and eat immortal food, lively striding the lovely dance-floor with the gods. The Silenoi and the clear-eyed slayer of Argus, Hermes, mingle with them in love in the depths of desirous caves (257-62). The next line, referring to the birth of pine and oak trees, makes clear that the “mating of nymphs and Hermes” is an origin myth for forests, establishing as well their

⁵⁸ Cf. the *Iliad in toto* from the very first word: *mênin* “wrath, rage.”

⁵⁹ Cf. Shelmerdine 1984, Burkert 1983: 39. Put briefly, sacrifice, as opposed to simple killing (though in most traditional societies no killing is “simple”), is a *trafficking in life and death*, a raising of slaughtered and harvested goods into a system of symbolic exchange with others, usually with the prolific and ubiquitous powers inhabiting and animating the world (and specifically the beings that are sacrificed).

⁶⁰ The textual problem here with this term is admittedly intractable. But my argument does not depend on (re)solving this critical issue; I opt for the easy sense of (*ana*)*pêroô* “to lame, mutilate.”

sacredness, since they “circle the precincts of immortals, and no mortals cut them with iron” (264-68). But when they do reach their fated portion of death, the lovely trees dry out, the bark around them withers and their branches fall, and with this their life-breath (*psuchê*) leaves the light of the sun (269-72).

The cutting of trees with iron (*sidêrôi*) recalls Hermes’ carving knife of grey iron (*polioio sidêrôi*), even as its color recalls the sickle of grey flint (*poliou adamantos*) that Gaia made and with which Kronos “reaped” (like wheat) his father Ouranos’ genitals, from which both Aphrodite sprang *and* the tree nymphs themselves (cf. Hes. *Th.* 161-62, 180-81, 187, 191-92). This rich nexus of signs and associations—the cave as a charged site of sexual “mingling;” the violent severing and dismembering reminiscent of the original cosmogonic “trick” (*dolos*) of castration; the “mountain” tortoise which lives a long life like the long-lived mountain nymphs whom Hermes’ is so fond of—all these come together to elevate the following scene of craftsmanship into a significant repetition of primal cosmogony.⁶¹ A major world-creative event is about to unfold before us, in which sex and death are both hopelessly confused. The end product will be both a *teuchos* and a *pherma*, an implement and an offspring.

Not only do tortoises, like trees, live a long time, but also like trees they possess something valuable that perdures their death: their shell. Both the carapace, the rounded upper shell, and the plastron, the flatter bottom shell, are interesting and lovely bones. It is tortoise’s shimmering carapace that Hermes’ had his eye on in the first

⁶¹ Instruments as symbolic microcosms of the universe occur in several music traditions around the world. The heads of Saami (Finn/Lapp) ritual drums were cosmographic texts, on which divination was conducted. Among the Xikrin Kayapo of Brazil the symbolic center of the universe is their ritual rattle, in the shape of a head, to which they dance and sing and thereby go back to the time of mythic origins (Levinson 1991: v. 7, s.v. Xikrin). Cf. also Olsen 1996: 47-68 on the sacred *habu mataro* rattle of Warao healers in Venezuela.

place, her “desirous physical form” (*phuên eroessa*, 31), and it is this perduring shape of tortoise that will sing beautiful song, becoming a “newly declared divine voice” (*neêphaton ossan*, 443). As David Abram comments on the interactivity of artists with their materials: “Genuine artistry...does not impose a wholly external form upon some ostensibly “inert” matter, but rather allows the form to emerge from the participation and reciprocity between the artist and his materials....In return for this respect, these materials contribute their more-than-human resonances to human culture” (1996: 278).⁶² It is tortoise’s glittering shell that strikes Hermes and which he finds so pleasing to the eye that he laughs as he speaks to her. Then, bringing craft to bear on the fortuitous conjunction of organic form and functional suitability (cf. *technê*, ln. 447), Hermes creates a novelty, a “charming toy” (*erateinon athurma*) that incarnates the unique coincidence of chance, nature, and craft (*tuchê*, *phusis*, and *technê*) by which it came into existence.

Lines 41-51 describe how Hermes makes the lyre, a passage that music historians have never tired of excerpting for its organological significance.⁶³ Helen Roberts (1981) even reconstructed a Greek *chelys*-lyre based on this passage and other ancient literary and iconographic evidence. Even if it leaves out many technical matters, the passage is remarkably detailed and seems to reflect the oral knowledge that would have been given as instructions when boys set about making themselves a lyre.

⁶² This is true even of the most ostensibly “raw” materials. As Gregory Bateson once wrote, “I know nothing about unorganized matter, if there be any” (Bateson 1979: 6). On closer inspection, most of the “raw,” highly formable materials used in building and manufacture today—asphalt, concrete, brick, lumber, metals, glass, plastics, corn syrup—are actually the most “cooked,” that is, results of extensive human processing that renders them “raw.” Rawness itself, here a profound misnomer, is the result of cultural processes. Do these conceptual contortions serve to mask our cultural processes, in order to create the illusion of a “natural world” that better conforms to our preconceptions—inert, lifeless, formless, *materia cruda* lacking *spiritus*?

⁶³ Cf. Landels 1999: 61-5; Mathiesen 1999: 237-43; Comotti 1989: 57-8; Maas and Snyder 1989: 35-6.

The instructions are brief: find a turtle; kill it and hollow it out; assemble a framework of reeds and affix it inside to holes pierced in the shell;⁶⁴ stretch oxhide over it; attach two arms and join them with a crossbar; then stretch seven sheep-gut strings. That the poet includes this description supports the argument that *Hermes* is a song for musical insiders, to be appreciated by those who know and live with music, who have made or will make a lyre, and perhaps directed at neophytes in an initiatory or para-initiatory ritual setting.

Having made his “desirous plaything,” he tests it out, and sings to it improvising, “as when young men (*kouroi hebetai*) at banquets mock with clever comparisons (*paraibola kertomeousin*)” (55-6). The song he sings is of his own birth, describing his own mother’s loving companionship with Zeus. He “calls out by name his own famous-named lineage” (*geneên onomakluton exonomazôn*, 57-9), then praises the servants and the wealth of tripods and cauldrons in the house. Both the youthful banquet simile and the details of Hermes’ first song indicate a rather casual and playful musical culture as would fit with young adolescent male life (and perhaps female life as well, but *Hermes* does not reflect female involvement in musical culture, though plenty of evidence attests to the intricate musical pedagogy of girls⁶⁵). Besides the mocking joke songs of young men’s feasts (mentioned again at 454, the “passing to the right” custom of banquet singing mentioned by Polybius⁶⁶), learning one’s family genealogy, both real and legendary, would have been an appropriate youthful song-

⁶⁴ Though this inner framework has been hard to interpret, it seems to have been necessary for structural as well as acoustic reasons (cf. Roberts 1981).

⁶⁵ For an entry into this subject, cf. Calame 1997.

⁶⁶ In other words the symptic tradition, a reveling feast where men drink together; the songs were also called *skolia*, probably both because they “wound” around the banquet, and because their subjects were “crooked” and “tangled,” i.e. clever, allusive, and full of innuendo.

genre (most aristocratic families managed to tie their lineage, through a hero, directly to the gods; and confer again Polybius' description of the traditional songs Arcadian children learned). So too, singing about one's house and its glory through possessions would have been a suitable youthful song-genre.⁶⁷

Nocturnal tricks, stolen cattle, and Olympic sacrifice

But as Hermes sang he was thinking other things: he lays his lyre in his holy cradle and "desiring meat" he heads off to steal Apollo's cattle, as the sun is going down (63-70). The next 350 lines are occupied with Hermes' theft of a herd, then his slaying of two cows at Olympia, Apollo's tracking of the pilfered cows, a trial before Zeus' throne on Olympus, and finally a musical showdown between Hermes and Apollo. We have already seen astronomical dimensions to the cattle-theft myth. Now we will try to glimpse some real-world rituals that the myth also seems to encode.

First of all, Hermes' laying aside his lyre, his "plaything," in the very cradle where he had lain as a newborn babe, looks like a symbolic separation from the indoors female world of his maternal cave. Formally leaving that safe and womb-like world, he will go outside, into the dark nighttime world of the hunter "desiring meat." He is, in other words, entering into the liminal realm of male initiation, the ritually staged but dangerous world of the "black hunter,"⁶⁸ where he will pass through a series of "rites and fictions which dramatize the difference between what the ephebes were (boys) and

⁶⁷ A useful locus of comparison in archaic epos are the many lavish descriptions of banquets and their accoutrements in the *Odyssey*; a particularly close example is the description of Circe's serving nymphs at *Od.* 10.348-70.

⁶⁸ Cf. Vidal-Naquet 1986: 106-28.

what they will be (men).”⁶⁹ Passing these trials and tests he will enter into the new status of young adult male.⁷⁰

Evidence for Greek male initiation is scattered in fragmentary form and, not surprisingly, often confusing, with variations across time and place. But certain common themes recur regularly enough for us to recognize them in *Hermes* as well. These include such deceptive “tricks” (*doloi*) as nighttime herd rustling, or even manslaughter; living alone in the mountains off the land; a ritual status inversion such that one becomes an outcast, outlaw, thief, or otherwise socially reprehensible. From Arcadia Hermes goes to Pieria far to the north in Thessaly, where he “cuts off a herd of fifty head” and drives them away, backwards to disguise their tracks. Then he fashions some sandals out of tamarisk and myrtle branches. The myth presents these as a means of disguising his own tracks as he walks, and most commentators have gone along with this without much ado. But it is conceivable that the sandals form part of a ritually significant outfit or costume, marking the entry into a particular phase of ritual status, a possibility suggested by two specific pieces of evidence in the text.

The first is that Hermes makes and puts these sandals on as soon as he comes into possession of the stolen herd. Later, only after he has driven them to Olympia on the Alpheios, and sacrificed the two cows, the poet makes a point of telling us that Hermes removes the sandals and casts them into the Alpheios (139), at which time he puts out the fire and scatters the ashes, as the “lovely light of Selene shone down all through the night” (141). In other words, the donning and doffing of the sandals

⁶⁹ Winkler 1990b: 33; also see Winkler 1990a.

⁷⁰ As an apt epigram in the *Palatine Anthology* explains, “Hunting trains for war; hunting teaches to seize what’s hidden, to await what advances, to chase what flees” (θήρη μὲν πολέμου μελέτη· θήρη δὲ διδάσκει / κρυπτόν ἐλεῖν, ἐπιόντα μένειν, φεύγοντα διώκειν. *Pal. Anth.* v. 5, p. 34 [Loeb edition]).

bounds Hermes' transgressive involvement with the cattle. Afterwards, he returns to his cave and cradle, taking back up the lyre he left there. Thereupon his relations with his mother have dramatically transformed. His mother rebukes him, calling him "clothed in shamelessness" and a "great trouble to mortal men and deathless gods," warning him that Apollo will come and bind him with "helpless ropes," and tells him bluntly to get out and be gone (*erre palin*, 155-61). In response Hermes asserts himself with confidence, asking why she tries to scold him "like a newborn child...fearful of his mother's shaming rebukes," and declaring that he will undertake what device seems best to him to achieve a livelihood, wealth, and honors, even becoming the "leader of thieves" (*phêlêteôn orchamos*) and breaking into Apollo's Pythian temple to steal its endless stores of gold, iron, and garments (163-81). His mother's cave is no longer the safe haven it was, nor is Hermes the helpless babe he was.⁷¹

The other indication that the sandals are ritual garments is a strange word describing Hermes as he puts them on: *autotropêsas* (86). Most translators have sidestepped this word, making it mean "being like himself," or "improvising," or the like. But literally it should mean "to turn oneself," and a meaning of "having transformed himself" would fit the context very well. Putting on the sandals made of

⁷¹ Clay (1983: 127-8) notes his transformed status but not the significance of his quarrel with his mother. A useful comparison here is *Odyssey* 1.329-64, where Telemachos publicly asserts his manhood by telling his mother Penelope to go back inside to her woman's work and leave speeches and control to him, the man of the house. In Greece as in other patriarchal societies, male coming-of-age involves learning the repertoire of ways adult men demean, put down, disparage, silence and otherwise keep women "in their place." The exchange between Hermes and Maia should be heard in this context.

On the other hand, in traditional cultures where boys must undergo dramatic and traumatic rites of passage, women—mothers—often participate in the forceful and final separation of boys from the maternal sphere. In Papua New Guinea, for example, there are cases where the women whip the boys, push them away and verbally abuse them when they try to take comfort with them. Sometimes female ritual practitioners continue these spates of verbal abuse at intervals in a long ritual seclusion full of physical deprivations and traumatic "symbolic" abuses (cf. Poole 1982: 116-40). Maia's verbal abuses and threats of Hermes might be seen in light of this pattern as well, as a rejection of the child and a refusal to be his comfort and refuge from the frightening male sphere that he must enter through the constraining passages of ritual laid out for him.

Pierian tamarisk and myrtles, Hermes has transformed himself into the ritual thief; accordingly he will not remove them until his night of theft and ritual sacrifices have been fully completed.⁷² His donning and doffing of the sandals thus mark the commencement and successful completion of a phase of ritual trial, the nighttime theft and sacrifice of cattle.

Most scholarly study of Greek male initiation has focused on the evidence for classical Sparta and Athens. But the narrative provenance of *Hermes* points us elsewhere, towards Arcadia and Olympia first, and secondarily to Delphi and northern Greece. First let us note that in southern Greece musical culture and male initiation were so intertwined that later authors claimed (perhaps not always wrongly) that famous lyric poets of the archaic period had been the founders of different cities' initiatory institutions. So in the pseudo-Plutarch *On Music* we read:

“The first establishment of music at Sparta was due to Terpander [7th c. BCE]. The second is best ascribed to Thaletas, Xenodamas, Xenocritos, Polymnastos, and Sacadas of Argos. These were the men who introduced the Dances of Naked Youths (*Gymnopaideiai*) at Sparta, those about the Provings (*Apodeixeis*) in Arcadia, and the so-called Robings (*Endymatia*) in Argos.”

(pseudo-Plut. *De Musica* 9; Barker 1984: 214)

⁷² Transformation, especially animal transformation, features in many of the Greek initiation rituals, male and female, as well as in the myths that seem connected with ritual practices: e.g., lycanthropy at Lykaion, Actaeon turns into a stag, Artemis' devotee Callisto is turned into a bear. Hermes' transformation, however, defies known animal categories. Apollo, looking at his enigmatic tracks, says they are not of “man, woman, grey wolf, bear, lion, nor Centaur” (222-4).

In light of the werewolf lore explored by Burkert 1983, and the identity of *Hermes* with the moon-thief, the following Slavic *zagovor* “spell” for werewolf transformation is of interest: “In the ocean sea, on the island Buyan, in the open plain, shines the moon upon an aspen stump, into the green wood, into the spreading vale. Around the stump goes a shaggy wolf; under his teeth are all the horned cattle; but into the wood the wolf goes not, in the vale the wolf does not roam. Moon, moon! golden horns! Melt the bullet, blunt the knife, rot the cudgel, strike fear into man, beast, and reptile, so that they may not seize the grey wolf, nor tear from him his warm hide. My word is firm, firmer than sleep or the strength of heroes” (Ralston 1874: 406).

These three ritual complexes, to judge from their names, all appear to be related to initiatory musical contests (emphasis on con-*tests*) or trials. Furthermore, two of them “Naked Youths” and “Robings” (literally “investiture”) indicate something involving clothing or its lack, probably as a mark of ritual status (recall here the name of the legendary Olympian king who fathered the fifty months on the moon, Endymion). The *Gymnopaidia* in particular is known to have been martial in character, celebrating with choral dances major Spartan military victories.⁷³ We see here then that musical practices were a focal point of the broader process of passing successfully through ritual trials of adolescence and into the status and duties of a mature citizen.⁷⁴

Two ritual complexes in particular for which we have evidence present striking parallels to the strange scene of nighttime banquet-sacrifice that is bracketed by Hermes’ donning of the sandals.⁷⁵ First is the sacrificial banquet of Lykaian Zeus on Mt. Lykaion in southern Arcadia. According to Walter Burkert’s reconstruction (1983: 84-93), the Lykaia festival involved a secret nocturnal banquet where (*perhaps* only symbolically) human flesh mixed in with animal meat was boiled and eaten. Those who cooked did not eat; those who ate were turned into wolves and would then have to flee human society for nine years. After nine years they return and, if they had

⁷³ Of the *Gymnopaidiai* Pausanias says that the Spartan market-square was called the *Choros* (“dance-floor”) because there “at the *Gymnopaidiai*, a festival the Lacedaimonians take more seriously than any other, the boys perform dances in honor of Apollo” (Paus. 3.11.9). Cf. Strabo 10.4.18, Athenaeus *Deipn.* 678c; good discussion at Rutherford 2001: 31 with references to sources for *Gymnopaidiai*. Cf. especially Wade-Gery 1949.

⁷⁴ Again, Plato’s backward-looking and idealizing social charter in the *Laws* may be instructive here: he imagines the social body composed of three choruses, one of the Muses (children up to around 18—when they graduate to wine-drinking, cf. 666a), one of Apollo Paeon (young men under 30), and a third of Dionysos (men between 30-60)—while men over 60 will graduate from chorus dancing to storytelling (664b-665b). This third and “best” (*ariston*) chorus will overcome with wine the reluctance of their age for singing (665d-666c), will be responsible for composing and singing the best and noblest new songs according to correct principles (666d-671a), and for keeping behavior in line at drinking parties when it threatens to exceed a proper measure of convivial good cheer (671a-e).

⁷⁵ On this scene also see Burkert 1984.

abstained from eating meat, take on human form again. Burkert sees this as a ritual for adolescent males' entry into initiatory secret societies, a period lasting nine years of training and living in a liminal status marked by symbolic inversions. Reminiscent of the Lykaion complex, Hermes is said to "crave meat," yet when he finally sacrifices the two cattle, he abstains from eating (132-3).

Another noteworthy parallel between the cult practices of Mt. Lykaion area and Mt. Kyllene is presented in *Hermes*. Mt. Lykaion (as did many locales) boasted a Cave of Rhea where Zeus had been born and nursed by Arcadian nymphs. This was the site of women's rituals, focused on nurturance and newborn life (Burkert 1983: 85). Maia's cave on Kyllene, where Zeus' son Hermes was born, presents a similar mother-son cult site, each of them probably, beneath the regional variation of names and myths, much the same in concept and ritual purpose.⁷⁶

Abstinence from eating sacrificed meat is a key element in another ritual context, one that even appears as though it might be the direct referent of the sacrificial scene in *Hermes*. This was the Pelopion sacrifice, a nighttime ritual banquet, in many ways similar to the Lykaion, held at Olympia in the precinct of the legendary hero Pelops. Again as reconstructed by Burkert (1983: 93-103), the cult of Pelops at Olympia was the heroic complement to the cult of Olympian Zeus. The evidence allows a glimpse of several binary oppositions. Zeus' altar was approached from the east, while Pelop's precinct lay in, and was entered from, the west. Blood to Pelops was poured down into a sacrificial pit, while Zeus' ashen altar was piled higher and

⁷⁶ Similarly, a sacred cave of Zeus Sosipolis and Eileithyia (goddess of childbirth) was located on Olympia's Hill of Kronos. An aged priestess and a virgin chosen each year ministered to the cult of the divine child in the room of Eileithyia; though here the child's identity was not important enough to be emphasized (cf. Burkert 1983: 103).

higher.⁷⁷ Pelops may mean “dark-face,” and the sacrifice to him occurred by night. Thus, while Zeus, and the divine realm above, were worshipped in agonistic contests and sacrifice in the bright light of day, the chthonic heroes below were engaged through a sacrificial communion in the dark of night. As we might expect, night was also the time for songs, music and dancing. In *Olympian* 10 Pindar narrates the archetypal first Olympic Games as instituted by Heracles; after the day of contests, “in the evening gleamed from the fair-faced moon a lovely light, the whole precinct sang at pleasant feasts the reveling type of praise song (*egkômion tropon*)” (ll. 74-78).⁷⁸ Just as the polarity of day and night was elaborated through other significant oppositions like gods/heroes, contest/song, a basic reciprocity between athletics and song also obtained. So Pindar (*Nem.* 3.10-11): “Everything thirsts for something. Contest victory most of all loves song” (*aethlonikia...aoidan philei*).

The sacrificial scene in *Hermes* presents many striking connections to what is known of Olympia and its cult practices.⁷⁹ First is the obvious point that Hermes drives the cattle to the Alpheios River, on the banks of which sat Olympia. More than once reference is made to Pylos as the place where Apollo’s cattle were hid (lns. 216, 355, 398) and commentators have debated the whereabouts of this toponym (whether it is Triphylian Pylos, or some other unknown place). But Hermes’ twelve-part division of

⁷⁷ On the well-documented archaeological site of Olympia cf. Mallwitz 1988; also Lee 1988. Mallwitz’s conclusions based on the archaeological evidence was that the Games began only after 700 BCE, but use of the area as a cult site is considerably older (1988: 99-100).

⁷⁸ Cf. also Pindar *Olympian* 3.19-22, where Heracles’ founding of the Altis altar to Zeus and the Olympic Games is situated at the time of the full moon.

⁷⁹ Clay (1989: 118-127) disputes Burkert’s identification of this scene as a sacrifice, preferring to see in it a ritual *dais* or banquet. But not noting the parallels with Olympian Pelops cult, nor Burkert’s situation of this in the wider context of ritual sacrificial-*banquets*, Clay fails to make the identification with the Pelops cult offered here, which does not however contradict her argument that a *dais*, not an Olympic sacrifice, is intended. I would argue that the scene in *Hermes* combines elements of sacrifice and *dais* in order to sound the mythic themes it is most interested in for its narrative goals. Thus Hermes is both the servant functionary at a *dais* and a divine recipient of sacrifice, enacting his divine status as the deified servant.

the sacrificed cow (128) argues connections to Olympia, as do other details. First is that the final mention of Pylos further specifies the location as “sandy Pylos at the ford of the Alpheios” (*Alpheiou poron*, 398). The “ford” of the Alpheios is exactly how Pindar describes the location of the Pelopion precinct at Olympia: “lying at the Alpheios’ ford (*Alpheou porôî*), his busy tomb by the altar most frequented by guests (*poluxenôtatôî*)” (*Ol.* 1.91-3). Perhaps the western “gate” (*pylos*) into the Pelopion was also known as Pylos. Or perhaps the poet has used Pylos as an intentionally polyvalent periphrasis, seeing as Pylos had, independent of the towns by that name, associations with gates into the underworld, usually lying in the west, and connected with the place where the sun went down.⁸⁰

Further, the scene’s focus on Hermes’ fire-making suggests Olympian fire cult. Hermes builds his fire over a pit set down in the earth (*katoudaiôî bothrôî*, 112), just as sacrifices to Pelops were into a pit (*eis ton bothron*, Paus. 5.13.2). At Olympia there was a sacrificial “servant of Zeus” known as the woodman (*xuleus*), who supplied the exclusive white poplar for sacrifices and who received the neck of the black ram sacrificed to Pelops.⁸¹ Hermes in this scene acts much like a ritual servant, fetching a lot of wood (*xula polla*), drilling and tending the fire, heaping logs on the pit, slaying, butchering, portioning, and disposing of the sacrificial meat, the hides, and the leftover

⁸⁰ Cf. Nagy 1990b: 224-26; Frame 1978: 81-115.

⁸¹ *Hermes* does not mention white poplar (*leukê*), unfortunately, since this would clinch the Olympian identification; but neither does it mention another specific kind of wood (besides a laurel branch in connection with his fire-sticks, 109).

ashes.⁸² We get a thick description on the ground of what ritual servants like the woodman would have done and gone through.⁸³

Like the woodman, Hermes is the divine servant. But unlike the woodman, Hermes does not eat of the sacrificial banquet, even though “he craved the sacrifice of flesh” and the “sweet savor weakened him, immortal though he was” (130-33). In mythological terms, as Clay (1989: 117, 122-3) argues, that Hermes resists partaking of meat effects his transformation into a full divinity—he is called a *daimon* directly after (138)—since the sacrifice’s smoking savor, and not the flesh, was the portion of which gods partook.⁸⁴ But there is a ritual dimension to this scene as well. As Pausanias relates, the Pelops sacrifice was sacrosanct, and any who partook of it were barred from entering the precinct or approaching the altar of Zeus (Burkert 1983: 98, 101; Paus. 5.13.2). So in *Hermes*, having not violated the prohibition on eating Pelops’ nighttime sacrifice, Hermes has opened the way to approach the throne of Zeus, which he will do the next day when Apollo hauls him in, as the gods feast, before Zeus’ scales of justice on Mt. Olympus (322-26).

⁸² The 4th century Attic historian Cleitodemos reported that heralds (*kêrukes*) functioned as cooks (*mageiroi*) at festivals (*LSJ* s.v. *kêrux*, Clitodemos 3.17; *Frag. Hist. Gr.* i, p. 362; source, Athenaeus 14.23). Something of the same social complex seems operative here.

⁸³ Cp. also *Iliad* 23.35-137, when Achilles orchestrates the building of Patroclus’ funeral pyre, the activities of the woodcutters (*hulotomoi*) are described in detail; the entire scene is an epic reflection of archaic hero-cult, like that of Pelops at Olympia.

⁸⁴ The involvement of fire in Hermes’ night of masculine transformations calls to mind another image of divine fire-nurturance, in the *Homeric hymn to Demeter*: Demeter nurtures the princely infant Demophon on ambrosia, and “at nights she would hide (*nuktas krupteske*) him in the strength of fire like a fire-log (*dalon*),” a process that causes him to “come into full bloom.” Also, just as Hermes after returning from his nighttime fire-rituals is called a *daimon*, Demophon is said to “grow like a *daimon*” (*h.D.* 235, 239-41; see also discussion at Nagy 1999: 181-2).

Musical contest and the Pythian Games at Delphi

Having doffed his ritual sandals in the Alpheios, Hermes returns home to Kyllene where, as already mentioned, he engages in a squabble with his mother. When dawn comes Apollo, after much tracking, follows the ambiguous signs and confusing clues to Kyllene and accosts the thief there. “Get out of your cradle,” Apollo orders, “you companion of black night” (*melainês nuktos hetaire*, 290), insisting on Hermes’ ritually changed status. Pleading his innocence in bald-faced lies, Hermes “leads” Apollo to Olympus and Zeus, where “the scales of justice were set down for them both” (324). Apollo relates his side of the story, recapitulating what we have already heard from the primary narrator (334-64), and Hermes retorts with “another story” (*allon muthon*, 366), telling how Apollo came with threats and violence, that he himself fears Helios and the other gods, and swearing a “great oath” by the “gods’ well-built front doors” (Hermes will be god of doorways), that he will never pay Apollo for ruthless theft (368-86). Zeus’ response to this bold display of denials from his “wicked-minded boy”—a response paralleling Hermes’ own on seeing the turtle, then Apollo’s at Hermes’ first lies (281) and later when he hears the lyre (420)—is to “let out a great laugh” (389), and to tell Hermes to lead Apollo to his cattle. Thus Hermes has passed the paternity trial of Zeus and entered into his role as “leader” (*hêgemon*, also *diaktoros*, “minister, messenger”).

This scene, once again, offers intriguing connections with ritual and cult practices. Various origin myths, tied to ritual events, from Delphi focus on the crime and punishment of a temple robber. In one version Delphic sacrifice was linked to

Achilles' son Neoptolemos-Pyrrhos, who was said to have robbed the temple and was justly punished (Burkert 1983: 119, with variants). Another myth linked the founding of the Pythian Games with Apollo's slaying of a Euboean thief who pillaged Parnassus' temple (ibid 121; Paus. 10.6.6). It is hard not to associate with this tradition Hermes' own boast to his mother that he will plunder Apollo's temple (ll. 175-81), a boast directly preceding his trial for theft at Olympus.

The elaborate festival sequence at Delphi, known as the Septerion, held every eight years and culminating in the Pythian Games, is even more illuminating. First, a small-scale model of a "king's or tyrant's palace" was set up below the temple terrace. At night and by torchlight a young boy was silently led to attack this model palace, overturn its table inside, set fire to it, and flee.⁸⁵ The boy then sets out with his retinue on an "erratic wandering" to the valley of Tempe in Thessaly (i.e., under Olympus). This was a "slave's work," but the procession along the "sacred route" served to unite all the regions of Greece along the way. In Tempe there were purificatory rites to expiate the boy from his "crime." This done, the boy carried a laurel branch on the return route, accompanied by *aulos*-music and received everywhere with reverence and esteem. His joyous arrival back in Delphi signaled the start of the Games. "Music was the primary mode of experiencing the Delphic god's epiphany, and the musical agon [contest] was the most important at Delphi" (Burkert 1983: 128-30).

Though the myth in *Hermes* differs in details and actors from other attested Delphic myths, the schematic correspondences are nonetheless striking. Hermes

⁸⁵ The motif of an overturned sacrificial table occurs elsewhere in archaic cult, for example at Lykaia in southern Arcadia, where the mountaintop cult center of Zeus Lykaios was located; integral here were myths of grave criminality and sacrilege involving the antediluvian king Lykaon (cf. most recently Detienne 2002: 115-22).

(having actually stolen cattle from Apollo) boasts he will plunder the Delphic temple of its riches. He then “leads the way” for Apollo to Olympus in Thessaly where he stands trial for the crime he is accused of. Acquitted with a laugh from Zeus, he leads Apollo back to return him his hidden cattle. This is followed promptly by Hermes’ musical display before Apollo; taking out his lyre and soothing Apollo’s wrath with his theogonic song, he wins the herd, gains his other divine honors, and becomes Apollo’s dear companion. Is it possible that when Hermes boasts he will become the “leader of thieves” (*phêlêteôn orchamos*, 175)⁸⁶ having plundered Pytho’s “great house,” the singer has in mind the young boy of the Septerion who is honored with the role of ritual criminal and who will announce the commencement of Apollo’s great musical games?⁸⁷

The musical scene of exchange that follows the trial at Olympus is the climax of the narrative, serving to frame the hymn as a whole with the theme of music. While the beginning of the hymn sang the creation of the *oidos*’ tortoiseshell-lyre, the end narrates a scene of instruction in the art of lyre-accompanied song (463-95). First Apollo, in a final burst of anger, threatens to bind Hermes. But Hermes pulls out the lyre and begins to play a song. “He stood boldly, Maia’s son, to the left of Phoebus Apollo, and swift and flowing he played the lyre.” The song he sings is a theogony: “proclaiming (*krainôn*) the immortal gods and dark earth, how they were first born and how each were distributed portions. Mnemonsyne first of the gods he announced in song, mother of the Muses,” and all the rest of the cosmogony he sang *kata kosmon*,

⁸⁶ Also “chief of thieves” (*archos phêlêteôn*), as Apollo calls him (292).

⁸⁷ Cp. the local tradition at Tanagra in Boeotia, where during a certain feast of Hermes the handsomest *ephebe* was selected to carry on his shoulders a ram around the walls, this to commemorate a time when Hermes had done the same to save the city from a plague (cf. Paus. 9.22.1-2; also Doty 1993: 64).

“in fine order” (424-33). Hermes’ theogony is the consummate speech-act, literally “fulfilling” or “completing” (*krainôn*) what it speaks of, the Olympian order of which he is the final fulfilling member. This verb is even more charged, indicating a sovereign act of “authorizing,” in exactly the way a herald, speaking under authority in the king’s own voice, might loudly publish a proclamation through the lands. “By singing a theogony and thus “authorizing” the gods, Hermes is in effect confirming their authority” (Nagy 1990b: 59; cf. also Benveniste 1973: 331-32).

Apollo, dumbstruck by this song, declares its worth at fifty cows (437). Hermes agrees to the “exchange,” and the seven-string lyre becomes a token of exchange in a new cultural economy of performing arts. The intangible delights of lyre song are set on equal terms of value with the physical wealth of domestic herd animals. Such an institution pertains most to those who

would make their livelihood (whether professionally, occasionally, or only at certain stages in life) and gain personal wealth by participating in the musical culture of the festival circuits; this is why I have called the hymn an origin myth of the *aoidos*. It is interesting, too, that the lyre as a symbol or currency of exchange sometimes appears on the early coinage that was just beginning to be minted in the archaic period, as on this fine sixth-century example from the island of Calymna (Figure 10). Just as the lyre



Fig. 10. *Chelys* on Calymna coin, 6th c. BCE

in the hymn becomes a token of exchange for other sorts of wealth like herd animals, so in actual economic practice some of the new *symbola* or minted trade tokens made an icon of the lyre into their seal of value.¹ After all, both the lyre and the coin are symbols of Hermes, as Apollo tells him announcing his divine functions: “For you have from Zeus the *timê* (right/honor) to establish deeds of exchange among men upon the richly fertile earth” (ll. 515-16).

The “gentle cohabitations” of learning the lyre

The scene of musical instruction that follows is of great interest because it articulates in verse a situation depicted visually on many early Greek vase-paintings: the one-on-one music lesson between a man and boy (Figure 11).² As related by the hymnist we see how the music lesson can become occasion for lessons on other matters, ethical and aesthetic ideas, even educational “theory.” Music instruction edges into meta-instruction. “It is in your own power to learn whatever you set your mind on,” Hermes tells his “pupil” Apollo (ln. 474). “Sing well, holding in your hands this clear-voiced companion, knowing [as you do] how to speak well and beautiful things in a fine and orderly manner” (εὐμόλπει μετὰ χειρῶν ἔχων λιγύφωνον ἑταίρην, / καλὰ καὶ εὖ κατὰ κόσμον ἐπιστάμενος ἀγορεύειν, ll. 478-79).

¹ Likewise some of the earliest of Greek coins, from the island of Aegina, have stamped on them the image of a sea turtle (cf. Kraay 1976: plates 5-7).

² For other examples of this scene of instruction cf. Mathiesen 1999: 249, 256, the latter on an early 5th century red-figure skyphos vessel, showing Linus instructing Iphicles (Heracles’ brother) on the *chelys-lyra*. [provisional credits on picture: from Perseus database: Photograph by Maria Daniels, courtesy of the Staatliche Museen zu Berlin, Preußischer Kulturbesitz: Antikensammlung Copyright notice. Illustration of Berlin F 2285; instructions at Perseus for requesting rights]

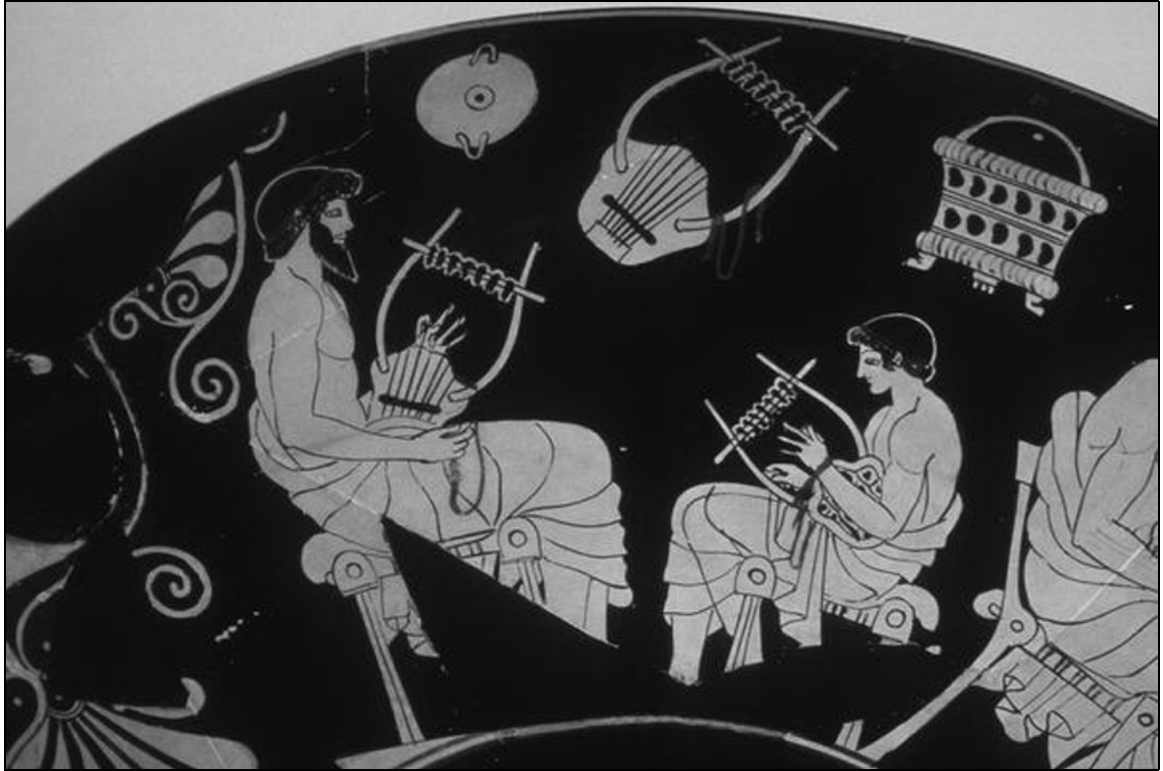


Figure 11. Scene of musical instruction. Attic red figure cup, ca. 480 BCE, from Caere, Etruria.

Thus Hermes emphasizes the importance of mindful and attentive care for proper form, awareness of one's instrument, and fine and beautiful performance. He goes on, emphasizing the idea of music education as an intimate and loving relationship with the instrument:

“Whoever inquires into her [the lyre] learning with skill and intelligence (*technê kai sôphiê*), by the sound of her voice she teaches all sorts of things that delight the mind (*noûs*); she is easily played with gentle habituations, but she avoids miserable toiling. But whoever being ignorant beforehand inquires into her violently, fruitless and in vain she chatters a confused and thoughtless noise. But it is in your power to learn whatever you set your mind on.” (ll. 482-88)

Playing an instrument, Apollo learns, is a form of deep and serious play. To elicit the delightful voice that accompanies singing requires the application of skill and

wit. The instrument draws on resources of innate talent to cultivate gentle habits. The ideal performer is one who understands that learning involves developing a relationship between oneself and the instrument that allows the instrument to instruct, inform, and shape the habits of the learner. To learn to play, in other words, involves self-learning and self-knowledge, and mastery of the lyre is also a discipline of self-mastery. There is also the suggestion, as Cora Sowa has pointed out (1984: 196), that to “inquire” into, or “consult” the lyre is conceived of here as a form of divinatory practice; the same verb, *(ex)ereinein*, “inquire, question, consult,” is used both here of the lyre and in the context of prophecy, in the present hymn as elsewhere in Greek epos. Playing the lyre becomes a form of divination, a conception that fits with the *aoidos*’ self-image of being the divinely inspired mouthpiece of the Muses.

Contrasted to the one who “consults” the lyre properly and successfully is the aspiring performer who rashly approaches the musical instrument in ignorance and with violence, with no self-control. The result of this approach is not music that delights the mind, but fruitless and thoughtless noise. In each case the instrument expresses in audible form the inner state of the performer. As musicologist Lucie Rault says, in the epigraph that began this work, “the instrument is the means of translating thought into something visible, palpable and audible;” Hermes’ lesson is that “for man to have a true dialogue with this interlocutor” requires most of all for the instrument to be treated and approached as an interlocutor, not merely as something to be learned and mastered in a dominating sense, but as an active instructor in its own right to which one must submit in order to learn (recall in this regard that *instrument* and *instruct* share the

same Latin root). To learn an instrument is also to learn *from* the instrument. To play the lyre is a hermeneutical discourse.

This reversal, interpenetration, and reciprocity of agent and action is emphasized throughout this passage by the gendering, implicit and explicit, of the lyre as feminine, as a member of the opposite sex with whom to have relations it is necessary to get along. Thus the lyre is called a *hetaira*, a “female companion” (often meaning a prostitute). As what-is-learned she is the grammatical object (lns. 482, 486), but in the very next line she is the subject who teaches (ln. 483), followed yet again by a construction in the passive: she is “played with.” The phrase connected with this, *sunêtheiêisin malakêisin*, translated above as “with gentle habituations,” is the strongest sexual language in the passage and is perhaps a pun, since *malakos* “soft, gentle” has strong overtones of feminine softness, tenderness, and delicacy, while *sunêtheia* (compound of the prefix “with” and root *ethos* “habit, character”—originally, an animal’s “lair” or “haunt”⁹⁰) means not only “habituation” but “cohabitation, living with.”⁹¹ Thus Hermes co-opts the language of sexual relations, seduction, domesticity, and, more importantly, the notion of the feminine as the teacher of cultivated delicacy and “sensitivity,” we might say, to develop his main point of musical instruction: learning is an engagement both active and passive, a desire-driven acquisition of skills, or unfolding of innate talents and gifts, thus also a willing submission to be taught. In short, learning to play the lyre is an erotic engagement.

Viewing the passage again in the social context of Greek male initiation, musical trial, contest, and culture, the feminine gendering of the lyre and of its

⁹⁰ Cf. Havelock 1963: 63.

⁹¹ Recall in this regard is Polybius’ description of young Arcadians’ musical training as a *suntrophos*, a “living with,” an intimate companionship (see Polybius passage at beginning of chapter).

“relations” with the musician represent a point at which the language of sexuality, and especially the feminine register of words and concepts, is given voice, infusing and charging male-centered discourse with an erotic edge and a feminine, “softening” side. By this I mean that to the Greeks themselves music was always potentially something non- or anti-masculine, the latter always defined in terms of tough martial virtue (*arete*). But they cultivated the Muses nonetheless, and it was their sphere where (as Polybius attests with his theory of geographical determinism of character) hardy manhood was tempered with what in Greek conceptions was the feminine side of *eros*, of “soft cohabitations,” and deceptive, soporific guiles and pleasure. It is Hermes’ charming music that disarms Apollo of his violent fetters: “the desirous sound of the divine voice went through his heart and sweet longing seized his spirit” (421-3).

Bearing in mind the male coming-of-age themes in *Hermes*, we might say too that the erotic language of music represents the young male’s new relation to the feminine. Having been duly separated from the maternal female sphere of his mother’s cave, he will now interact with women as sexual partners, and eventually take a wife and father children himself. Male musical discourse defined a social context where mature (or maturing) sexuality could be openly expressed, thematized, explored and exploited for poetic effect.

The herdsman’s pipe and martial training on the border

Finally, having traded his lyre to Apollo for a herd of fifty head, he receives as well a herder’s prod, and becomes the cowherd (497-8). Apollo takes the lyre, and Hermes

makes himself another instrument, the *syrinx* or panpipes (511-12). The elaborate exchange of gifts, signs and honors continues, and resolves many levels of the narrative, including mythological and theological levels, as others have explored.⁹² But this detail of Hermes becoming the herdsman may serve to complete the persistent level of male initiation themes that we have been following.

Having passed through several rites of separation from his boyhood state, including removal from his mother's protection, ritual status inversion and trials, and musical contest, he is now ready to enter into the duties of a young man in a martial-pastoral society. Accordingly, he gives up his childhood plaything, the lyre,⁹³ and takes up the goad and panpipes of the cowherd. Going out to the pastures on the borders he will live alone, or with other young men, protecting family herds from predators and from cross-border raiders. In a culture where masculinity is bound up with defending one's own animals as well as stealing those of others, the bucolic life is tantamount to military training. As such family-centered archaic practices changed into the more organized and formalized institutions focused in the city-states of the classical world, the *ephebeia*, or young-men's training, often involved just such periods of defense service on the borders of one's state territory.⁹⁴ Hermes turned herdsman would thus be a mythic mask for the young man of an intermediate age-grade (ca. 16-25) serving as border guard while he trains for full military service.⁹⁵ Nor was the purpose of such

⁹² Clay 1989: 136-51; Scheinberg 1979; Larson 1996 (who has some important critiques of Scheinberg); Nagy 1990b: 59-60.

⁹³ Recall Plato's pedagogical stipulation, noted before, that children learn the lyre between ages 13-16 (*Laws* 809e-810a). Also in the *Republic* 399d, only the lyre and kithara are allowed to remain in the city, and the *syrinx* would be allowed to shepherds in the fields.

⁹⁴ Cf. Vidal-Naquet 1986; Winkler 1990a, 1990b.

⁹⁵ Looking forward to fifth-century texts, the servitude of the satyrs—that young male troupe of servants to Dionysus in Athenian satyr plays—as herdsman for the Cyclops Polyphemus in Euripides' *Cyclops* may take on new resonance in association with the present discussion of male initiation and martial

training simple defense and maintenance of existing boundaries, but often rather the negotiation of those boundaries and expansion onto the enemy neighbor's territory. The reciprocity of expansionism and music as a metonymy for social life is well expressed in a Delphic oracle, delivered to the Spartans when they wanted to invade and takeover Arcadia, the mountain fastnesses to their north. The oracle was not optimistic but did grant a concession (Her. *Hist.* 1.66):

*Arcadia you ask me. A great thing you ask me, I'll not give you.
Many in Arcadia are the acorn-eating men
who will fend you off. But I won't grudge you something big:
I will give you Tegea to dance with the striking foot
and to measure out the fine plain with the reed.*

Ἄρκαδίην μ' αἰτεῖς: μέγα μ' αἰτεῖς: οὐ τοι δώσω.
πολλοὶ ἐν Ἄρκαδίῃ βαλανηφάγοι ἄνδρες ἔασιν,
οἳ σ' ἀποκωλύσουσιν. ἐγὼ δὲ τοι οὔτι μεγάριω:
δώσω τοί Τεγέην ποσσίκροτον ὀρχήσασθαι
καὶ καλὸν πεδίων σχοίνῳ διαμετρήσασθαι.

No doubt Apollo's oracle was being prudently realistic: the Arcadians were renowned for their hardiness, and for their rigorous, old-fashioned musical culture through which they cultivated that hardiness in each new generation.

Euphrosunê, musical tricks, and festival foundations

In father Zeus *kratos* and *metis*, forceful strength and clever wit, are matched and united; but Apollo is the son who embodies overwhelming force (*bia*), while Hermes

training (cf. Seaford 1984: 33-37). Recall here too that the myth of Hermes' invention of the lyre was felt to be a suitable subject for satyr drama (Sophocles' *Ichneutae* treats the myth).

incarnates cunning and craft (*dolos, technê*). When the lyre's song overwhelms the ire of Apollo, Zeus' grand Olympian order has finally reached a stable but dynamic completion, and the celestial eagle and thunderbolt of Zeus have their cunning, earthly counterpart in the lovely shell of Hermes' tortoise-lyre. Its charming voice averts from the feast the strife that always threatens it, and brings instead *euphrosunê*, "conviviality," along with desire and sweet sleep (so Apollo declares, *ln.* 449; also 482).⁹⁶ Similarly, Odysseus in his praise of the Phaiakian singer Demodokos, whose "voice is like the gods," declares that there is "no achievement more graceful" (*telos chariesteron*) than when "*euphrosunê* holds throughout the people" as they feast, drinking wine and listening to song (*Od.* 9.2-11).⁹⁷

This can be compared to the beginning of Pindar's first Pythian ode, which says much the same thing, in honor of a victory at Pytho's musical games, when it invokes the "golden *phorminx*—you quench the spear-wielding thunderbolt of ever-flowing fire. The eagle of Zeus sleeps upon his scepter, with his swift wings drooping on both sides, lord of birds; you pour dark mist on his bent head, gently closing his eyes....enthralled by your rushing motion...your shafts enchant the minds of the gods through the skill of Leto's son and the deep-girdled Muses" (*Pyth.* 1.1-12). The lyre has the power to charm Zeus' eagle to sleep, and quench his fiery thunderbolt.⁹⁸

⁹⁶ *Euphrosunê*, as attested in the Hesiodic tradition, is also the name of one of the three *Charites*, "Graces," along with *Aglaia* and *Thalia*, "Brilliance" and "Good Cheer," from whose eyes glance "limb-loosening *eros*" (*Theog.* 909-11); elsewhere too, the Graces are linked with *Himeros*, "desire" (*Theog.* 64). At *Hermes* 575, Zeus grants Hermes *charis* "favor, grace."

⁹⁷ On this passage and *euphrosunê*, cf. Ford 2002: 29, Nagy 1990: 198, 277-8; also Bundy 1986: 2; Bacchylides uses the metaphor "the gold that is *euphrosunê*" (*Epinician* 3.87), an apt image in the context of *Hermes*, where lyre-song, by inducing *euphrosunê*, becomes *murion olbos* ("endless bounty, wealth") for Hermes.

⁹⁸ The lyre has become, then, a potent symbol in the Turnerian sense: "[ritual symbols] condense many references, uniting them in a single cognitive and affective field....ritual symbols are "multivocal," susceptible of many meanings, but their referents tend to polarize between physiological phenomena

But before “Leto’s son” Apollo had the skill to play the lyre, our Hermes hymnist claims, he had to receive it and instruction on it from his younger brother Hermes. Beneath the rich symbolic and mythological meanings that make this claim satisfactory within archaic Greek thinking, there is still a partisan and regional political ring to it that has yet to be fully clarified. The hymn’s narrative spans mainland Greece from north to south and thus unites it in a single pan-Hellenic gaze. The outer bounds of this symbolic geography are Olympia in the south and Mt. Olympus to the north. In between are the sites sacred to the competing brothers, Kyllene to Hermes, Delphi to Apollo. Moreover, the south was, to judge from the hymn and outside evidence, more the realm of Hermes and of other symbols of darkness, trickery, guile, theft (recall Pelops, the Lykaia, all of Hermes’ nighttime high-jinks), just as Apollo, light, wealth, and legality were linked with the north (Apollo as the sun, his herds and other wealth at Pytho, Zeus’ “scales of justice”). Now it is significant that the lyre (and all else the hymn associates with it, as explored above) is also *from the south*. And yet Apollo’s Pythian Games, in the north, were the preeminent venue for musical competition. But we should ask ourselves, was this always the case?

In fact, throughout the early archaic period (8th-6th cent. BCE) the festivals and public life of southern regions provided some of the most productive environments for

(blood, sexual organs, coitus, birth, death....) and normative values of moral facts (kindness to children, reciprocity, generosity to kinsmen, respect for elders, obedience to political authorities, and the like). At this “normative” or “ideological” pole of meaning, one also finds reference to principles of organization; matriliney, patriliney, kingship, gerontocracy, age-grade organization, sex-affiliation, and others. The drama of ritual action—the *singing, dancing, feasting*, wearing of bizarre headdress, body painting, use of alcohol or hallucinogens, and so on, causes an *exchange* between these poles in which biological referents are ennobled and the normative referents are charged with emotional significance” (Turner 1974: 55, emphasis added). If I have made my case well, this entire theoretical passage should resonate with the *hymn to Hermes*. It is a mythic charter that constructs the *aidos*’ humble concatenation of dead shell, cowhide, and sheepgut (the “physiological” pole) into a highly charged ritual symbol for the normative values of *euphrosunê*, well-regulated festive community, male rites of passage, practical and religious calendrical conceptions, etc.

musical specialists.⁹⁹ While Ionia and the islands fostered many famous singers, the Peloponnese was also a hotbed of music culture, and many Greek singers from the east found fame and patronage for their talents there (Alcman in Sparta, for instance, if he was not in fact a native). In addition to the relatively well-known Tyrtaeos of Sparta (mid-7th cent.), and Terpander of Lesbos (said to have won a musical contest at Sparta's Carneia festival towards the beginning of the 7th cent.), other southern musicians famous in their day but less well-served by time include Echembrotos of Arcadia and Sacadas of Argos (early 6th cent.). There must have been many others, and local festivals all over the south, at Lykaia, Olympia, Argos, Sparta, Amyclai, Elis, Pheneos, Ithome and elsewhere, provided them periodic performance spaces in which to practice their arts, show off their skills, and gain fame for dazzling musical bravura.

There is a moment in the archaic period that fits the overall orientation of the *Hermes* narrator and his apparent sympathies and attitudes. Privileging the south by putting it first and making it home to Hermes' inventions, and asserting especially Olympia's preeminence, the *hymn to Hermes* then goes further and subordinates Pythian Apollo to Hermes in music, making it a gift and a matter of instruction from the younger to the older.¹⁰⁰ The first quarter of the sixth century (600-575 BCE) was a time of major festival innovations on a pan-Hellenic scale, often associated with the waves of political upheaval that drove tyrants out of many major city-states. In a span of roughly a decade the Pythian, Isthmian, and Nemean Games were established (586/582(?), 581/0, and 573, respectively). The latter two were held every other year,

⁹⁹ "In the seventh century...Sparta was the most important musical center of Greece" (Comotti 1989: 17).

¹⁰⁰ Cf. Clay 1989: 142 for other readings, including her own, of the poetic import of the face-off and trade between Hermes and Apollo. My view is much simpler: Hermes is a southern *aoidos* gifting to Apollo at his Pythian festival the soothing charms of lyre-music.

while the Pythian festival became the rival of Olympia as a quadrennial festival (it was held in the second year of the Olympic cycle).¹⁰¹

Now it would not be hard to imagine that for the already powerful priestly-oracular institution at Delphi to add a premier music contest to its festival calendar, putting itself in direct rivalry with the Olympic Games, may have aroused resentment or antipathy on some fronts.¹⁰² The establishment of these other festival games was nothing less than the founding of a pan-Hellenic system of ritual community. But while “Hellenic” unity may have been an ideal, the gathering of different people from all corners of the Greek-speaking world would also have accentuated regional differences and activated rivalries (competitive display of course being an important reason for gathering). The recorded winners at the first Pythian festival, in fact, were a Melampus from the western island of Cephallenia for lyre-song, Echembrotos the Arcadian in *aulos*-song, and Sacadas of Argos in *aulos* playing (Paus. 10.7.3)—that is, none of them from the north, Athens, the islands or Ionia. Sacadas was also renowned as the first to perform the five-part Pythian *aulos* piece that dramatized in music the fight between Apollo and the serpent Pytho (Paus. 2.22.8). It may have been Pythian Apollo’s festival, but southern musicians, in its early days, seem to have been the stars of the show.

Putting together the southern orientation of the *Hermes* narrative with what we know about the festival innovations in the early sixth century allows for another theory

¹⁰¹ Hammond 1982: 350; Fontenrose 1988; Morgan 1990. Properly speaking, at Delphi this was a *reorganization* amplifying the importance of previous festival customs. The earlier Pythian festivals, according to Fontenrose (125), were every eight years. Cf. Morgan 1990: 136-7; also Dillon 1997: 99-123 is a useful survey of the four Panhellenic festivals.

¹⁰² The founding of the Pythian Games was indeed preceded by conflict, the so-called First Sacred War when the Amphictionic rulers of Anthela, a multi-state confederation, went to war with and took over Krisa in a dispute over control of pilgrimage routes. Afterward they took control of Delphi as well (cf. Fontenrose 1988: 125-6).

concerning the possible date of the hymn, a point on which it has so far resisted any critical consensus. Based on the above I would propose that the hymn was composed in the first quarter of the sixth century—which accords with other reasonable arguments¹⁰³ bearing on its date of composition (see Janko 1982)—perhaps for, or not long after, the founding of the Pythian Games in 586/82.¹⁰⁴ In thematic terms, this would make the final scene of musical reconciliation between Hermes and Apollo the formal presentation of festival music from the south to the Delphic establishment. In other words, in addition to being a wonderfully rich origin myth for the Greek *aoidos*, the final scenes of the *hymn to Hermes* are also a foundation myth (from a rather sly southern viewpoint) for the Pythian Games themselves.

“Finding a tortoise, he gained endless wealth.” So the unknown poet of the *Homeric hymn to Hermes*, probably himself hailing from somewhere in Hermes’ southern homeland,¹⁰⁵ succinctly sums up his point of view as a singer. It was a lucky find, indicating good omens for Hermes’ successful passage through a series of peril-fraught

¹⁰³ Brown’s theory (1947) that dates the poem to the late fifth-century with an Athenian provenance, based on a political allegorical reading of the hymn through an Athenian lens, is not in my view reasonable. (Similarly for Graefe 1973, who dates it even later on an analogous reading.) *Hermes* provides not a stitch of evidence to suggest ties to Athens, which is rather conspicuously *absent* from the entire hymn. As Janko 1982: 142-49 shows, evidence of Attic dialect forms in the hymn is also lacking.

¹⁰⁴ Janko’s conclusion (1982: 143-50) puts the temporal bounds on the hymn as ca. 547-500 BCE, but his *terminus post quem* is based on an inference from slender evidence (supposed connections to Croesus and the fall of Sardis), and does not definitively rule out an earlier sixth century date. Schmid et al. 1929(1): 238 proposed connections with the First Sacred War. Indeed, Janko’s own discussion of the close linguistic and thematic ties between *Hermes* and the hymn to *Pythian Apollo* (143, 148-9) should lead us to posit a much closer link in time and place between these poems. The link of Onchestus between the two hymns would almost lead us to suspect that they might be by the same singer, or that at least they knew one another and are engaging in (live?) poetic dialogue.

¹⁰⁵ The idea that the *Hermes* poet has connections to the south does not contradict Janko’s position that the poet has Boeotian ties, since ties and allegiances to two or three places was not uncommon, on account of the considerable population movements (for colonization, trade itinerancy, simple relocation) throughout the archaic period. I consider the strong southern orientation of *Hermes* a primary given to be factored into any discussion of the poem’s provenance. How we fit this with the Boeotian elements is up in the air, and probably a matter of speculation.

trials on his way to becoming the “companion of the feast” of gods on Olympus. Its transformation through the magic of craft into a marvelous instrument of song brought the will of Zeus to completion, because with it the divine order gained its organ of eternal fame, the lovely song of the *aoidos* who is Hermes’ counterpart among mortals. Like Olympian sacrifice from which the savory smoke rises to feed the gods, lyre-music broadcasts in beautiful and orderly sound the echoes of human praise to please the feasting Olympians who rule on high.

From the classical period on, as Apollo took over as the pan-Hellenic god of music, Hermes would increasingly fade into relative obscurity, and even in Arcadia his goat-footed son Pan gained over him in prominence. The success of Dionysus (and Athens) also helped to eclipse Hermes who had, for the *Hermes* hymnist at least, many similar associations with fertility. Athena also took over Hermetic aspects; Odysseus was the maternal great-grandson of Hermes, but in the *Odyssey* as we have it Athena is the tricky hero’s closest divine companion.¹⁰⁶ As Hellenism spread its rather stereotyped Apollonian—and Athenian—order through new lands, in Italy, Egypt, the Near East, the trickster’s improvisational creativity, by which human culture was originally snatched from nature during lucky flashes of insight sparked by coincidence, receded to the margins of a settled way of life.

Some modern critics, unable to imagine any deviation from Apollo’s supremacy, have found it an insoluble enigma that Hermes make and give Apollo

¹⁰⁶ However, the *Odyssey* preserves ample signs of close association between Hermes and Odysseus, since he is the god who helps Odysseus on his way more than once (in Book 1, and 10.275-309, the Circe episode); see also Nagy 1990b: 34.

“what was *already his* as god of music” (Solomon 1994: 46; emphasis added).¹⁰⁷ But the *hymn to Hermes*, challenging this Apollonian bias as anachronistic, urges us to see a time and place in which Hermes had been much greater than his later pan-Hellenic, and pan-Athenian, incarnation. A god who was everywhere, “he keeps company with all mortals and immortals” (πᾶσι δ' ὄ γε θνητοῖσι καὶ ἀθανάτοισιν ὀμιλεῖ, *Hermes* 576), for to him “the dearest thing of all is to befriend a man” (μάλιστα γὰρ φίλτατόν ἐστιν / ἀνδρὶ ἐταιρίσσαι, *Iliad* 24:334-5).

He is there at the still uncertain hour before the morning,
at the baffling borderland between sleep and waking,
and he conducts your soul, at the last,
along the downward road to the house of Hades.
And in between, where civilization's crust cracks,
on seldom trod paths linking town to town,
he is with the lonely traveler,
listening to him keep himself company,
whistling as he walks.

¹⁰⁷ So Solomon concludes, having never questioned his starting-point assumption: “*if Apollo is the god of music*, however, and Hermes simply [sic!] a divine trickster-infant otherwise associated with fertility, flocks, the dead, travel, heralds, merchants, and thieves, then it is enigmatic for Hermes to have invented this most profound of ancient Greek musical instruments” (1994: 37; emphasis added). Cf. too Mathiesen's (1999) title for his compendious history of Greek music: *Apollo's Lyre*.

Contra this view, Nagy 1990b:58-60 (which it seems Solomon ought to have taken into account), for whom the “newer” god in the hymn, “Hermes—not Apollo—is in fact the older god, and that his “authorizing” staff and “authorizing” Bee Maidens are vestiges of an older and broader poetic realm [that united the functions of seer/herald/singer]. From a historical point of view, Apollo and his Olympian Muses are the newer gods: they represent the streamlining of this older realm into the newer and narrower one of pan-Hellenic poetry” (see also Nagy 1990a).

Intermezzo: Turtle the Trickster

“Turtle is always the subject of a tale”

Yoruba proverb (Ellis 1894: 259)

In the *hymn to Hermes* a tortoise-become-lyre—its musical “voice” a voice from beyond the grave—is a good omen and a symbolic double for the trickster god Hermes. In other parts of the world, turtle him- or herself is the trickster hero of traditional narratives. An especially rich tradition about turtle the trickster is passed on among the Yoruba of West Africa, where Àjàpá the turtle, “Master of Sundry Wiles,” is the clever, lazy, greedy protagonist of many Yoruba tales. Among Àjàpá’s most powerful resources in his scheming are his musical abilities. His singing can cast spells on people, inducing forgetfulness, persuading agreement. Turtle tricksters going by other names are found elsewhere in West Africa: there is Ikaki of the Kalabari in Nigeria, Ekaga among peoples in Cameroon, Gabon, and Guinea, and Sulwe of the Ila in Zambia.¹ Some Bantu tribes of South Africa also know turtle as a savvy trickster, and “Brer Tarrypin” (terrapin) turns up prominently in the Uncle Remus stories from the American South. In fact, some of the same stories about clever, musical Turtle occur in many parts of Africa, the southern U.S. including among Southeast Native Americans, and are widespread among different indigenous South American cultures.² Not only are

¹ Owomoyela 1997: ix-xvi.

² As Dundes 1965 documents, these noteworthy triangular relations between Africa, North America and South America, were already detected and in some cases well-explored by 19th century folklorists.

these stories intriguing for the world mythology of music; their remarkable distribution is a marvel of folkloric diffusion, because the far-flung territory where these stories are found, over three continents and among widely differing ethnic-linguistic groups, is a bedeviling puzzle of world folklore, and an amazing story in its own right.

Turtle the Yoruba Singer of Tales

In the late nineteenth century Alfred B. Ellis published an extensive ethnographic volume on the religion, customs, and beliefs of Yoruba peoples of the “Slave Coast,” in which he included several of their “tortoise stories.” From his account it is clear that the tricky turtle protagonist was to some degree the narrative counterpart to, and mask for, the wandering storyteller himself. Distinguished from the courtly oral chroniclers attached to kings, the professional singer of tales (*akpalo*, “maker of *alo*” or tales) was an itinerant entertainer. His instrument was a drum. One tale Ellis relates tells how a young hunter, washed into a gully during a rainstorm, agrees to be Turtle’s slave if he will save him. This done, Turtle shuts the young man up inside his drum, ordering him to sing well from inside the drum whenever he comes to a house and plays. After playing his drum for a royal dance, during which Turtle retells the story of the young hunter’s mishap as the young man calls out in refrain to be rescued from the drum, Turtle is invited to sing the song again at a dance by the young man’s own family. After this performance they reward Turtle handsomely with food and rum, getting him drunk until he finally passes out. They then rescue the young man from the drum, replacing him with a squawking crow. The crow cries out, “Why when you were eating

and drinking rum did you not give some to the drum?” This highly self-reflexive tale makes it clear that the trickster protagonist Turtle could be, at least at times, a narrative mask for the (no less tricky) drumming storyteller.³

Zulu: Hlakanyana, hare, iguana, and the whistle-theft

Hlakanyana is a tricky hero of South African Zulu tales. Though he is not a turtle, one of his epithets, “Little Weasel,” suggests that he is a humanized form of an earlier animal trickster.⁴ A story cycle attested, about how he kills a hare, makes a whistle of one of his bones, then loses it to an iguana, is important because it is solid (if baffling) evidence of an African version of a story also found, with Turtle and other tricksters, among Native North and South American tribes. In the case of the latter the versions have often been treated as culturally important indigenous narratives (which well they may be, since diachronic origins are not the same as synchronic meaning in a symbolic system).

Hlakanyana spies a hare and, being hungry, tries to beguile it with a story. He eventually overcomes the hare, kills, cooks, and eats it, then makes a whistle from one of its bones. Playing it he goes along singing, and comes to the bank of a river, where

³ Ellis 1894: 260-63. Sekoni 1994 explores Yoruba trickster tales for how their “ambivalences” (as they are usually interpreted) reflect genuine sociological struggles over linguistic/moral codes; Turtle’s tricks are strategies of resistance to ruling forces that jeopardize his agency, autonomy, and livelihood. (If in summary Sekoni’s hermeneutic sounds like a banal Marxist reading, its strengths become more evident when juxtaposed with Owomoyela 1997, whose renditions are sententious morality tales where Ajápá always learns his lesson, his chapters organized by the vices and virtues the tales ostensibly display—“obligations of friendship,” “appetite,” “resourcefulness,” “mischievousness,” “vanity”—like a West African version of William Bennett’s *Book of Virtues*. Far more readable, real, and full of vital human wit, pathos and predicament are the oral versions in Schaefer and Egbokhare 1999).

⁴ Werner 1968: 155, 160. Nor is his humanization complete. In one episode to escape pursuit he “changed into a piece of wood” and crosses a swollen river; this mode of escape is more naturally suited to an animal that can swim, and indeed turtle escapes by just this means in several of his tales (ibid.: 163).

up on a tree limb lay a lizard. He asks to borrow the whistle, but Hlakanyana first refuses, then consents, telling him to come away from the river lest he escape into the water with the whistle. The lizard does so, tries the whistle and likes its sound, so he tries to abscond with it. Hlakanyana fights the lizard, but gets struck with his strong tail, and the lizard escapes into the water with the whistle.⁵ Having lost his hare-bone whistle, Hlakanyana proceeds on his adventures, in the course of which the leg-bone-become-whistle motif seems to recur in fragmentary form: the hero kills and eats a leopard, “keeping, however, one leg, with which he set out once more on his travels” (Werner 1968: 164-68). The subsequent story events leave this detail unmotivated, and thus it seems to be a fragmented deformation of the leg-bone whistle motif. Again after intervening adventures, Hlakanyana finds the lizard, calls him down from the tree, kills him and recovers his whistle.

***Terrapin, Possum, and Wolves, a.k.a. Turtle, Monkey and Jaguar
A North-South American Comparison***

James Mooney in his *Myths of the Cherokee* (1900: 278-79) reported a myth that bears striking resemblances to a turtle tale collected among the Gê-speaking Xikrin-Apinaye Indians of the central Brazilian Highlands and first published in 1930, then collected in Wilbert and Simoneau (1978 [v.1]: 259-60) (resemblances often noted also by Levi-

⁵ Werner 1968: 165 relates variants: “In a Xosa version it is Hlakanyana who steals the whistle from the [lizard]....One of the Ronga stories about the hare describes him as challenging a poor gazelle to the game of “cooking each other.” Having killed her, he made her horns into a kind of trumpet, which he used to sound an alarm of war. In fact, this trick, in one form or another, and attributed to different actors, is found throughout the Bantu area.”

Strauss; cf. 1969: 158-61, 174-76; 1973: 290-94).⁶ I will put the two accounts side by side (Cherokee version on left).

The Possum and the Terrapin went out together to hunt persimmons, and found a tree full of ripe fruit. The Possum climbed it and was throwing down the persimmons to the Terrapin when a wolf came up and began to snap at the persimmons as they fell, before the Terrapin could reach them. The Possum waited his chance, and at last managed to throw down a large one (some say a bone which he carried with him), so that it lodged in the wolf's throat as he jumped up at it and choked him to death. "I'll take his ears for hominy spoons," said the Terrapin, and cut off the wolf's ears and started home with them, leaving the Possum still eating persimmons up in the tree.

After a while he came to a house and was invited to have some kanahe'na gruel from the jar that is set always outside the door. He sat down beside the jar and dipped up the gruel with one of the wolf's ears for a spoon. The people noticed and wondered. When he was satisfied he went on, but soon came to another house and was asked to have some more kanahe'na. He dipped it up again with the wolf's ear and went on when he had enough.

Soon the news went around, that the

A monkey was up in a tree eating inaja fruit when a turtle came by and asked him for a piece of the fruit. The monkey told him to climb up. The turtle answered that his legs were too short to climb trees. The monkey then went down, brought the turtle up, and put him on top of a bunch of inajas. Then, from sheer meanness, he left him there and went away.

At that moment a jaguar passing by the inaja tree saw the turtle and asked him to come down. The turtle realized that the jaguar wanted to devour him and refused to come down, saying that he was afraid of falling. The jaguar told him to jump down and promised to catch him. The turtle then worked out a plan to kill jaguar. He said he would jump. But before the jaguar had had time to prepare himself, the turtle jumped on his head and killed him.

The turtle fled, but some days later he came back. The vultures had already eaten all the jaguar's meat. The turtle then took a piece of bone from the jaguar's leg and made a flute with it. Playing the flute, he went into the woods.

After a while he met another jaguar, who asked him for the flute. When he

⁶ For a close-up, contextualized musical ethnography for a Gê-speaking people, the Suyá of Brazil's Xingu National Park, cf. Seeger 1987. In the Mouse Ceremony he documented, a rite of passage for young boys as they begin their initiation into adult male life, daily shout songs and seasonal unison songs were performed over a period of fifteen days.

Terrapin had killed the Wolf and was using his ears for spoons. All the Wolves got together and followed the Terrapin's trail until they came up with him and made him prisoner. Then they held a council to decide what to do with him, and agreed to boil him in a clay pot. They brought in a pot, but the Terrapin only laughed at it and said that if they put him into that thing he would kick it all to pieces.

They said they would burn him in the fire, but the Terrapin laughed again and said he would put it out. Then they decided to throw him into the deepest hole in the river and drown him. The Terrapin begged and prayed them not to do that, but they paid no attention, and dragged him over to the river and threw him in. That was just what the Terrapin had been waiting for all the time, and he dived under the water and came up on the other side and got away.

Some say that when he was thrown into the river he struck against a rock, which broke his back in a dozen places.

He sang a medicine song:

Gû'daye'wû, Gû'daye'wû,

"I have sewed myself together, I have sewed myself together,"

and the pieces came together, but the scars remain on his shell to this day.

refused to give it up, the jaguar pinned him to the ground with a forked stick and left him there to die.

Resigned to his fate, the turtle started to play the flute. A monkey nearby heard the music, approached the turtle, and, feeling sorry for him, freed him from the stick. In gratitude, the turtle gave the flute to the monkey. The latter left, joyfully playing the flute and jumping up and down.

Suddenly the jaguar that had pinned the turtle down with the stick appeared. He tried to take the flute away from the monkey, saying that it had been made from a bone of one of his relatives. The monkey denied that the flute had been made from the bone of the jaguar, but the latter insisted, saying that the flute still had the odor of his relative. The monkey then said that the smell the jaguar noticed was that of another jaguar which had played the flute. The jaguar believed the monkey and let him go, but warned him that if the flute had been made from the bone of another jaguar, he would kill him. The monkey was satisfied and started to back away little by little. When he was some distance away he stopped and, calling back to the jaguar, cried: "The flute is really made from the bone of your relative!" Then the monkey raced away as fast as he could. The jaguar was furious, but he could do nothing about it because the monkey was already far away.

Both tales begin identically, with the motifs of the fruit tree, the antagonism between wolf/jaguar and the turtle, and the killing of the wolf/jaguar. In each case a part of the slain animal is used to make a tool (the flute from jaguar's leg, spoons from wolf's ears—but note the aside about the fruit that chokes the wolf, “some say it was a bone which he carried”). Whereas the Cherokee tale diverges from the musical invention then modulates into different motifs (e.g., how turtle's shell got its cracks), the South American version (right column), meanwhile, plays out the same narrative sequence seen at the center of the African tale, with the killing and making of a boneflute, then its transfer to another animal (theft in one case, gift in the other). Finally, it should be noted that in the Uncle Remus tales of J. C. Harris a long and finely detailed version of this story sequence occurs. There Brer Tarrypin collaborates with Buzzard to get some honey in a tree, but winds up tricking Buzzard into burning himself up in a fired bee's nest. Tarrypin takes Buzzard's wing feathers and makes a set of panpipes (“the quills”) out of them, to the accompaniment of which he goes around singing “I foolee, po' Buzzud.” After this Brer Fox wants the quills and manages to steal them from Brer Tarrypin, but he eventually tricks Fox again, recovers his quills and leaves Fox with a limp leg (Harris 1955: 170-77).

The story motif at the end of the Cherokee version above, concerning turtle breaking his shell but surviving or reviving, occurs in a number of variations. But another African account is noteworthy here to compare with the Cherokee version. It is told in connection with the “unnamed tree” story, in which several animals attempt without success to obtain fruit using the tree's magic name, and at last turtle succeeds.

Some versions end, as this one which Werner reports from the Bena Kanioka,⁷ with the animals taking vengeance on the turtle:

“He reached the tree in safety, and told the name to the animals, who joyfully climbed the tree and ate the fruit, but refused to give him a share of it. When they had eaten their fill they killed him. But the little ants took his body away, and sang:

“Knead the sand and mould the clay
Till he comes whom God has made.”

It is not explained who this person is or how he appeared, but the ants handed over the dead tortoise to him, and he restored him to life. The animals killed him again, smashing his shell to pieces; the ants put the pieces together, and he again revived. As soon as he had regained his strength he uprooted the tree, with all the animals in its branches, and they perished in its fall” (Werner 1933: 284-85).

As in the Cherokee version (and others) the breaking of the shell and turtle’s death follows with a magical song sung to revive him. (Recall, at this point, Hermes gnomonic utterance about the live tortoise being potent in magic spells but in death becoming a singer.)

Flying Turtles and Cannibal Grandchildren

Right before the Zulu hero Hlakanyana killed the hare and made his whistle, he had been in dire peril of himself being eaten, in the house of two “ogres” and their mother.

⁷ She does not specify the locale, but perhaps she means the Bantu-speaking Kanyok of southeast Zaire (cf. *Ethnologue* report: http://www.ethnologue.com/show_language.asp?code=KNY)

But he tricked her and managed to cook her up and serve her to her own sons:

“He thrust her in and put on the lid. No sooner had he done so than she shrieked that she was being scalded; but he told her that could not be, or she would not be able to cry out. He kept the lid on till the poor creature’s cries ceased, and then put on her clothes and lay down in her sleeping-place. When the sons came home he told them to take their ‘game’ and eat; he had already eaten, and did not mean to get up. While they were eating he slipped out at the door, threw off the clothes, and ran away as fast as he could. When he had reached a safe distance he called out to them, “You are eating your mother, you cannibals!” (Werner 1968: 163).

From among the Warao of the Orinoco River delta in northeast Venezuela, the same motifs recur, in conjunction with another turtle-trickster sequence important in the South American narratives—his bird transformation and unsuccessful flight to heaven:

The box turtle swam far off and climbed out on a trunk to sun himself.⁸ He gathered wax and made himself wings. He pulled the tail feathers of the sparrow hawk and glued them with the wax to his own behind. And he flew into the air, “Dau, dau, dau,” and his feet sounded, “kau, kau, kau.” And so he flew around, making turns and climbing higher and higher. Then his wax wings melted from the heat of the sun and he fell. Way beneath him was a sleeping woman. He fell on top of her and killed her. Her house was nearby. Before going to the house, he cooked the woman. When he arrived, the granddaughters were not there, so he boiled and salted the woman and then guarded her. He hid in the roof of the house. In the afternoon, he heard the granddaughters returning. They came into the house saying, “Grandmother

⁸ Compare Harris 1955:175 (from *Nights with Uncle Remus*, no. 15): “Las’, one day w’iles old Brer Tarrypin was settin’ on a log sunnin’ hisse’f, yer come Brer Fox, playin’ dat same old chune [tune] on de quills [the reed panpipes Tarrypin had made from Buzzard’s feather and which Fox had stolen].”

must have caught something.” They uncovered the pot and ate. “You’re eating your grandmother’s liver with that bread,” Moanaira [the turtle] called down. One of the girls listened. “Listen, my sisters!” “You are eating your grandmothers liver with that bread,” he repeated. “Don’t pay any attention,” they said. “Eat, let’s all eat.” Then they all saw him. “That’s a box turtle, is it not?” Then he fell, “Baoooo!” In the afternoon, far off, a little boy cried, “Dorou,” and then he saw a small white dove. “Gui, gui, gui,” it trilled. He put him in a basket and carried him home. At night, he cried, “Where shall we put him?” He placed him on top of some beans within the house and he sang. Then he put him on the rope supporting the hammock and he became quiet.” (Wilbert 1970: 411)

There are several other Warao versions of this story, some of which make turtle’s bird transformation a subsequent event to his musical-culinary encounters with jaguar (and other animals). They also make it clear that the apparently non sequitur shift, at the end of the above version, to the little boy and bird is in fact related to the turtle myths. One version positions turtle’s misadventures just after his role in world creation: “He is the maker of all the rivers. He caused the Winikina to be [and the Araguabisi, the Sacupana, the Merehina]...And the Orinoco, that one he made also.” After he made the rivers, then follows a summary version of an entire turtle cycle. First Turtle Black Eye befriended Jaguar and made a bet with him. He won the bet and took Jaguar’s necklace. And with the necklace Turtle Black Eye departed. He went and met a hawk, who took the necklace but died in the fight. So Turtle Black Eye took the hawk’s feathers and put them on himself, and flew to the chief of the hawks. But when he addressed him, his feathers fell out. The feathers were finished, and Turtle Black Eye fell down from the sky, into a house, landing on an old woman. He placed her in a

cooking pot and when it came to boil, the woman's granddaughters' emptied the water and Turtle Black Eye ran away. He went into the forest with one of the girls. They got together, and then they went home. When night fell, she placed the little bird beside her; but he visited the younger sister. Then he heard how someone next door was copulating with the elder girl. Turtle Black Eye left immediately and entered the house next door, and there he died. The people cut Turtle Black Eye up and threw some pieces in the river. These different pieces then become the various species of turtle in the world (Wilbert 1970: 480-81).

In this version, the musical theme (the making of the boneflute) has disappeared, but the sequence of thefts is retained using the jaguar's "necklace." In addition, it is clearer here, but not yet entirely transparent, that the shift from the girl's unknowing cannibalism of their grandmother to the next scene of sexual liaisons is somehow important to native notions of sexual mores and perhaps to theories of sexual conception and pregnancy. Another longer version of essentially the same story provides important details. Here the characters are turtle, deer, jaguar, and buzzard, then the old woman and her grandchildren. The beginning preserves a musical trick: "One day the turtle began to dance. A deer came by and asked, "Turtle, what are you doing?" "I'm dancing." "Well, you dance a lot," the deer told him. "And you, don't you want to dance, too?" he asked. And he continued dancing...dancing" (Wilbert 1970: 413). Then turtle tricks the deer into leaping to its death. While turtle is skinning the deer jaguar comes and asks for the deer, but then takes it by force. Turtle asks for at least one thigh, jaguar refuses, but then does give him the intestines. Then they each cook their own pot of stew, and jaguar absconds with turtle's stewpot. In response

turtle steals jaguar's "collar" and escapes into the water. The jaguar then calls on a buzzard to catch the turtle for him. He tries, but the buzzard loses the fight and dies. Turtle pulls out the buzzard's feathers and fastens them on himself to fly like the birds. But when he jumps into the air the feathers start coming off, he falls and lands on a little old woman washing in the river, breaking her head. He throws her body into a pot already boiling in her house, then he turns into a butterfly and lights upon one of the house's corner posts. The grandchildren come and taste the food, and really enjoy it, but when the butterfly announces that they are eating their grandmother, they leave off eating.

Here once again the making of the flute from a bone is nowhere to be seen, although the initial musical motif is not entirely lost since the fatal tricking of deer involves dancing, and the fight over his corpse retains the motif of the thigh piece, the bone of which in other versions would become the flute. And where the Warao tales always modulate into focusing on food and eating, boiling pots and cannibalism, these focuses were prominent also in the Cherokee version with which we began, where the tool that turtle fashions is hominy spoons from the wolf's ears, and when he is captured by the wolves he narrowly escapes being boiled in a pot. And whereas his fall (from a tree) elsewhere motivates and serves to explain his cracked shell, here his fall kills the grandmother and leads to the trick of cannibalism.⁹

⁹ One last, more divergent version should be mentioned: a Guajiro story tells how four brother gods went hunting, meeting up with all the animals also out hunting; the brothers learn at the beginning that their mother had been eaten by a jaguar. The smallest of the four brothers was the cleverest. The brothers and the animals have an archery contest and at last the clever brother shoots a deer and wins. Jaguar claims possession of the deer (it is not clear why), and the clever brother carries it to his house for him. Jaguar's old and blind mother was there. "The boy cut off her head and threw her body into the pot, leaving her head outside in a gourd. The jaguar arrived and began to eat pieces of his own mother. But every mouthful made a kind of sound, and he said: "Why is it that every time I chew, something seems to be singing? What is this?" The jaguar went to look around, and finding his mother's head he realized that

It is curious, however, that in these Warao versions (at least in those I have found) the deer bone is not made into a flute, because as ethnomusicologist Dale Olsen relates, the *muhusemoi* or deer-tibia flute is one of the most frequently seen and heard of Warao instruments. Its actual method of manufacture is intriguing. A hunter kills a deer and acquires a tibia bone from the leg. He opens both ends and removes as much marrow as he can with a knife. This done he places the bone out of reach of dogs but within reach of cockroaches who in several days eat out the rest of the marrow, leaving the bone hollow for the flute-maker to finish the job by notching the mouth and drilling the holes (Olsen 1996: 75).¹⁰ Here natural and artificial processes are blurred, decay and creative generation merge into one, as invertebrate insects collaborate in the shaping of animal bone into a human instrument for musical sound.

In the following stories from elsewhere in South America, turtle's sundry roles in hunting magic, girls' puberty rites, and as an important symbolic species in rainforest ecologies, will be explored in connection with some common patterns in South American musical cultures.

Musical lifecycles of turtle in South America

Among the Ayoreo of the Gran Chaco region in Bolivia and Paraguay, turtle was once a very tough man who carried heavy loads. Sun had made it possible for him to carry heavy loads, but he grew tired of it and asked Sun to change him into an animal, to get

he had been eating her. Then he went to fight with the brothers." But the brothers chase jaguar out of the country, and he goes on his way, singing "Poor me, they have sent me away from my country!" (Wilbert and Simoneau 1986 [v.1]: 83-4).

¹⁰ In addition to his monograph, Olsen's webpages on the Warao and their music are informative (http://otto.cmr.fsu.edu/~cma/Advocacy/Warao/warao_indians_venezuela.htm).

out of carrying heavy loads. He stipulated also that those who eat his flesh would have to wash their hands after eating. For those who would hunt him to eat he left behind this song, that hunters may sing and more easily find turtles to eat:

“I am very sad
Because this man has been looking for me so hard.
That is why I am so sad.
I will show myself to this man
So that he can have my meat,
So that he may be happy eating my meat.
I will show myself to that man.” (Wilbert and Simoneau 1989: 503-4)

This and other Ayoreo turtle stories follow a general pattern of relating magical songs that turtle, in past mythic adventures, left behind and are now good for this or that ailment or predicament. Another story, about how a turtle cured herself when her head had been cut off, is “against pains in the chest. One must blow on the chest” (ibid.: 506). Still another, about turtle and armadillo, “is useful when one is out in the forest and the turtles are scattered all over the place. When one tells this story all the turtles will come together in one place, and one can find several turtles in a house” (ibid.: 507). As religion scholar Lawrence Sullivan puts it, Ayoreo songs “are the residual traces of primal being left over when sky separated from earth” (1988: 277).¹¹ Each myth takes the form of a story followed by one or more sacred songs related to the

¹¹ Sullivan’s entire exploration of the meanings and cosmology of sound and music in South American cultures is most engaging (1988: 274-88). Worthy of note is the occurrence in some cultures of strong synaesthetic conceptions of sound; among the Desana different instrument sounds are described as having, for instance, “male odor, a very strong yellow color, and a very high temperature,” or songs may evoke specific tastes like that of certain fruits, or images, like schools of fish running upriver to spawning beds. On different sensory models of Andean and Amazonian cultures, cf. Classen 1990. Dobkin de Rios and Katz 1975 present some patterns of the use of music in hallucinogenic rituals in several New World cultures, including the heightening and directing of synaesthetic perceptions.

story. These myth-chants, “the debris of withdrawn sacred beings, are fragments of sacred time.” The ancestors or ancient men—like turtle in the story above—“left these myth-chants behind when they were transformed into the various creatures of the earth. Thus, each important animal species and cosmic phenomenon has its myth-chant that recounts its origin and leaves its medicinal “vestige” of song” (ibid.: 276). Only the primordial ancestors of human beings were untransformed, and thus they have no songs of their own but instead imitate the songs of other beings. These narrations and songs are dangerous, however, because “the chanter who recounts a myth runs the risk of suffering the same tragic fate as the primordial beings.” Only those who are specially prepared may tell the myths and sing the chants (ibid.: 276-7).

Anthropologist Ellen Basso has documented comparable systems of thought and musical practice among the small group of Carib-speaking Kalapalo, who now live in central Brazil’s Xingu National Park. Here each ritual, which is always some form of collective musical performance of dance and song, is connected to “Powerful Beings” who interact in narratives with the “Dawn People” in a space-time frame she translates as “in the Beginning.” The “distinctive attribute of Powerful Beings...is that they are musical. All musical invention is associated with them, and when they openly assert their extraordinary power, they do so by producing something musical; in myth, music is often a means of bragging” (Basso 1981: 274-5). As an example here Basso gives a song of “Turtle Monster” who brags that he has been destroying the Birds’ Leaders, “men who have dressed themselves in magical feathers” (ibid.: 275).

Dawn People, on the other hand, “never invent music, but acquire it from Powerful Beings. When performed by Dawn People, music disarms dangerous

monsters by making them forget their harmful intent” (ibid.: 275). These relationships established in mythic narratives between musical inventors, the Powerful Beings, and the first recipients, the Dawn People, are enacted and activated in ritual musical performances. Collective singing and dancing, in appropriate costumes and masks and in symbolically patterned space, achieves for the participants a communion with the Powerful Beings, which is not a singing *to* them but a singing them *into being* (Basso 1981: 285-89). The Kalapalo talk about their experiences of collective musical performance in terms that Basso translates as “being happy” and “being in harmony,” a sense that something has been accomplished as a group, that difficulties and tensions have been resolved (1981: 289-90).

But even in the more casual and common occurrences of mythic narrations among the Kalapalo—as Basso has demonstrated at length by analyzing the sonic and linguistic poetics of narrators—any meaningful distinction between storytelling and singing, between speech and music, breaks down. “Kalapalo storytelling resembles the experience of performing music, the hearing of tones produced by the self, the experience of something that is at once external and internal, and the merging of the self with what is produced” (1985: 9). A basic ingredient of Kalapalo narrative poetics is a complex sound symbolism, where it is the sound-shape of certain types of utterances that carries meaning; mimetic, onomatopoeic, and interjectional utterances serve to indicate animal songs, and characters’ emotional states or identities (cf. Basso 1985: 63-74).

Basso demonstrates the musicality of Kalapalo stories in a 250-line transcription-translation of the story of Turtle Monster she recorded on March 25, 1979

(1985: 83-89). The thrust of the narrative, as it says near the end, is to explain how “all the birds’ calls came from Turtle Monster’s flesh.” How this comes about involves a conflict, over two generations in the Beginning time, between the Powerful Being Turtle Monster and human characters who are dressed up by the birds in feathers to become like harpy eagles. The birds set the first bird-dressed hero the task of killing Turtle Monster, who himself is adorned with birds’ tails and can fly; but the hero, overcome by Turtle Monster, plummets into a lake and dies. Then his son is set the same task, undergoing ritual adornment of paint and feathers, and he accomplishes it, in revenge for his father’s death. He soars up to the center of the sky above the plaza and breaks Turtle Monster’s body (apparently by dropping him): “He broke his body, *tik!* / “Hoh hoh,” the Birds cheered, / the Birds. / “Hoh hoh! Oh, now he’ll really die! / Just as we thought he would, our son has avenged his father.” After this messengers convoke the birds, who gather to share Turtle Monster’s flesh. And as they all pecked at it they tried out their calls. “Listen to my musical instrument,” the different birds say in turn, showing off their calls (e.g., *Kwi, kwi* and *Kuju kuju*), and sometimes arguing over who will get what instrument-call. Turkey Vulture, who lived far away, arrived too late to get any of Turtle Monster’s flesh. This is why he does not have a call. This is how the Birds got their calls, and the hero became the leader of the Birds.

Although not a task I intend to pursue here, it would seem that context-sensitive versions of Turtle myths, like this one of the Kalapalo, might provide folklorists some integral clues for sifting through the complex mosaic of turtle and trickster motifs, as surveyed above, to try and ascertain which might be indigenous to South America (and no doubt there is significant variations and differences among these), and which reflect

African influences in post-contact times.¹² For while the battle between (flying) turtle and a predatory bird, with musically important outcomes, can in a general way be detected in the several context-free versions related above, this Kalapalo version in other ways seems quite independent of some of the basic narrative patterns of those stories which seem, when compared with African tales, to reflect trans-Atlantic influences.

Other South American traditions about turtles are similarly distinct from the shifting set of motifs surrounding a turtle-trickster's adventures, thefts, and confrontations with other animals. Stories collected about turtles among the Cuiva of the upper Orinoco in Colombia and Venezuela, for example, mainly focus on independent themes. One is how the turtles learned from the gulls that the Muco River was stinky and contaminated, and so they migrated elsewhere upriver. Another story is about how humans first learned that turtle eggs can be safely eaten, a bit of culinary knowledge attributed to an "old woman" who, contrary to her own society's customs, happened to try them one day. In another, it is said that stars are turtles, and that when stars fall to earth they land in the water and become a certain species of turtle. The Cuiva stories focus very closely on natural history of turtles, their times and seasons of egg-laying, and their culinary uses (Wilbert and Simoneau 1991: 153-63).

¹² Just as one entry point into considering the many socio-cultural vectors for strong and varied African influences on native South American folklore and musical culture over time, see Maureen Warner-Lewis 1994, who during 1968-72 recorded hundreds of Yoruba-language songs on Trinidad (just off the coast of Venezuela), sung mostly by elderly singers who had long since ceased to speak Yoruba regularly in daily life. Another fine recent musical ethnography for Afro-Caribbean traditions is McDaniel 1998, on the "Big Drum" ritual of Carriacou in the Grenadine islands.

Guajiro Turtle Narratives

I will conclude this chapter with a intriguing unique case of New World (con)fusion of indigenous and Old World—both European and African—traditions, lifeways, ideas, and stories. The Guajiro, who live in northernmost Colombia and Venezuela, developed in post-contact times a pastoral nomadic culture intensely centered on their horses and cattle herds, as well as goats, sheep, and donkeys, domestic animals introduced by Europeans. Accordingly, as in other areas of their “new-traditional” culture, Guajiro turtle tales are a unique fusion of apparently aboriginal patterns of thought and practice, and other elements clearly rooted in a world of trans-Atlantic contacts.¹³

The Guajira peninsula, the northernmost promontory of South America, divided between the nations of Colombia and Venezuela, is Guajiro land. Roughly the size of Attica and Boeotia in Greece, Guajira is a desert scrubland of cacti and other desert vegetation, which in good years bursts into bloom in two brief rainy seasons in April-May and September-November (Perrin 1987: 122-25, 166-67). Drought and the specter of starvation pervade Guajiro stories, and many of their myths are moving dramas of the struggle for basic subsistence, where Hunger personified (Jamü) at times plays a

¹³ The Guajiro now have the unfortunate honor of living in the most coal- and oil-rich territory of Venezuela, and since the crude-guzzling United States is the number one consumer of Venezuelan energy exports, the Guajiro must fight losing battles with transnationals like Exxon-Mobil who know how to create and manipulate governmental systems and procedures to dispossess Guajiro landowners and occupants from their lands in order to extract lucrative natural resources. Another major problem today is the irresistible pull of wage-labor in (and thus shanty-town living on the outskirts of) the nearby industrial metropolis of Maracaibo (cf. Perrin 1987: 145-51). Venezuela’s Guajiros are ethno-linguistic relatives of the Arawak-Taino descendents in Caribbean islands like Cuba (also called Guajiros), where the official intellectual-bureaucratic consensus, however, is that native Cuban peoples all died out in the 16th century.

role as antagonist.¹⁴ On a continent where native tribes now often number in the low hundreds, with over a hundred thousand the Guajiro are among the largest native groups.¹⁵

They acquired livestock sometime in the early 16th century, and gradually sheep, goats, donkeys, horses and cattle, the latter two animals especially prized as wealth and symbolic of prestige and status, were integrated into their economy and cosmology. A new name, *kusina*, came to refer to those Guajiro who did not know stockbreeding, and several myths developed about the origins of the new animals. One narrative strategy was denial of foreign origins: “Cows, sheep, goats...they do not come from elsewhere, as the *alijunas* (whites) assert. Where would they have been brought from? All Guajiro cattle come from this land where we live. Those who claim that they come from elsewhere tell lies....All that is found here was here before” (Perrin 1987: 135). But other myths follow traditional narrative patterns for cultural origins and relate how hunters encounter divine beings who host them in their homes of supernatural abundance and then gift them the new animals for human use.¹⁶

One of these stories attributes the new animals to the miraculous adventures of a pair of brothers who were hunters of sea turtles. For coastal Guajiro hunting sea turtles has been an important and productive mode of life, and the story emphasizes

¹⁴ See stories in Wilbert and Simoneau 1986 (v.1): 320-31.

¹⁵ As was the case with American Southwest native peoples, the undesirability of Guajiro land to Europeans may be a large factor in Guajiro cultural survival since the 16th century. But determined resistance to *alijuna* (“white, strangers”) influence and internal strength of their traditions has also been important.

¹⁶ Perrin 1987: 135-43 translates and analyzes one account that makes the Sun the divine owner of herd animals who gives them to a wealthy Guajiro woman who has come to his home. The Sun, in Perrin’s analysis, is an intermediary and ambivalent figure between the central dichotomy between Juya and Pulowi, the antagonistic divine couple who represent male-female, upper-lower, sky-earth, rain-drought, human-wild, respectively; the Sun occupies liminal space between the two, and as master of the new domestic stock signifies the ambivalent position of those animals in a wild-cultivated opposition.

their daily success in catching turtles for food. Unlike hunting deer, a risky venture with high chances of failure, they always caught two turtles a day and never went without food. “It was like a cattle pen for them, like someone who has a flock of animals, and who goes and catches one as soon as he is hungry.” But one day the turtles disappeared, and the brothers had to spend long hungry hours at sea, and go home to their families to meager dinners of wild fruit. The next day, back out at sea a large ray surfaced, and they decide to spear it so as not to go hungry. The ray pulls them far out to sea to its house underwater. “Inside there were *alijuna* (whites), nothing but *alijuna*. They had all kinds of things: cows, pigs, donkeys, dogs, and much more besides.” The brothers were also brought green bananas, pumpkins, cheese, poultry. They ate their fill and were happy. The next morning they were brought a large bull, a metal container full of food, and some firewood. They killed the bull, cut it up, salted and dried it. On the third day they returned home, and everyone ate from the foods the hunters brought back. Only now the dried beef jerkey had become just dried turtle meat. (The narrative goes on with a subsequent tale about how the turtle hunter kills his annoying, drunk brother-in-law and then flees with his family to a land across the sea).¹⁷ A sort of equivalence of and exchange value between turtles and cattle is an idea that arises in several stories. Another turtle hunter tale says that he was well-off because people would come and bring him hammocks, hats, and beef, “to trade for turtle meat, for the meat of the turtle is different from that of land animals” (Wilbert and Simoneau 1986: 501).

Turtle features in two short and one long accounts that concern his attendance at a feast or a *yonna* dance. In the first, clearly a transformed variant of several motifs

¹⁷ Wilbert and Simoneau 1986 (v.2): 507-12; other related tales and variants, 501-20.

explored already above, turtle is only a guest at the dance. In the latter two he is the consummate drummer, and his identity is as the suave, clever, handsome, and desirable musician. The third longer text, in fact, is a piece of poetic brilliance, and if written out in a verse form corresponding to native Guajiro phrasing, it would probably be as long as the *hymn to Hermes*, with which it can hold its own for wit, narrative irony, and artful composition.¹⁸

In the first story Black Vulture invites Turtle to a feast given by the creator god “up above.” Turtle demurs, because he has no way to get there. Vulture says he can ride with him, so Turtle goes. At the feast everyone was dancing. Vulture and Turtle join in. Everyone was drinking and dancing. As the party wound down, Vulture slipped away with some girls and left Turtle lying drunk on the ground. Turtle woke up later in an empty house, feeling very thirsty. It was very dark and he could not see the earth far below. Overwhelmed by thirst, he pulls in his head and then falls, tumbling down to the earth, cracking his body upon landing. His relatives massage and bathe him in warm water, but from that time on his ribs were whitish and slightly separated, and his back seems all cracked (Wilbert and Simoneau 1986: 231-32). With humorous local touches added (turtle waking up terribly thirsty, with the implication that his fall from the sky is due to a hangover), this story is easily relatable to versions of turtle stories discussed above.

¹⁸ The prose version given in Wilbert and Simoneau 1986 (v.1): 233-39 is more than five pages, around 220 lines; comparing this to the verse versions of Guajiro tales given by Perrin 1987, where the semantic content of each line is roughly half that of a line in the prose account, a safe guess at the length of a verse version would be between double and triple the prose (ca. 450-600 lines). Indeed, there are many places that extensive narrative expansion might be expected, for instance when all the animals who are at the dance are named and described a much fuller natural history cataloging and description of their appearance would not be unusual.

The other two stories are very different, focusing instead on how the great drummer Turtle saves a big dance from boring, incompetent musicians. They also focus on the sexual desirability of Turtle the drummer, and in the longer account he becomes the first lover of three virgin girls, after which he has to flee the anger of their male relatives.

In the time before animals had their present forms, Hawk and Sparrow Hawk arranged a *yonna* dance to celebrate their young unmarried daughters' emergence from their period of seclusion.¹⁹ This is the most important rite of passage among the Guajiro, one which all girls undergo beginning at first menses. They are ritually secluded indoors in a hammock for a few days, then after emerging they begin a longer seclusion period of several months to a few years when they learn all the tasks and roles of an adult woman (such as spinning and weaving).²⁰ The ritual prescriptions surrounding girls, more formal than for boys who have no rite of passage, is perhaps relatable to the strong matrilineal kinship system in which property and inheritance are linked to one's lineage. Guajiro society is strongly stratified, with both wealthy and humbler classes, and marriage regulations, including the custom of bride-price and obligatory premarital virginity, are no doubt tied to maintenance of these social and economic hierarchies.²¹ So to celebrate their daughter's emergence, Hawk and Sparrow Hawk invited all the animals in the world to the *yonna*.

But when they arrived, the men were shy in the girls' presence. The organizers got nervous. The flute players were poor, the singers uninspired, the drummers out of

¹⁹ On the *yonna* ("dance") see Perrin 1987: 122-27 (with photos: # 1, 18, 19). It is actually a display dance, couples engaging in a dramatized antagonism where the woman tries to knock her male partner down, while the spectators around them cheer and jeer at the couple's contest.

²⁰ Cf. Perrin 1987: 128-30.

²¹ Cf. Perrin 1987: xiv, 158, 160; Watson 1970: 10-13.

rhythm, and the dancers did not keep in step. The *yonna* seemed on the verge of failure “because of the confusion in the minds of the men.” The beautiful butterfly girls felt cheated. The hummingbird girls left the dance floor. Hawk and Sparrow Hawk had forgotten to invite Turtle, a skillful drummer and a serious and cautious character. To save the dance Hawk went to him and asked him to come play. “The young man” refused, saying that it would take him too long to get there on foot. Hawk said he could ride with him, but Turtle said no, he didn’t want to be criticized and for people “to say later that I’m a poor fellow who doesn’t even have an animal of his own to ride.” He told Hawk he would be there by nightfall.²²

Turtle comes to the dance, and at first is nervous in the large gathering of “aristocratic and unfamiliar people.” It is a distinguished crowd, with Jaguar, King Vulture, Rattlesnake, Alligator, Cardinal, and all the prettiest girls, Butterfly, Hummingbird, Bee and many others.²³ Hawk introduced Turtle as a real drummer who would enliven the feast, and everyone was pleased. They were all curious to see Turtle, but they couldn’t make out his features in the dark. He takes up the drum and begins to play. The women were saying, “This fellow really knows what he’s doing.” Turtle’s drumming brought the party to life:

²² Here occurs the only real sense of inconsistency in the tale. We are told that he saddles his horse and rides it to the dance that night. But his tricks over the next two nights involve him getting Hawk to carry him home on his horse without the former realizing it. Unless, as seems unlikely, it is more desirable to be carried home than to ride one’s own horse, it would seem that we are to believe Turtle actually walked to the dance the first night. His later tricks to get a ride home all hinge on his concern, explicit here, about appearances of wealth and status as evidenced by possessing one’s own horse.

²³ The animal gathering may very well have something to do with the thirty or so “totemic” matrilineal clans of Guajiro society, all of which have animal names; after the introduction of livestock the clan animals were used, in iconic forms, for animal brands, and there are several myths about these clan-name origins (and for the custom of branding).

The girls came out to dance. Never had the people heard such perfect sounds as those coaxed from the drum by Seeperría [Turtle's name]. The party quickly came to life. An uncontrollable desire to dance seized even those who have never so much as moved a foot, and the enthusiasm was overwhelming. The women had a strange sensation in their bodies which made them go crazy. It was as though they were being wooed by the drum's caressing, ever-changing voices.

The young turkey buzzard girl danced slowly, describing graceful circles in the air. Itse revolved around her dancing partner, turning in backward motion. Iwána marked the rhythm by moving her upper body. The spider monkeys and *makos* monkeys danced holding hands. The *samulu* vultures danced badly. There was much courtship going on: the king vulture fell in love with the guan, the woodpecker with the *reinita*, the rabbit with the fox, the macaw with the heron, the iguana with the pigeon. The parakeet was jealous of the duck; the lizard was winking at the dragonfly. There were disputes, discussions, and threats from the drunks.²⁴

Turtle played until dawn and when he stopped playing he tricked Hawk into taking him home. He tells him he is going to look for his horse, and asks Hawk if later on he can drop his "mantle" (his shell) off at his sister's house where he lives (when actually Turtle never took his mantle off, "for fear it might get stolen"). Hawk picks up the mantle and marvels at it: "a beautiful mantle, dark with yellow squares and carefully folded. Hawk marveled at the dress used by his friend; he had never seen such splendid, impressive clothing before." Noticing that it is quite heavy, he takes it and drops it off at Turtle's house. Thus he gets a free ride home from Hawk, who is unaware of the ruse.

²⁴ Again, with the possibility that these animal names resonate as clan animals, there is a realism of this dance of courtship belied by its fantastic menagerie of characters.

That night when Hawk comes riding back to invite Turtle for the second night of the feast, Turtle tricks him again by having his sister tell him that he's working on his horse's hooves, but to please take his mantle to the dance and he'll be there later. Turtle drums again for the dance, but this time the girls take a much more active interest in the musician, who has become an unbearably handsome and mysterious stranger:

The girls gathered around him, eager to get acquainted with him, but in the dark night they could not see him. The men offered him *aguardiente*, but he refused it for he did not drink. Then Seeperría asked for a cigar to smoke, and as he lit it a bluish light illumined his face. In the faint light the girls saw that he was wearing a beautiful mantle covered with yellow squares and golden spangles. They also saw his profile, his straight nose, his delicate mouth, and his gentle eyes. They felt that they were in love with that graceful youth, who in their opinion had perfect looks.

On his drum Seeperría imitated the quick fluttering of the hummingbirds, the soft murmur of the spring, the harsh sound of the distant sea, the sighing of the wind among the leaves, the voice of *Juya*²⁵ in the sky. Every possible sound issued from that drum, as though Seeperría's hands were trying to revive the song of the spirits. That night the participants danced until their feet bled.

The second night of the *yonna*, then, is marked by a significant increase in Turtle's sexual attraction, the girl's sexual interest in the musician, and in the expressive, mimetic power of his drumming, which is able to imitate all the sounds of nature and the songs of spirits.²⁶ That morning Turtle tricks Hawk into taking him home

²⁵ The male god, of the sky above and especially of rain, opposed in most things to his wife Pulowi.

²⁶ Guajiro conceptions of the dead and the afterlife link dead souls to the natural cycle, principally the rains. The rains are commonly thought of as coming from, and even as being, the dead. "Juya—the

again, though Hawk grumbles at the presumption of Turtle when he thinks he is nowhere around: “That miserable rogue thinks I’m his servant. Twice now I’ve had the trouble of taking this heavy cloak to his house.”

The next day Turtle tricks him one last time for a ride, answering Hawk’s suspicions about why he is always disappearing, with a story of how he had been out looking all day for his horse, whom he had heard was out with a herd of mares, but when he went out to look he was nowhere to be found. His legs were really sore from all the walking about, he said, and “as he spoke he massaged his legs so his friend would believe him.”

The third night of the dance, Turtle plays until midnight. Then he asks to be excused to go out into the forest to defecate. It was just an excuse so that he could go have intercourse with three girls who had “made overtures to him of their own accord. It was the last night of the dance. The people were enjoying the merriest moment of the evening while the three girls gave themselves to Seeperría for his pleasure. That night Butterfly, Hummingbird, and Bee lost their virginity to the young drummer as proof of their admiration.”

When Hawk and Sparrow Hawk learned of this disgraceful act they wanted to kill Turtle. He slipped away and hid in the shrubs. The people at the festival were outraged and the girls threatened with punishment. The girls ran away, but as they did so they turned into a butterfly, a hummingbird and a bee, and they remain so until this day, “living jewels that adorn our woods.”

Rain—is nothing other than the long-dead Guajiro. / Moreover, when it is going to rain, one dreams of the dead. The elders have learned this from experience” (cf. Perrin 1987: 104-19).

Turtle had frightened off all the horses so they couldn't easily pursue him. War broke out at the feast because of what had happened. Later his pursuers found Turtle's mantle on the road. "What luck! Here's the mantle that belongs to the wicked seducer of our daughters!" said Hawk. "He must have left it because it was so heavy," replied the other. "Let's take it with us so we can exchange it later on for some good cattle." Sparrow Hawk threw the mantle over his shoulder and they continued their pursuit. Soon he complained about its weight and wondered what it was made of. Hawk said, "it's heavy because it's made of very valuable *she'ebe*. You can see that it's decorated with golden spangles." At this they started arguing about who would get to keep the valuable booty. Finally they decided to "unroll" the mantle and see how big it is. When they did so they were surprised to find Seeperría huddled inside, sleeping peacefully. Outraged by this trick they threw him violently to the ground to kill him. The fall twisted his arms and his fingers fell off (earning him the nickname Masa'apanta "the one with the twisted arms"). Not yet satisfied, Hawk and Sparrow Hawk threw him again against a rock and left him for dead. The bones on his back were shattered by the blow and he could no longer stand up. As he crawled away to take off his mantle it stuck to his body, remaining there forever. Since then Turtle crawls around with his cracked shell on his back.

Guajiro Turtle, the drummer, displays Guajiro values and breaks Guajiro social norms. He is concerned most of all with the appearance of social status and standing, and he deploys his tricks to avoid the embarrassing appearance of being too poor to own a horse, to pretend he is wealthier than he is. But his real wealth resides in his power to drum, which overcomes the shy "confusion in the minds of

the men” and sets all the animals dancing. But as the music’s and musician’s power escalate over the three nights of dancing, it becomes dangerous, since the “drum’s caressing, ever-changing voices,” not to mention Seeperría’s handsome face in the hazy light of a lit cigar, seduce the unmarried girls, just emerged from their period of seclusion, into freely violating their virginity. For this breach of normative sexual behavior the girls are punished—a punishment memorialized in the flight of butterflies, birds and bees—and Seeperría, duly and violently punished, becomes Turtle, the crooked-leg crack-shelled slowpoke whose shell is a wonder to behold and valuable as an item for trade, even for that most precious of possessions, cattle.

Stories, like tricksters, travel. They leap from mouth to ear with little of the biophysical constraints that govern the transmission—and permutation—of genetic traits. Language “barriers” seem to pose little real obstacle; motifs jump, bore through, tunnel under and overgrow frontiers of nation, culture, and tongue. They have often smuggled themselves into new contexts via written media as well.²⁷ But when stories travel, they are always, even in the most unlikely new settings, liable to find local figures and characters congenial to their narrated events or basic action patterns. For many of those stories are in fact already there, inscribed in the landscape, on the cracked back of a tortoise or terrapin, in a leopard’s spots or a jaguar’s stripes.²⁸ Everywhere humans, the

²⁷ For instance, Nahuatl redactions of the text of Aesop’s fables appear in 16th century Mexican manuscripts, written in the mission schools by students who spoke/wrote Nahuatl, Spanish, and Latin (cf. Burkhart 1992: 101).

²⁸ By the same token, species also travel. A major, ongoing process of New-Old World interaction is the intentional and accidental introduction of exotic species and the consequent, usually devastating, transformations of indigenous ecologies. Leakey and Lewin 1995: 234, with many others, have identified exotic species invasions as one of the three main causes of the sixth mass extinction of biological species currently underway. See also Brosimmar 2002.

storytelling animal, have spun earthly wisdoms out of the earthy behavior of their animal cousins. Other animals may not in fact “speak” like we do—as we imagine them doing in animal stories—but they do most certainly sing and dance, commingle and play serious games of life and death with one another. Animals’ diverse physical attributes and behavioral antics as they interact do indeed offer stories to tell.

Traditional folk musics are often, in South America, Africa, and elsewhere, local natural history catalogs, detailing in narrative forms the myriad species of the

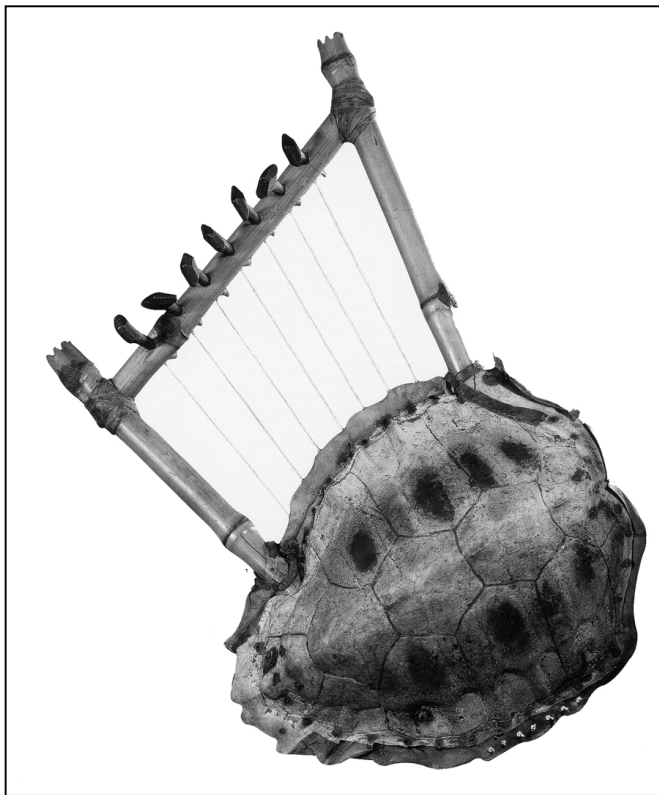


Figure 12. Egyptian tortoiseshell *tanbura* (Rault 2000: 202)

ecosystem, elaborating in complex poetics and performative repertoires the natural and symbolic ecologies of home.

A late variant of the Hermes and the lyre story, sometimes encountered in secondary works with no reference to ancient textual sources but probably relying on

Isidore of Seville, has it that Hermes found the turtle on the

banks of the Nile in Egypt.¹ Even

¹ So Sachs 1940: 25 “Mercury is supposed to have devised the lyre when one day he found a dried-out tortoise on the banks of the Nile.” Isidore of Seville, in his *de Musica*, wrote “The lyre was first discovered by Mercury, they say, in the following way. When the Nile returning to its banks had left various animals in the fields, among them a turtle was left, which since it had decayed, and its sinews remained stretched out within the hide, when struck by Mercury it gave a sound. After this form Mercury made a lyre, and gave it to Orpheus, who was most devoted to this practice.” (chap. 22.8; Migne, *Patrologia Latina* 82: 168; my translation).

if this variant is just a late confusion,² the change of locale from Arcadia to Africa would make sense if only because from the late fourth century BCE onward Egypt was a multicultural world colonized first by Greek then Roman ruling powers (both of whom had followed the Persians in imposing foreign rule on the ancient Nilotic civilization). It was here, too, that Hermes shifted shapes, coming under the influence of the Egyptian god Thoth, and became Hermes Trismegistos, a syncretic patron deity of Gnostic mysteries and riddling esoteric wisdom.³

We should not be too quick to discount the influence of Egypt's ancient history, I think, including the Greek and Roman centuries, when faced with the fact that the seven-stringed tortoise lyre, or *tanbura*, is still (or was until recently) made in Egypt (Figure 12). To be sure, the design is much changed: the shell is turned on its side, the arms are of bamboo stocks, and the tuning pegs are an innovation. But then, much else has changed, and more radically, in Mediterranean music over the last two thousand years.

Or perhaps it is sheer coincidence? But in that case, as we have come to see, a Hermes or other trickster is still likely to be involved.

² After all, as Levi-Strauss insisted (1963: 217), every variant of a myth is part of the myth, and literate scholarly transpositions and transformations can be understood as shaping and being shaped by the same processes of narrative adaptation and mythopraxis that generate all folkloric transformations over space and time.

³ Cf. Scott 1924-36; Copenhaver 1992, especially pp. 63-4.

Qi 啓 brings Nine Songs 九歌 down 降 from Heaven 天

The songs of a city are its diviners.

Sumerian Proverb

In myth at least, archetypically Greek music began with a tortoise carapace; historically, literacy in China began on the ventral shells, or plastrons, of turtles. Easily among the more momentous developments in twentieth-century international scholarship are the profound shifts in understanding of early Chinese history that archaeological finds have precipitated. The received view of Bronze Age China (ca. 2000-221 BCE¹) has been considerably revised, sometimes overturned, by numerous spectacular discoveries. Among the most important are the Shang royal tombs, with their caches of grave goods and oracle bone inscriptions numbering over a hundred thousand; and, from Shang and Zhou burials, the thousands of ritual bronze vessels and instruments, including magnificent bronze bells, drums, stone chimes, and collections of string and wind instruments.

Modern historical inquiry has led Chinese intellectuals to modify many features in their received tradition, which was as full of reverent idealization and pious legend as the time-honored Western image of the glorious Greeks. But not all has been rejection; much in the traditional record has been reconfirmed, especially concerning

¹ I follow Falkenhausen 1993: 23-4 in defining the Bronze Age as “the roughly two millennia from the first emergence of monarchic states on the north China plain to the founding of the Chinese empire by the First Emperor of Qin in 221 B.C.” Throughout this period “bronze reigned supreme, culturally and politically” as the material around and with which political power and social rank were wielded, displayed, and distributed.

the importance of music in the total culture of the earliest dynasties. Reciprocally, ethnocentric Western intellectuals have had to revise their dismissive, even trivializing attitudes to China's musical heritage.² And again on the Chinese side, for all the popular boasts of cultural uniqueness, supremacy, or longevity often encountered (e.g., China has the "longest recorded history," the "oldest continuous civilization," etc.), this one at least is entirely true: in all the (known) ancient world only in China was bronze-casting technology applied so thoroughly to musical ends that by the ninth century BCE grand sets of scaled chime-bells, each bell capable of producing two distinct tones, were being made for the courts of ruling elites.³ The subsequent elaboration of this musical industry tracks along with historical developments in other arenas, until its decline in the late Warring States period (mid-fourth to third centuries) and final demise sometime in the Han dynasty.⁴ In addition, since they were inscribed with sometimes lengthy dedicatory texts, excavated bells are an important new source for

² A major popular mediator of things Chinese to the West in the early twentieth century, Edward Werner, dismissed Chinese music in a sentence: "They have produced...some music, not very fine" (1984 [1922]: 59). He was equally disparaging of their literary imagination and technological achievements; of the one he wrote that the Chinese "are not unimaginative, but their minds did not go on to the construction of any myths which should be world-great and immortal; and one reason why...was that their intellectual progress was arrested at a comparatively early stage. It was arrested because there was not that contact and competition with other peoples which demands brainwork of an active kind as the alternative of subjugation, inferiority, or extinction, and because, as we have already seen, the knowledge required of them was mainly the parrot-like repetition of the old instead of the thinking-out of the new;" of the latter he submitted: "the inventions of the Chinese during a period of four thousand years may be numbered on the fingers of one hand" (a curious thing to register in *print*, a Chinese invention) (1984 [1922]: 60-1). For an incisive intellectual historical sketch of the attitudes toward China exemplified so baldly in Werner, cf. Puett 2001.1-20; also see Lincoln 1999: 83-100 on Sir William Jones' (18th cent.) wholly deprecatory view of the Chinese. For an entertaining contemporary rebuttal to the sort of (anti)-sinology Werner et al. presented, cf. Han-Yi and Shryock's (1933) critical review of John Ferguson's travesty of a contribution on China to the *Mythology of All Races* series.

³ Less certain, because less verifiable, but apparently true on current evidence, is that China produced the earliest bells anywhere in the world; bronze bells were preceded by pottery bells in the early third millennium (Falkenhausen 1993: 132).

⁴ Falkenhausen 1993: 130-1, for timeline of the evolution of bell-casting technology.

historical events and chronology in the early periods.¹ Thus we face an intriguing state of affairs, that history in early China was written on musical instruments.

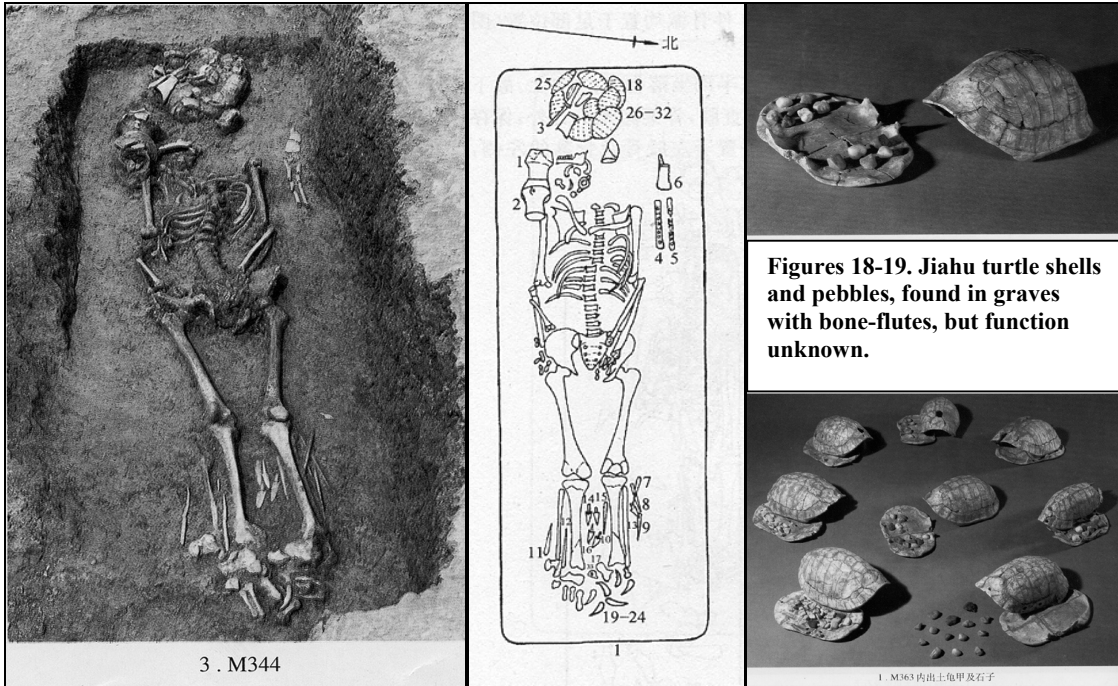
Modern archaeology has also brought to light China's extensive autochthonous developments in the Neolithic. Sites evincing early rice and millet cultivation date back to around ten thousand years ago, and several sites associated with agricultural village complexes have been excavated from the sixth millennium and later.² As mentioned above, some of the earliest musical instruments found anywhere are from the Chinese Neolithic, the Jiahu boneflute collection (ca. 8th-6th mill. BCE). But these were no isolated finds; rather, their archaeological context was a large cemetery in which individual burials contained extensive assortments of grave-goods. The graves containing flutes had male occupants. Other goods, most made of clay pottery, bone or stone, included polished stone or jade ornaments and bead-strings, pottery bowls and vessels, many varieties of spear- and arrowheads, bone-needles, awls, stone axes, tooth-bladed sickles, curious bone hinged fork-shaped tools, and numerous tortoise-shells. These shells were plastron-carapace pairs, some with drill-holes perhaps for tying the two together; included with these were collections of small, irregular pebbles (see Figures 13-19: picture sources *Henan Sheng wen wu kao gu yan jiu suo* 1999 v. 1: 174, 191; v. 2: c.p. 7.1, 9.2, 39.5, 42.1, 43.2).

The shells have made the news because eleven examples of different symbols were found inscribed on them, prompting suggestions that these may be evidence of early pre-writing sign-making.³ While scholars are rightly cautious about calling these

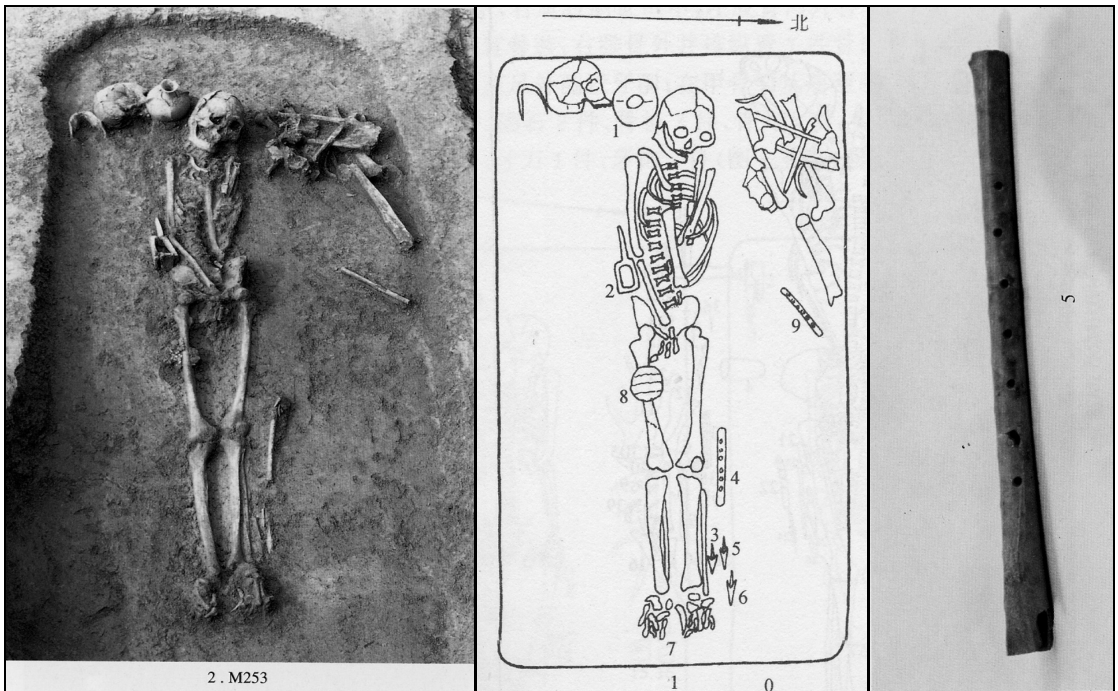
¹ For examples of inscriptions, cf. Falkenhausen 1993: 13, 42, 50, 74.

² See Chang 1986, 1999; Chang et al. 2002; Rawson 1996.

³ Reported on BBC online, 17 April 2003 [<http://news.bbc.co.uk/1/hi/sci/tech/2956925.stm>]. Shang oracle bone expert David Keightley called it an "anomaly." Cf. research report, Li et al. 2003.



Figures 13-17: Jiahu graves M344 and M253. In schematic, bone-flutes are # 4-5 (above), 4, 9 (below); turtle-shells 18, 26-32 (above), 8 (below). Below right: Jiahu bone-flute close-up.



isolated scratches “writing,” what is more interesting in my view is the evidence for music and/or divination they provide. For it is clear these turtles were not by any means texts; but their real function, though unknown, is more likely to have been musical. Rattles have been suggested, or divination of some sort. In the latter scenario the pebbles have been called “counters,” but another option might be some form of sortilege or lot-casting. The later yarrow-stalk divination, the basis of the *Yijing* (“Book of Changes”) and a tradition parallel to the scapulimantic technique, combined successive casting of lots and counting routines, a scenario also conceivable with the shells and pebbles.⁸

These are speculations. But what is clear is that at Jiahu in the Neolithic burial routinely included inhumation of many sorts of hand-made artifacts, both useful and ornamental. Among these were enigmatic tortoiseshell/pebble sets, and multiholed boneflutes. While the latter attest to the importance of music in life at Jiahu, the former show that turtles had a marked, if enigmatic, significance in ritual symbolic culture already in the Neolithic, an importance they would retain down into Shang and Zhou times, and indeed throughout Chinese history. It seems a reasonable inference as well that these collections belonged to and were used by the grave occupants while living, and perhaps were made by them. Alternatively, the flutes were used in funeral ceremonies and were offered by loved ones during the burial. But in either case, just as music was part of the ritualized lifecycle of Neolithic hunters and planters, so too were

⁸ To speculate further, the carapace might have provided a bowl to shake the lots while the plastron acted as a naturally sectioned-off divination plate (a sort of “cosmograph,” as used in several cultures). It must be reiterated, however, that these are mere possibilities. Nevertheless, such speculation can be fruitful, if it opens perspectives through which the artifacts themselves might be interrogated, perhaps yielding traces of their making, handling, and use(s) that otherwise might have gone unnoticed.

the implements of music, along with their other tools and ornaments, buried to honor the dead.

Chinese tradition recalled three early dynasties, Xia (夏), Shang (商), and Zhou (周).

While classical texts preserve historical documentation of a limited sort for the Zhou (after 1122 BCE⁹), Xia and Shang were always more legendary and archetypal;¹⁰ while all three periods were subject to the sort of practical mythopoesis, common in traditional and oral-centered cultures, that framed models for behavior on ideal images of the past. In fact it was just such “using the past to criticize the present” that led the first emperor of Qin in 213 BCE to have all books (with certain exceptions) proscribed and burned (as though obliterating the past would cut off the sources, and the motives, for social criticism).¹¹ Texts discussing music from the turbulent centuries of the Warring States (403-221 BCE) and the empires of Qin (221-208) and early Han (after 206) recalled fondly a less tortured age when music was intimately intertwined with government. In traditional rites (*lǐ* 禮) and music (*yuè* 樂) were to be found the key to an orderly and stable society.¹² “Former kings,” states the *Yueji* “Records on Music”

⁹ 1122 BCE is the earlier of the traditional dates for the Zhou conquest of the Shang, the “long” chronology, while the “short” gives ca. 1028 BCE. Cf. Keightley 1978b: 171-76 for discussion of the traditional chronologies and a tentative revised chronology based on the oracle bone inscriptions and other archaeological evidence.

¹⁰ Cp. this, the modern consensus, with the great Victorian Sinologist, James Legge, who followed Chinese tradition in granting Zhou, Shang, and Xia historical status, along with two of the three pre-Xia sovereigns Yao and Shun; accounts before these kings, he said “have been, and ought to be, pronounced ‘fabulous’ and ‘legendary’” (Legge 1879: xxvii). Thus as he believed the *Shujing* (“Classic of Documents”) related historical events dating back to the 24th cent. BCE. Modern historiography has trimmed back this early date by at least a thousand years.

¹¹ The exceptions were books on medicine, divination, agriculture, and the history of the state of Qin (Puett 2001: 148); Puett’s entire study explores the mythopraxis of the past on the theme of creation and artifice. See also Allan 1981, 1991: 12-18; Nylan 2001.

¹² All transliterations of Chinese follow the Pinyin standard (unless in titles of or quotes from sources using other systems). Also, in citing terms (but usually not names) modern Mandarin tones are represented using diacritics: 1st = ē, 2nd = é, 3rd = ě, 4th = è.

(ca. third cent. BCE), “paid close attention to what aroused feelings; used ceremonies to guide intentions; music to harmonize sounds; regulations to unify actions; and punishments to prevent conflict” (after Falkenhausen 1993: 1-2).

But music was not only considered one instrument, among others, of good governmental control. A state’s music also provided an audible index of its general welfare. The *Yueji* continues, “the sounds of a well-ordered age are calm and full of joy about the harmony of its government. But the musical tones of an age in disorder are resentful and full of anger about the perversity of its government. The musical tones of a state that is doomed to perish are mournful and full of anxiety about the dire straits of its people.” Putting the two points together the author concludes: “Truly, the Way of the sounds and musical tones is intimately linked to government” (ibid.: 2).

At roughly the same time in Greece, Plato (ca. 428-347 BCE), whose writings are preoccupied by a need to understand and account for the social and political traumas of his first thirty years of life in Athens, where he watched as its empire crumbled, pinpointed music as both explanation and cure for social instability. The *Republic* of course has much to say on the role of music in the ideal city. There Socrates concluded that “People should beware of change to new forms of music, for they are risking change in the whole. Styles of music are nowhere altered without change in the greatest laws of the city” (*Rep.* 424c; Barker 1984: 140). But it is in the *Laws*, Plato’s last and in many ways most ambitious work, where music and government become, as in contemporary Chinese musical/political theory, inextricably united. With serious play on the verbal correspondence of “songs” and “laws/customs” (both *nomoi*), the Athenian in the dialogue describes first Athens’ old music culture,

then its decline into chaos. At a time when music had been orderly and well-controlled in the city,

“the mass of citizens were content to be governed, and not to have the effrontery to adjudicate by their hubbub. But later, as time went on, there appeared as instigators of unmusical law-breaking (ἄμουσου παρανομίας) composers who, though by nature skilled at composition, were ignorant of what is right and lawful in music. In a Bacchic frenzy, and enthralled beyond what is right by pleasure, they mixed lamentations with hymns and paeans with dithyrambs, imitated *aulos* song with their *kithara* songs, and put everything together with everything else.”

(*Laws* 700d; Barker 1984: 156-7)

This overthrow of musical standards inspired in the masses lawlessness towards music, “a musical aristocracy was displaced by a degenerate theatrocracy.” The arrogant disregard for order in musical matters spread to all others areas of civic life, and the result was a disastrous anarchic liberty (701a-b). Plato’s solution, in imagining the ideal city, is to establish a strict union between music and religious practice (as he imagines held in ancient Egypt). An ideal state would institute a senate of wise, elderly overseers with absolute powers to organize, monitor, and censor the musical life of the city.¹³ By thorough and constant regulation of musical practices, the state, Plato imagines, might again be able to turn its “songs” (ὄδᾶς) into “laws” (νόμους), as they once had been (*Laws* 799a).

Plato’s idealized musical city was not to be, and Greece was not spared further political unraveling in following years, as heard about in previously (see pp. 90-92 above). Late Bronze Age China followed a similar path of military escalation. Civil

¹³ *Laws* 653c-660c, 664b-671a, 798d-802e, and *passim*; most of these passages are collected in Barker 1984: 141-63.

wars were fought throughout the fifth century, while the impotent Zhou king only formally recognized the new, fragmenting state of affairs in 403 BCE (a year after Athens surrendered to Sparta in the Peloponnesian War). By the late third century an imperial order was settled, to be known as the Han (漢)—leaving a bygone classical world, an age of bronze, to molder in hazy, selective memories, and under rich loess soil plowed by planters from time out of mind.

Among the treasures buried by time were musical stones (*qìng* 磬), triangular or boomerang-shaped hanging stone chimes that were part of the “suspended music” orchestras of Bronze Age ruling-class courts, and often mentioned in the *Shijing* (“Classic of Songs”). As Kin-woon Tong proposes (1983: 63), *qìng* may have originally developed from plowshares which they happen to resemble, perhaps first used as a signal-sounding device, then taking on deeper ritual significance and functions in musical performance. A Jin dynasty commentator (third-fourth cent. CE) noted the resemblance, saying that “a large *qìng* looks like a plowshare.”¹⁴

More certain is that in the earliest texts the plow is an important symbol of fertility and agrarian prosperity. Several *Shijing* songs on agricultural themes praise the plow: “They haul away cut grass and trees, their plows (*gēng* 耜) open the ground...with sharpened plowshares (*sì* 耜) setting out on the southern acres. Sowing their many sorts of grain, seeds holding life in them” (Mao 290.1, 3-4¹⁵). The next song

¹⁴ Guo Pu, annotation of the *Er Ya* (cited in Tong 1983: 63). Closely related to *qìng* 磬 is the musically important term *shēng* 聲, “sound, tone,” (also “fame”) which combines the *qìng* graph as the phonetic to a semantic element of *ěr* 耳 “ear,” giving a nice example of fanciful poetic “etymology” for which Chinese is justly (in)famous: sound is hearing a struck stone. (Following the real principles governing Chinese word formation (cf. Boltz 1999), the etymological account is probably something more like, *shēng* 聲 “sound”: a word that sounds like *qìng* 磬, having to do with hearing, *ěr* 耳.)

¹⁵ All citations of the *Shijing* follow the traditional Mao ordering.

begins with a variation on this formulaic expression: “Cut sharp and deep the good plows, setting out on the southern acres; sowing their many sorts of grain, seeds holding life in them” (Mao 291.1-2).¹⁶ The fieldworkers labored mindful that they were continuing a long tradition established by their ancestors: “it is so not just now, in the present; from of old it has been thus” (290.8); and again, after a bull sacrifice ending the next harvest song: “so to resemble, to carry on, to carry on for men of old” (291.8).

The ancestors were all-important figures in the lives of these singing fieldworkers. The ancestors received offerings of the fruits of labor, so that they in return might bless their descendents and make their families and fields prosper. “We make wine and sweet unclarified wine; we offer it to our forefathers and foremothers, and so fulfill the hundred rites (*li* 禮)” (290.6). The right and duty to present offerings to the ancestors fell to the oldest male descendent, who appears in these songs as a focus of admiring attention: “The distant descendent (*zēng sūn* 曾孫) comes; with wives and children he sends food to the southern acres; to inspect the fields he comes and is pleased; he comes to make sacrifice to the quarters, the *yin* and *si* offerings, with red and black victims, panicked millet, glutinous millet, to make offerings and sacrifices, that the shadow of our good fortunes grow” (Mao 212).

We have these songs, many of them to all appearances genuine folk songs from three thousand years ago (with oral formulaic language reaching back who knows how long), because the elite patrilineal males who ruled underling families and controlled the fields, and at whose courts literacy was cultivated, saw fit to record them. No doubt this was in order to record the high praises of themselves and their families expressed

¹⁶ *Shijing* 212.1 has another formulaic variant. See also 154 and 277.

in many (but not all) of the songs.¹⁷ Later tradition held that the king made tours of inspection every fifth or ninth year, during which he auditioned and collected songs from the lords of subordinate states.¹⁸ Mencius (fourth century BCE) connected the decline of (Zhou) government with the cessation of these royal inspection tours when songs were collected.¹⁹

Shang and Zhou lords were powerful in their realms, commanding allegiance, obedience and submission. Human sacrifices, their corpses lacking heads, are extremely common in excavated Shang and Zhou royal tombs.²⁰ Forcefully subjected peoples came bearing tribute, as one song describes Huai River peoples coming from the south bearing “great turtles (*yuán gūi* 元龜), elephants tusks...southern metal” (*Shijing* 299.8).²¹ With the plastrons of such turtles divinatory rituals of pyromancy were conducted, and the resulting oracles inscribed in the earliest form of the Chinese script. Later texts compiled tribute-geographies, describing the various goods acquired as tribute from different outlying regions. The *Yu Gong* (“Yu’s Tribute”) chapter of

¹⁷ Not all songs are honorific. There are several examples of courtly ministerial “remonstrance” and, from lower social strata, songs of lament for hard times, blame of rulers for poor living conditions, and complaints of soldiers while out on long, dangerous campaign. The voice of the outspoken crowd became a mainstay in Chinese political philosophy. In Mencius (4th century BCE) the voice of the people reflects the movement of heaven; so when the legendary king Qi succeeded his father Yu, although his good minister Yi was regent, “the people made songs praising Qi,” (*Mengzi* 5.A.6, Lau 1984 (v.2): 191) thus indicating heaven’s will that he succeed as ruler.

¹⁸ Cf. Kaufmann 1976: 23-25

¹⁹ The passage is an abbreviated sketch of a literary historical progression, moving from songs to history, poetry to prose: “When the [Zhou] king’s traces were snuffed out the *Shi* perished. When the *Shi* perished then the *Spring and Autumn* annals were made. The *Cheng* of the state of Jin and *Tao Wu* of Chu [written records of these states] are similar to the *Spring and Autumn* annals of Lu” (*Mengzi* 4.B.21, Lau 1984: 165).

²⁰ Cf. Allan 1991: 5-11; at the Yinxu city site 852 human victims were found in the 185 ceremonial pits, along with horses, oxen, sheep, dogs, and chariots; by one count, extant oracle bone inscriptions record more than 13,000 human sacrifices. See also Keightley 1999: 266-67. For mortuary victims in graves of various states during Zhou times, cf. Falkenhausen 1999: 458-59, 486, 501-06, 519, and discussion of such practices in a broader investigation into sanctioned violence, cf. Lewis 1990: 26-28, 206-09. In the *Zuo zhuan* historical narratives it is accepted practice that the blood of a prisoner be used to consecrate newly cast war drums (cf. *ibid.*: 27 with references).

²¹ Shang oracle bones also record that turtles were brought as tribute in large numbers (cf. Keightley 1978b: 12).

Shujing (“Classic of Documents”), probably no earlier than the third century BCE but purporting to be from the Xia dynasty (early second millennium),²² reports that *qing* stones were brought from the banks of the Si river (in modern Shandong) (*Yu Gong* 1.5) and from the land of “Black water” (ibid. 1.9); from the land of the “Nine Jiang” (somewhere in the Yangzi southern lake country?), the “great turtle” (*dà gūi* 大龜) was brought (ibid. 1.7).

By the mid-second millennium the turtle was of utmost significance in the divination rituals that underwrote the legitimacy of Shang kings (again, that this cultic elaboration of the turtle in China goes back far earlier is shown by Neolithic finds²³). At their royal ritual center near Anyang, on the western edge of the Yellow River’s fertile delta floodplain, the Shang, or Yin, ruling clan maintained an elaborate cycle of festivals and sacrificial observances. They used a calendar based on a sixty-day cycle. This was generated using a dual day-count system of a primary ten-day *xún* (旬) week and a secondary duodecimal count (the so-called “heavenly stems” and “earthly branches”). With this count as their guide, dictating or indicating lucky and unlucky days, an intricate and on-going ritual drama enacted the rhythms of the agricultural year, the round of devotions to deified ancestors and the prescribed propitiations of powers in the natural world.²⁴ The forces and features of the environment were also thought of as ancestors. Mountain and River were high ancestors; sunrise was Eastern Mother and sunset Western Mother (Allan 1991: 50-54). Shang kings were integrated

²² I follow Nylan 2001: 134 who argues that the *Yu Gong* chapter probably dates no earlier than around the Qin unification (221 BCE).

²³ Keightley 1978b: 3 traces “pyro-scapulimancy” in north China to the last half of the fourth millennium.

²⁴ For the Shang “supernatural forces were conceived...in terms of hierarchies of dead fathers whose wishes continued to be consulted through pyromantic divination” (Keightley 1978a: 220).

with the *xún* week via a mythic complex involving ten distinct bird-form suns. The ten suns roosted in a cosmic Mulberry Tree, bathed in different pools at the ends of the earth, perhaps had encounters with an archer-hero, and were the divine progenitors of Shang kings (cf. Allan 1991: 19-56). In this way, divine ancestor cult and a cycling calendar of devotions coalesced.

To test the spirits, pyromantic diviners would apply red-hot pokers to sets of holes drilled into turtle plastrons and ox scapulae, divining the answers to oracular queries by the resulting patterns of cracks. Having perhaps already inscribed the date and question on the oracular bones, they then recorded the answers received (by the end of the Shang these became predictably favorable).¹ The royal diviners thus cultivated, and were most likely involved in developing, the Chinese logographic script. While the large repertoire of symbols they used were in form and origin clearly pictographic, in function they constituted a true script of logographs, each representing specific lexical morphemes or words. All the processes of graph compounding that still characterize Chinese writing are already at work in the oracle bone script (cf. Boltz 1999: 106-23). Although the nonexplicit phonology of the graphs poses difficult problems for linguistic reconstruction, nevertheless they provide a unique and fascinating glimpse into some of the poetic thought processes and symbolic ecology of the Shang and early Zhou who used and developed them (see Figure 20 for examples).

¹ Cf. Keightley 1978b: 1-56; 2000.

The key term for the divining procedure was to “crack” (*bǔ* 卜), used in the oracle inscriptions as well as later texts (cp. *Shijing* 50). Modern scholars trying to recreate the fire-cracking procedure have come to suspect that *bǔ*, which has been reconstructed as Archaic Chinese **pak*, was onomatopoeic for the sound of the cracking shell. If this is indeed the case, then the turtle may have been thought to be “speaking” the oracular response.²

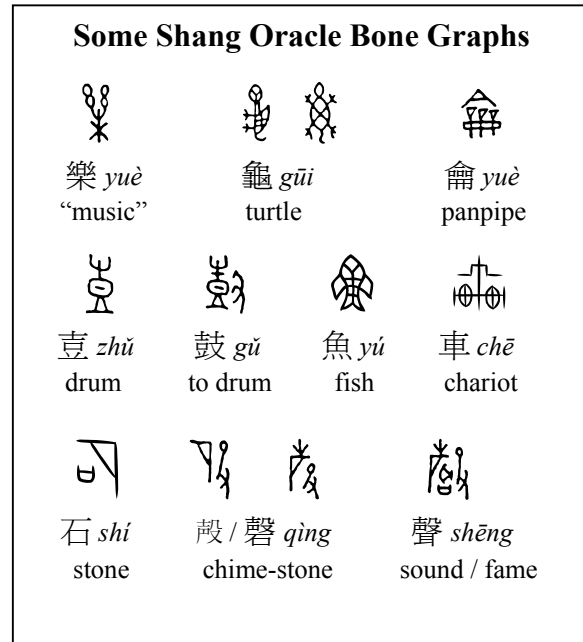


Figure 20. Shang oracle bone graph examples

Day after day priests divined the proper time for sowing, harvests, campaigns, when to build or go hunting, which rites to hold and on behalf of which divine ancestors. While the Shang festival cycle over time became increasingly routinized, as well as larger in scale, it also continued to mediate the human responses to the unexpected, especially fluctuations in weather, unpredictable storms, flood, dry spells, pests or plagues.³ Prayers for rain and rain dances were a particularly common event.⁴ “Shall we perform a rain dance to the River and to Yue Peak?” (*Cuibian* 51, cited in

² Cf. Keightley 1978b: 2, 21-2 n. 93. He mentions the oracular “turtle’s voice” (*gūi yǔ* 龜語), but says that to his knowledge this is first used by Hu Xu, an eighteenth-century scholar. But *Shijing* 237 (quoted just below) does use *yuē* 曰 “say” of the turtle’s divination response.

³ So Keightley 2000: 41: “sun, wind, and rain loomed large in Shang consciousness. Good or bad fortune was frequently determined by, and conceived in terms of, the weather.”

⁴ By and large the most frequent topic of concern in the oracle bones is the sequence and propriety of sacrificial rituals (the “hosting” or “entertaining” of divine ancestors); cf. Keightley 1978b: 177-82, 222 (Table 29). On rain-making beliefs and procedures in later periods cf. Cohen 1978.

Eno 1996: 43). “Should dancers rain-dance at the Yu-fields, will there be rain?” another asks; and again: “If dancers have the feather-dance performed, is it proper?” (Tong 1983: 294-8). Other oracle inscriptions have questions that seem to ask about the propriety of other dances, at what time and place to perform them, and what instruments to use (such as pole drum or double pipe).

Shijing songs also refer to the practice: “Here we will make a start; here take counsel, here notch our tortoise (*qì gūi* 契龜); it says, “Stop,” it says, “Halt. Build houses here.” (Mao 237. Trans. Waley 1987: 248). Significantly, this description of locating a settlement by tortoise divination occurs in a foundation legend song of the Zhou ruling clan.²⁹ Living to the west of the Shang center, in the eleventh century BCE the Zhou overthrew their powerful eastern neighbors and rivals. For their part, descendants of the Shang ruling house seem to have lived on in the later northeastern state of Song, and their dynastic hymns are preserved at the end, and are some of the most fascinating, of the *Shijing* (nos. 301-305).³⁰ There the descendants of Tang (湯), the great founding Shang king, continued to celebrate the fact that they had “received the charge (*mìng* 命)” from Heaven (Mao 302)—even after Zhou had dispossessed them of it. In their ancestral rites they continued to sing praise prayers to their “brilliant ancestor” (*liè zǔ* 烈祖), and to pray that “heaven send down” (*tiān jiàng* 天降) “peaceful prosperity” (*kāng* 康) and “fortunate favor/blessings” (*fú* 福). (More on the significance of *jiàng* “send down, descend” and *kāng* “peace/ease/prosperity” below.)

²⁹ So too, *Shijing* 244: “King [Wu] examined and cracked, whether to build the Hao capital; the tortoise determined it, King Wu accomplished (*chéng* 成) it” Cp. the Shang oracle inscription: “If the king establishes a walled town, will Di [high god] show approval?” (*Bingbian* 86, Eno 1996: 47).

³⁰ For recent discussions of courtly and dynastic hymns that take advantage of oral and performance theory, see Shaughnessy 1995, and Kern 2000. C. H. Wang’s rapprochements with orality and ritual theory (1974, 1988) are also valuable.

The descendants of Tang recalled the Shang king and capital city as being “orderly-bright, the high midpoint of the four quarters, radiantly glowing his fame (*shēng* 聲), splendidly gleaming his spirit (*líng* 靈). Achieving long life he is at peace, and thereby protecting his living heirs” (Mao 305).

Zhou songs, on the other hand, recalled affairs under Shang rule differently. In a piece of courtly remonstrance put in the mouth of King Wen, the Yin-Shang ministers are chastised as violent oppressors, extorting tribute-leviers, even robbers and thieves, “making no distinction between light and darkness...turning day to night,” and for this reason their great charge (*dà mìng* 大命) has collapsed (*qīng* 傾). The song of bitter rebuke ends with a famous comparison, in the mode of “using the past to criticize the present” (if the poem is, in fact, from the time of the Shang downfall, though this should hardly be taken for granted): “Yin’s [Shang’s] mirror is not far off: it is in the days of Xia’s sovereign (*xià hòu* 夏后)” (Mao 255). Like the Xia before them, the wicked Yin/Shang too had come to a just end.

A founding moment comparable in stature and afterlife to the Trojan War for the Greeks, the overthrow of the Shang was celebrated by the Zhou ruling clan ever after, in ritual dramas of song, music and dance. After Wen Wang (文王, “Accomplished(?) King”)³¹ first challenged the Shang, his victory was completed and furthered under his successor Wu Wang (武王, “Martial King”). The new Zhou kings now ruled by “Heaven’s charge” (or “mandate,” *tiān mìng* 天命), as declared in divinatory omens, and as evidenced of course through real success in battle and

³¹ On the important and difficult term *wén* cf. Falkenhausen 1996, Kern 2001; might its early use as an honorific epithet mean something like “decorated” (in the modern English military sense)? (cf. note 36 below).

maintenance of rule. Musical dramas, in the ancestral sacrifices, re-enacted in memorial this succession of power:

*Capturing and competitive was King Wu
Incomparable was his valor!
Illustrious were (kings) Cheng (成) and Kang (康)
God on high (Shang Di) exalts them....
bells and drums huang-huang,
chimestones and flutes jiang-jiang,
Bring down blessings, strong-strong
Bring down blessings, long-long
The awe and dignity, stern-stern
Being drunk, being sated
blessings and wealth come in return.*

(Mao 274, trans. after Shaughnessy 1995)

“Bring down blessings” here is again *jiàng fú* (降福), a recurring formula (with variations on the object descending) that indicates how the spatial relation between the divine and human spheres was conceived. Good things “descend” or come down to the world of the living below, just as gods and the spirits of deified ancestors (*shén* 神) “descend” to partake of their ritual offerings of food, wine, song and dance. So at *Shijing* 235, King Wen is “on high,” “bright in heaven,” and he “ascends and descends” (*zhì jiàng* 陟降) at the left and right of god (Di). The same formula appears in a series of royal investiture songs, to describe the vertical comings and goings of the great ancestors whom the new king must now emulate (Mao 286-288).³² In the last of these three it is heaven’s charge, a difficult burden for the new king to take up, that is

³² On these songs see Shaughnessy 1995: 139-46.

said to “ascend and descend” in its workings, inspecting the deeds of men—a message aimed at the king, no doubt, to urge him to high moral standards.

According to the same conception, the birth of kings and mythical ancestors is described as descent from heaven: Tang of Shang “descends,” as does his good minister A-Heng (Mao 304); Heaven sends down Shang ministers (but it is the king’s responsibility when they misbehave) (Mao 255); on a high mountain touching heaven a spirit (*shén*) descended and gave birth to two ancestral Zhou princes (Mao 259); Heaven charges the black bird to descend and to give birth to the first Shang ancestor (Mao 303). Along similar mythic lines, in both songs relating to the agri-culture hero Houji, “Lord Millet,” the several sorts of grain “descend” either with or through him, or on his account (Mao 245, 300).

Of course bad things also come down from heaven: exhausting evils and great rebellions (Mao 191), funerals and starving famines (194), death, disorder, crop-thieving insects (257; also 258, 265), and great grinding epidemics (264).³³ These references appear in poems of ministerial “remonstrance” (*jiàn* 諫). When disasters struck and “heaven was sending down disasters,” well-schooled ministers could draw on a stock of formulaic didactic and hortatory rhetoric. Using language of lament, varied metaphors, appeals to tradition, reason, and the sufferings of common people (*xià mín* 下民), a concerned (or otherwise interested) minister tried to rouse his lord from idleness to action. It is noteworthy that this ministerial language could also appeal

³³ Three textual places dispute the heavenly origins of disaster: the anti-Shang poem (Mao 255) reasons that ministers may come from heaven, but it is the king who gives them their authority and duties; another lamenting remonstrance (Mao 193), which begins with an ominous solar eclipse, insists that evils among the people below do not come down from heaven but from “chat, battle, betraying hatred, competing for offices: people cause it.” Another complaining minister (Mao 264), not to be outdone, and apparently serving a state in a powerful woman’s grip, says chaos does not descend from heaven, it is the work of a woman.

to music for its metaphors: “Heaven’s guiding the people is like an ocarina (*xuān* 壎), like a bamboo flute (*chí* 箎)...it is like leading them by the hand and nothing more, to guide the people is very easy” (Mao 254.41-6).

It is in the dark shadow of such miseries and misfortunes that the hoped-for blessings of bumper crops, big families, and social harmony shine all the brighter. Thus we can begin to see, even in a succinct “toast” to the ancestors at a harvest sacrifice in a good year, how agrarian economic concerns and ancestral commemoration come together with potent and moving religious feeling (Mao 279):

<i>A bountiful year, much millet, much rice,</i>	豐年多黍多稌。
<i>and we have lofty granaries</i>	亦有高廩、
<i>ten thousand, millions upon many millions,</i>	萬億及秭。
<i>to make liquors, to make sweet wine,</i>	爲酒爲醴、
<i>for steamed offerings to our forefathers, foremothers,</i>	烝畀祖妣、
<i>so as to fulfill our hundred rites—</i>	以洽百禮。
<i>send down great good fortunes on us all!</i>	降福孔皆。

From high to low, this practical nexus of hopes for prosperity and filial devotion to the memory of illustrious ancestors—who came back periodically to partake of their offerings—cut across lines of wealth and status, forming the basis of popular and elite religion alike. Strong cases have been made, in fact, that this basis nexus of ritual family feasting, rooted in subsistence practices and devoted to cementing kinship bonds, has formed and continues to form the backbone of Chinese religion(s).³⁴ With

³⁴ “Chinese” needs to be understood in the plural as well, since modern day China (as in the past) comprises dozens of distinct ethnic-linguistic groups (Litzinger 2000 is an absorbing study on the tortured politics of ethnicity in the 20th cent. for non-Han groups like the Yao of Guangxi). On the family feast and religious ritual cf. Paper 1995; Teiser 1988: 26-42 explores the roots of the medieval Chinese Buddhist ghost festival in earlier patterns of autumn celebrations of harvest and ancestral veneration.

this basic cultural ground laid out, we will now turn to a closer examination of the elite musical-sacrificial liturgies—which were in turn built on this broadly human religious base—since it is to these that most evidence, both poetic texts and archaeology, gives a privileged focus.

Bronze implements of rites and music

During Shang and Zhou times the heads of ruling families maintained courts that included in prominent place the temple compounds of their ancestors' spirits. In addition they kept hunting parks, ornate gardens, and fine outdoor courtyards before the temples where they hosted other aristocrats and clan members, entertaining them typically with archery contests, fine banquets, drinking bouts, and music. A Zhou lord or vassal would possess a set of ritual bronzes, which would include such things as *ding* tripods, wine bowls and pitchers. It also included a set of bronze chime-bells and other instruments in an orchestra (such as bronze pole-drums and chime-stones, but the bells were the principal status objects). Possession of bells was above all a marker of one's status and position in a network of extended lineage and kinship. The number of bells in a set indicated rank, and bells and sets also circulated, upward as tribute, and downward as gifts. Ideally, for instance, only the Zhou king (*wáng* 王) kept a temple courtyard surrounded on all four sides with arrays of bells and stones, while lesser lords and nobles might have the right to only three or less sides of musical instrumentation.³⁵

³⁵ Cf. Falkenhausen (1993: 29-65 and *passim*), whose study is an admirable social, political, and technological history of Bronze Age China from the perspective of bells and music (his work is a model

The bronze implements used in ritual sacrifices and musical performances were complementary parts of a greater whole. The third century *Yueji* (“Record of Music”) associates them in this way. Bells, drums, flutes, chimestones, feathers, pitch-pipes, shields and axes are the “utensils” (*qi* 器) of music, while the “utensils” of ritual are the *fū*-vessels, *gǔi*-baskets, the chopping-board, and the *dòu*-vessels. Similarly, in music the correct movements, bowing and flexing, bending and rising, the motions and numbers of performers, and the fast and slow tempos, are compared to the motions up and down the temple stairs and the changing of garments that accompany the rites. These elements of performance are called, respectively, the *wén* 文 (“refined weaving/patterned form”³⁶) of music and of rites.³⁷ This late systematization of tradition is liable to be anachronistic for earlier times. But in this case earlier evidence does point to a basic complementary relation between ritual offering implements and the instruments of music, as well as the “weaving” order of movements that comprised the sacrifices and the musical performances. Rites and music, as we will now see, composed a unity of traditional ritual aimed at attracting and pleasing the ancestors in order to secure their good will and divine protection.

Courtly orchestras could be massive, complicated setups. The now famous excavated instrument collection from the tomb of Marquis Yi of Zeng (who died ca. 433 BCE) included a three-tiered, L-shaped set of sixty-five bells, a scaled lithophone

of interdisciplinary scientific humanism). For full-color plates and introductory essays to Marquis Yi’s bells and early Chinese music, see also So 2000, Rawson 1999.

³⁶ *wén* (modern “writing, literature, culture”) had in Warring States and early Han times the meaning of “patterned, refined,” with no special or exclusive link to writing, and perhaps based on a metaphor of weaving. Martin Kern (2001) traces its development and meanings in this time-span (he comments on this passage and a similar one, p. 54-5), finding that a shift towards specifically literate and literary meanings begins around the late Western-early Eastern Han (1st c. CE). In earlier Zhou times the connection between the meaning(s) “patterned, accomplished(?)” and its use as a royal honorific title has been problematized by Falkenhausen 1996.

³⁷ *Liji Yueji* 21, cf. Legge 1967 [1885]: 100.

of thirty-two chimestones, three drums, and fourteen other string and wind instruments. The huge bronze bells, which could weigh as much as several hundred pounds,¹ were hook-mounted on the horizontal crossbars of wooden stands (Figure 21). Setting up such orchestras was a major undertaking in itself, as described in the *Shijing*:

*Blind musicians, blind musicians
in the Zhou courtyard.
Set up beams, set up posts,
tusk-shaped ornaments, upright plumes,
echo-drums, large hanging drums,
hand-drums, chimestones, wood clappers, scrapers,
when ready, then play—
pan-pipes and flutes are raised,
huang-huang they sound
solemn, harmonious, well-tuned birdsong
our first ancestors listen
our guests (gé 客) arrive and settle
forever observing their achievement (chéng 成) (Mao 280)²*

¹ The largest of Marquis Yi's bells weighs 448 lbs (203.6 kg). Cf. Chen et al. 1994: 25

² Trans. following Falkenhausen 1993: 209, Shaughnessy 2001: 159, and Karlgren 1950: 245.



Figure 21. Bronze chime-bell set (sixty-five in all) of Marquis Yi of Zeng (d. ca. 433 BCE). The unmatched lower bell (fifth from right) was a gift from the king of Chu. The top tier of bells are pitch standards of Zeng, which are inscribed with cross-references to the note-names of Chu state scale (picture source: So 2000).

For these ritual events the ancestors joined in as “guests,” attracted to their sacrifices by the lustrous sounds of their temple orchestras. This was not just so in ritual belief: ancestral presence was dramaturgically represented as well, by the so-called “impersonator” (literally “corpse,” *shī* 尸), a male descendant who silently “sat in for” the dead during the performance.³ Also among the ritual specialists was an “invocator” (*zhù* 祝) who spoke for the ancestral spirits throughout the proceedings, at the end announcing their acceptance of the rites and music, and pronouncing their thanks and benediction on the congregation.

A particularly rich text in the *Shijing* for this sacrificial drama (Mao 209), which has been the focus of much discussion, details the ritual order of proceedings. According to Martin Kern’s analysis, an invocator first addresses the ancestral

³ Besides 209, discussed hereafter, the *shī* “corpse-impersonator” appears in *Shijing* 247, 248, and (in an ironic vein) 254.

impersonator with a brief agricultural origin myth: this moves from clearing the land to planting grains, to harvest and the accompanying ancestral sacrifices, as discussed above (Mao 209.1-12). Following this deep association of agriculture with the ancestors are further directives on and descriptions of the sacrificial order itself (ll. 13-36), during which the “divine spirits” arrive.⁴¹ This culminates with the invocator declaring the spirits’ announcement of acceptance and blessings (37-50), at which point the “rites and ceremonies are completed” and “bells and drums give their warning” (51-52). Music thus marks the close of the most sacred sequence of events, and the invocator concludes with the further announcement: “The spirits are all drunk—the august impersonator (*huáng shī* 皇尸) may now rise!” Then, “Drums and bells send forth the impersonator (*gǔ zhōng sòng shī* 鼓鍾送尸), and so the divine protector [the spirit(s)] returns back (*gūi* 歸)” (55-58). This terse formula lucidly captures the essential dramaturgical and religious link between music and ancestral spirits: having received their due offerings, drunk their wine and communed with their descendents, they depart back to their temple, or to heaven, conveyed on the ringing echoes of drumbeats and hammered bronze chimebells. As Falkenhausen has well put it, “ancient Chinese ritual performers....employed percussion instruments to make audible the transition between the human and divine spheres,” “music imparted indexical significance to ritual action and translated human intentions into a rhetoric of sound powerful enough to penetrate to the ancestral spirits in heaven and elicit a response” (Falkenhausen 1993: 23).

⁴¹ See Kern 2000: 83, n. 115 for the difficulties in terminology here; I follow his analysis. His translation is “divine protector,” but he follows an interpretation that what is referred to here are the ancestral spirits in heaven, which descend and enter into the impersonator.

The response once obtained, the spirits depart and the sacral ritual is complete; the servants and women then remove the foodstuffs and dishes, and a banquet begins: “the many fathers and the brothers banquet among themselves.” Music begins again for the banquet, and the poem closes with a sort of male drinking song, declaring a drunken state of convivial *communitas*, and bestowing a thankful blessing on the host:

*We are drunk, we are satiated
young and old, we bow our heads.
The spirits have enjoyed the drink and food
they cause you, the lord to live long!*⁴² (trans. Kern 2000)

The last lines then enjoin “sons, sons, grandsons, grandsons” to carry on these sacred family rites into future generations.

Another term used for visiting spirits is “honored/admired guests” (*jiā bīn* 嘉賓). While this can refer to any guest of honor, several songs indicate that the guests include spirits. In either case, though, whether guests are human or divine, music is directly tied to honorably entertaining one’s guests:

*With pleased sounds the deer call to one another,
Eating the celery of the fields.
I have here honored guests;
The zithers are struck, and the organ is blown [for them]; --*

⁴² *Shijing* 247 is an extended toasting song of this sort, which includes in one of its strophes the line “the royal impersonator(s) have made auspicious [“drummed-for”] announcement” (*gōng shī jiā gào* 公尸嘉告). Both examples indicate that the post-ancestral sacrifice banquet was an oral performance context where reflective commentary on the ritual and its meanings was appropriate.

A profitable comparison (anthropological and poetical) might be made between these male ritual drinking parties in ancient China, and the Greek *symposion*, with its Indic cognate the Soma *sadhamāda*. All three cases provided a context of both convivial and competitive display where the cultivation of traditional oral song might foster more critical reflections on the nature of culture, society, morality, cosmology, etc. In other words, in each case communal drinking and singing opened discursive pathways to “philosophy,” “physics,” “theology,” “literary criticism,” etc. (For China cf. Nylan 2001: 72-119; for Greece, see Ford 2002; for India Johnson 1980: 3-65, and Mahony 1998 is also useful. Much remains to be done in all three areas, though perhaps in India most of all.)

*The organ is blown till its tongues are all moving.
The baskets of offerings [also] are presented to them....
...I have here honored guests;
For whom are struck the qin and se zithers.
The qin and se zithers are struck,
And our harmonious joy is long-continued.
I have good wine,
To feast and make glad the hearts of my honored guests.*

(Mao 161; Legge, modified)

It is difficult here to decide for sure whether living or dead guests, or both, are meant. But this ambiguity arises partly because of the nature of the belief, since the dead are assimilated to the living and are, in the context of banqueting and musical ritual, brought back to life. In the following example, however, the funereal signs are clearer, since it appears that the narrator is depositing the armor of a dead relative in a temple setting:

*The red bows unbent,
Were received and deposited.
I have here an honored guest,
And with all my heart I bestow the gift upon him.
The bells and drums have been arranged in order,
And all morning will I feast him.
The red bows unbent,
Were received and fitted on their frames.
I have here an honored guest,
And with all my heart I rejoice in him.
The bells and drums have been arranged in order,
And all morning will I honor him.
The red bows unbent,
Were received and placed in their cases.
I have here an honored quest,*

And with all my heart I love him.

The bells and drums have been arranged in order,

And all morning will I pledge him.

(Mao 175, after Legge; Karlgren 1950)

In fact, the musical character of “honoring” a guest seems implicit in the word itself: *jiā* 嘉 is composed of the semantic element *zhǔ* 壺 “drum” with the phonetic *jiā* 加 (“add, increase”).⁴³ Thus the social ritual of admiring and honoring a guest with joyful sounds of music generated, by metonymy, an honorific adjective: a “drummed-for,” or “celebrated” guest.⁴⁴ Moreover, the language of “hosting” or having a “guest” (*bīn* 賓) goes back to the Shang oracle inscriptions, where the (musical-sacrificial) rites to various ancestors were described in terms of inviting and having them as “guests” (*bīn*).⁴⁵ We might compare this to the Greek (and wider Indo-European) sphere, where we also encountered (though not surprisingly) the semantics of reciprocal guest-host relations impinging on music and musicians. But there a conceptual pattern, lacking in the Chinese sphere, cast the musician himself as a foreign-guest (*xenos*), where here the in-coming (divine) guest is treated to music.⁴⁶

⁴³ The same element that appears in *gǔ* 鼓 “drum, strike drum” and, from this, *gǔ* 瞽 “blind musicians.”
⁴⁴ This reading is supported by early Zhou bronze inscriptions, where the graph read as *jiā* 嘉 (glossed in Ricci 2001 as “good, excellent; to celebrate, praise”) contains the element 壺 (or variations), a pictograph of a pole-drum, and is identified in Zhou bronze, and earlier oracle bone inscriptions as *zhǔ* 壺, also found in the forms for *gǔ* 鼓 (壺) (although the earlier oracle bone graphs identified in Ricci as *jiā* (壺) does not appear, except perhaps in one instance, to have this drum pictograph) (cf. Ricci 2001, #1111, 2416, 6178).

⁴⁵ Cf. Keightley 1999: 260, 2000; Chang 1983: 54-5; Allan 1991: 56.

⁴⁶ Of course, Greek host-hospitality also knew how to entertain guests with music; cf. nearly all banquet scenes in the *Odyssey*. The difference being noted here is structural: in archaic Greece musician itinerancy conditioned the singer’s use of the language of *xenia*; while in Bronze Age China court musicians seem to have been tied to the orchestras they played as hereditary specialists (though their status or social class is not entirely clear), cf. Falkenhausen 1993: 62-65.

The opening of the preserved Shang-descendent ritual hymns (Mao 301) is another fine example of the musical honoring of ancestral guests:

How rich, how graceful!
We set up our hand-drums, large hanging drums.
play the drums jian-jian,
to please our glorious ancestors.
The descendant of Tang has come
he has secured our victories.
hand-drums, hanging drums, deep-deep,
Shrill-shrill flutes sound
then calm, even, peaceful,
with the sound of the stone chimes.
Illustrious is Tang's descendant;
solemn-calm is his music.
Splendid are the gongs and drums;
the Wan dance (wàn wǔ 萬舞),⁴⁷ very grand.
We have here honored guests (jiā gé 嘉客)
they too are happy and pleased.
From of old, in days gone by,
Former people began it,
mEEK and reverent both day and night,
in humble awe discharging their tasks.
May they heed our burnt-offerings, our harvest offerings,
that Tang's descendants bring.

(based on Waley 1987: 225)

The logic of these songs and their formulaic nature has by now, I hope, become clear.

But it is worth reiterating the recurring elements in the pattern: ritual music, the sounds

⁴⁷ On the Wan dance, a fascinating topic unfortunately beyond the scope of this discussion, cf. Waley 1987 [1937]: 338-40; Kaufmann 1976: 79-80; Tong 1983: 289-343 (his entire discussion of “ancient” music genres, i.e. music that was already ancient in classical Zhou times); *Shijing* 38 is the song of a Wan dancer who performs in the palace at noon.

of which are often described using onomatopoeic words, allure with their charm the spirits of the ancestors. Dance and mimetic displays are also common. The “honored guests” (which may be the spirits, or also include the human guests all together in a living ritual community) are pleased and satisfied with the music and the other offerings. The traditional nature of the ceremonies is then usually referenced, carrying a normative force: those present are to continue the rites into the future. Finally, here as elsewhere, mention is made of the agricultural source of the sacrificial offerings—a source in human labor whose reason for being is to supply ancestral devotions—and a closing blessing-prayer for future prosperity, good fortune and favor.

A rather late chapter in the *Shujing* (“Classic of Documents”) also articulates the basic function of music in drawing the ancestral spirits. The Great God Huang Di’s music minister Kui says: “When the sounding stone is struck loudly or gently, when the *qin* and *se* zithers are played strong or gently to accompany the singers, the deceased ancestors (*zǔ kǎo* 祖考) returning, arrive (*lái gé* 來格).”⁴⁸

I have belabored the primary core of the early Chinese ancestral ritual because we shall soon be moving further south, to the ancient state of Chu (楚). There a similar pattern of ritual musical culture flourished. But long-standing traditional Chinese conceptions of their own cultural geography have encouraged scholarly interpretations of the south—on the basis of ideas and practices very similar to those above—as a

⁴⁸ *Shujing*, *Yushu yiji*, cf. Legge and Waltham 1971: 34-5 ; also Kaufmann 1976: 24. Cp. *Shijing* 209.34 (discussed above), “the divine spirit [protector] comes” (*shén bǎo gé* 神保...格). The *Shujing* passage goes on, when all the guests have come, “in the court below there are flutes and hand-drums, joining in at the sound of the rattle and ceasing at that of the stopper, when the organs and bells take their place. This makes the birds and beasts begin to move. When the nine parts of the service as arranged by the sovereign have all been accomplished (*chéng* 成) the male and female phoenix come with measured dancing.” K’uei said, “Oh when I strike or tap the stone-chime, the various animals lead on one another to dance, all the chiefs of the official departments become truly harmonious.”

“shamanistic” culture; meanwhile the north (all too easily equated with the *Shijing* as a whole) has not had this exoticizing label attached to it. What difference this makes will become more apparent later on (though I have hinted at it here: it has largely been to exoticize and primitivize the south). But here suffice it to say that both Shang oracle inscriptions and the *Shijing* songs amply attest that spirits were believed regularly to descend, attend feasts, listen to music, and to speak with their descendents through ritual intermediaries. There is little sense applying a double standard. If this pattern constitutes “shamanism,” then many *Shijing* songs are shamanic no less than the *Chuci* songs of the south.

Music of Accomplishment, Music of Downfall

But before moving to Chu, I should like to return to the role music played, and was thought to play, in the establishment and consolidation of a family’s dynastic power. Above we heard one of the Zhou songs praising Wen Wang and Wu Wang, Kings “Civil” (*wén* 文) and “Martial” (*wǔ* 武). The first overthrew the Shang while the latter followed up his father’s military successes. Later kings honored in the same song, and frequently appearing together, are Kings Cheng (成) and Kang (康). Their names are also significant: “Achiever” or “Successful” on the one hand, and “Prosperous” or “Peaceful” on the other. Occurrences of these words in other contexts of traditional songs allow us to see that both of these concepts were implicated in the music of governing. Behind them, a mythic cycle of recurrent decline is at work, where history

moves from glorious military conquest to decadent musical prosperity, only to give way in time to another round of the same.

The ideal king was an active king, one who led the people in work projects, conducted military campaigns, toured his realm, who sent or led out new colonies to open new land for cultivation and to found new settlements.⁴⁹ He was a surveyor and architect, a mediator of heaven, who knew how to impose through creation heaven's pattern on earth. So in *Shijing* 50 we read:

*When Decision-star was in the central quarter,
we⁵⁰ started building Chu (楚) temple.
Surveying it by the sun,
we built the house at Chu.
We planted hazels, chestnut trees,
idesias, planes, catalpas, and varnish-trees,
to chop down for qin and se zithers.
He climbed the ruin-mound,
to look out over Chu,
look out on Chu and Tang,
to measure by shadow the mountains and citadel:
he descended and examined the mulberry trees;
the "cracks" foretold favorably:
the result will be certain conquest.
When spirit (ling 靈) rain had fallen,
he charged his groomsman*

⁴⁹ Mao 237 (already mentioned twice above), one of the most extensive of the songs celebrating colonial settlement and building projects, combines onomatopoeic descriptions of the sounds of labor with the detail that drums were played during the work: "Their lines then were straight, / lashed planked were used to carry, / making temples all in line. / They mounded them *rengreng*, / they pounded them *honghong*, / they raised them *dengdeng*, / they scraped and chiseled them *pingping*; / a hundred measures all about arose; / the chimes and drums could not keep up with the beat" (after Shaughnessy 1999: 301)

⁵⁰ The Chinese does not indicate the subject of the sentences in this song; the Victorian James Legge used "he" throughout, while the American modernist Arthur Waley opted for the more populist "we." The ancient Chinese, it seems to me from the *Shijing*, could recognize popular collective agency, but were also strongly of the "Big Man makes history" mentality.

*by morning starlight to yoke his chariot,
and camp in the mulberry fields.
Not just upright, a man indeed,
possessing a heart trusty and deep
and tall mares, three thousand.*

Here the king or leading noble is portrayed as a colonizing leader, one who knows the stars and their signs, how to assess the landscape, plan and lay out a new city so that it is in line with the divine order. He initiates arboriculture, planting trees that will yield varnish, and wood suited for musical instruments. He knows how to divine by tortoiseshell, and to get results: “spirit” rain.⁵¹

Both Wen and Wu were energetic founding rulers of this sort (or, more accurately, they were the figures around whom the ideal image took shape and flourished). Founding rulers, furthermore, establish models for all epigones to follow; they “begin” tasks, “open” fields of exploit and leave missions for successors to accomplish.⁵² The word *chéng* 成 connotes just such completion and fulfillment of a plan or order. Apparently playing on its meaning, in several *Shi* songs *chéng* is used in the last line: a song of successful military campaign ends, for example, by praising the leader, “truly a great success (*dà chéng* 大成)” (Mao 179; see also last lines of 4 and

⁵¹ *líng* 靈 is commonly etymologized as sorcerers, (*wū* 巫) praying for rain, (*líng* 霽). *Wu* is the term often rendered as “shaman” (especially in discussions of southern Chu culture). On the traditional paradigmatic force of the king as rain-maker, through sacrificial and divinatory communion with heaven, cf. Allan 1991: 41-46; also Cohen 1978. *Shijing* 258 is an extended lamenting prayer by the king on the occasion of an extreme and deadly drought. Pleading with heaven, the king cites his endless sacrifices at the altars of ancestors and of nature-divinities, which have been of no avail. The song makes clear that “natural” disaster was felt as a major *moral* failing and a direct assault on the legitimacy of the king. (Incidentally, one oracle bone graph combines “turtle” and “rainfall” (𠄎); the modern equivalent would be 龜, though this graph has no modern descendent.)

⁵² See Puett 2001: 28-38, who discusses the concepts of “making” as they appear in the *Shijing* foundation and settlement songs. Several key terms indicate the work appropriate to a divinely sanctioned ruler and his followers, among these are *qi* “open,” the significance of which will become clearer below.

12). A great deed done and the song glorifying it each coming at the same time to a fitting conclusion.

Important here is that later texts describe music itself as a “completion” to labors that a ruler has undertaken. The *Liji* (“Record of Rites”) says “as for music (*yuè* 樂), it represents what has been completed (*chéng* 成)”—the context being the dance that represents King Wu’s successful conquest of Shang (cf. Shaughnessy 1995: 137). Similarly, the *Yueji* relates that when “the kings deeds were accomplished (*chéng* 成), they performed music (*zuò yuè* 作樂)” (*Liji yueji* 26, Legge 1967 [1885]: 101-2).

This concept, where music is made to mark the successful completion of a collective but ruler-led undertaking, is well expressed in a short *Shi* song (Mao 242).

<i>He planned, began the Spirit Tower</i>	經始靈臺、
<i>planned it, built it,</i>	經之營之。
<i>many people worked at it,</i>	庶民攻之、
<i>under a day completed it (chéng),</i>	不日成之。
<i>he planned, began, with no urging</i>	經始勿亟、
<i>a throng of relatives came.</i>	庶民子來。
<i>The king was in the Spirit Park</i>	王在靈囿、
<i>where does and stags bow down</i>	麇鹿攸伏、
<i>does and stags sleek, sleek,</i>	麇鹿濯濯、
<i>white birds shining bright.</i>	白鳥嚶嚶。
<i>The king was by the Spirit Pool</i>	王在靈沼、
<i>oh, plentiful fishes leapt!</i>	於物魚躍。
<i>Drum-stand, cross-beams, hooks,</i>	虞業維樅、
<i>great-brave drums, large bells,</i>	賁鼓維鏞。
<i>what an assembly of drums and bells!</i>	於論鼓鐘、
<i>what pleasing sounds at the Round Pond!</i>	於樂辟廡。
<i>What an assembly of drums and bells!</i>	於論鼓鐘、
<i>what pleasing sounds at the Round Pond!</i>	於樂辟廡。

*Alligator drums pound b'ung-b'ung!*⁵³
dim-eyed blind men perform their service.

鼉鼓逢逢、
朦眊奏公。

This twenty-line song, which breaks into three sections—two stanzas of six lines, and one of eight—is an idealized microcosm of the ecological, social, and within these musical, orders that are by now becoming familiar. In the first stanza a royal plan is conceived and commenced, to build a “Spirit Tower,” a suitably religious duty, to which the people respond eagerly, “completing” it (*chéng*) in less than a day. This goal accomplished, we see the king at leisure in his park or garden. Surrounded by lovely deer, birds and fish, he is the master of a teeming natural world given order through human labor, one that submits to him as its lord.⁵⁴ Against these two parallel and counterbalanced images of royal labor and rest is set an eight-line stanza describing the musical labor of the blind musicians. With a chiasmic structure, where the second couplet repeats before going on to the final couplet, the stanza moves from the image of instruments being set up, to the blind musicians performing their public service (*zòu gōng* 奏公).⁵⁵ The graph 樂, repeated in the central exclamatory lines, is here read as the homograph *lè* “pleasant, joyful,” but in this context it manifests its close semantic and etymological ties to music (*yue*). Thus the song enacts the traditional logic that understands musical performance as the celebratory medium proper for punctuating a noteworthy royal accomplishment, especially public works and military victories.

⁵³ Karlgren’s reconstructed phonetics: note the similarity to the English onomatopoeic “bang.”

⁵⁴ *fú* 伏 “lie down,” used of the deer, has the further sense of “bow down, submit,” perhaps active here given the proclivity for sport-hunting among elite men.

⁵⁵ *gōng* is usually “duke,” but also more rarely, “public [service]” or “court;” in 177 it occurs with *zou*, and is read as “perform [public] deeds;” *zou* means to offer, report, but also play music (modern *zou yue*), and Tong reads it as common in oracle bones for “perform” music (1983: 15-17, ex. 295, 315); In this context, unique in the *Shijing*, are the two idioms being combined in a new way, with the meaning “play music as public (royal) service”?

After King Cheng, the “Achiever,” came King Kang (康), the “Pacific”—another royal name with meanings that resonate in scenes of ritual banqueting and music. Contexts where it occurs make it apparent that *kāng* 康, “peace, ease, prosperity,” is a term of moral ambivalence. While connoting “relaxation” in a positive sense, it also contains a shadow meaning of “laxity.”⁵⁶ So at *Shijing* 114, a song on the theme of *carpe diem*, an exhortation to take pleasure as time steals away is qualified with a warning against ignoble and excessive ease:

*There are crickets in the hall,
the year is drawing its dark lush strokes.
If we don't enjoy (lè 樂) ourselves now,
suns and moons will pass us by.
But oh, don't take it too easy (dài kāng 大康)!
keep in mind where your duty resides;
Be fond of pleasures (lè 樂) but don't be too wasteful.
The good nobleman is vigilant-watchful.*

The two following stanzas repeat the theme, with variations that enjoin mindfulness, first of outside affairs (or external enemies), and then of sorrows; the nobleman should be alert, and (concluding with an affirmation of timely relaxation) rested or calm (*xīu* 休), just as their chariots rest in the off-season. Each stanza, however, hinges on the fifth line, ending with the pivotal ambivalence of “great ease” (*dài kāng*). There is a proper measure of rest, but beyond that is an excessive and dangerous state of negligent laxity.

⁵⁶ Compare the double sense of classical Latin *otium*, at once the “leisure, rest” proper to a freeborn gentleman, as well as the “useless relaxations” of shiftless nobility. Similar too are classical Greek *agan* and *lian*, adverbs meaning at once “enough” and “too much,” both sufficiency and excess.

The basic ambivalence of “ease” appears again in *Shijing* 220, a lengthy description of the elite clan banquet. Here the orderliness and propriety of the banqueters is emphasized at the start, during the more formal ritual proceedings with and for the ancestors, where the music, drinking and archery is all very decorous and ritualized. This order is then contrasted with the guests’ later behavior as they drink too much, dance wildly, get into brawls, upset tables, and engage in other unseemly or violent behavior. The song is five long stanzas in length, the last three devoted to the banquet in a state of excess, the first two describing the restrained enjoyment of the ancestral feast. It is instructive that on the cusp of this division, at the end of the second stanza, *kāng* 康 is used, the term of ease to the point of license, describing a final “wine cup of ease,” as the seasonal rites come to a close. Similar to this instance is a formula in *Shijing* 302, a song that overall seems connected with the same closing point in the ancestral ritual: the descendants of Shang celebrate that “heaven sends down peaceful ease” (*tiān jiàng kāng* 天降康). Finally, *Shijing* 271 seems to play on the contrast between “achieving” and “taking ease” when it praises King Cheng by saying that he *did not* take his “ease” (*kāng*) in his execution of heaven’s charge.

Later writers, such as the poet-scholar Ban Gu in Han times, pinpointed the period when the *Ya* ritual odes (the longer, courtly songs in the *Shijing*, called *yǎ* 雅 “refined, elegant”) went into decline as being “after Kings Cheng and Kang” (Ban Gu; Kern 2001: 76).⁵⁷ Since this report comes from more than a thousand years after the purported reigns of these kings, it holds far less value as history than as myth, on which it perhaps draws some of its rhetorical force from the ambivalence of Kang (“ease”)

⁵⁷ So too in the *Shiji* it is reported that after King Kang, under his successor King Zhao “the kingly way of government diminished” (Nienhauser 1994: 66).

traced above. By this time, in fact, the early “history” of the Central Kingdom had been smoothed into a systematic, unified timeline of exemplar sages and kings. In this scheme, the three Dynasties each rise to greatness and decline in a succession of power, the theme of decline involving both decadent courtly music and excessive “ease.”

As if an exemplar for this entire conceptual nexus, the king whose reign marked the fatal decline of the Xia was Tai Kang 太康, “Great/Excessive Ease.” To be sure, several Xia successors followed him—no doubt to fill up empty years in the idealized dynastic chronology—but it was the follies of Tai Kang, son of Qi, son of Yu the Great the flood hero, which fatally blotted out Xia legitimacy and paved the way for the Shang to succeed them. In the *Shujing* chapter “The five sons’ song,” Tai Kang is said to pursue pleasures and travels without restraint, due to which his popularity waned. Then in the following “song” of lament that he and his five brothers sing, the second brother’s stanza includes: “when inside is a jungle of lusts, outside a barren for birds, when wine is sweet and song a habit, when there are lofty roofs and sculpted walls, any of these things has always been a prelude to downfall” (Legge, modified).⁵⁸

The same pattern repeats in the myths about Shang. While Tang the virtuous founder had overthrown the decadent Jie of Xia,⁵⁹ the last Shang ruler Zhòu was himself decadent, and thus ready for overthrow by the martial and vigilant Zhou

⁵⁸ The Han historian Sima Qian’s account simply states, “Emperor Tai Kang lost his state,” then deflects the courtly chaos theme into the next reign, when the Xi and Ho tribes are said to have “indulged themselves in drinking, disregarding the seasons and the reckoning of the days” for which the general Yin campaigned against them (cf. *Shiji* v. 1, Nienhauser 1994: 37).

⁵⁹ *Shijing* 304, the Song state hymn in praise of Tang of Shang, possibly supplies evidence to indicate that the later long list of Xia successor kings was a historicizing fabrication. A line naming Jie of Xia (夏桀) as one whom Tang overthrew also has Kun Wu (昆吾) where the second graph is sometimes used for the state of Wu to the southeast of Song, but could also be a borrowing or misreading for wǔ 五 “five,” giving “five descendents,” which compares with the “five brothers” who follow Qi and fall into internecine strife. In this case Jie of Xia would be either one of the five brothers or follow just after them, which would account for the suspicious doubling, in the later historicized version, of the theme of decline, first with Tai Kang after Qi, then much later with Jie.

(different graph). By Han times Zhòu of Shang had become the Nero of early Chinese infamy.

“He was haughty towards his subjects because of his abilities and he raised himself above the whole world by means of his reputation. He considered everyone beneath him. He was fond of wine, licentious in pleasure and doted on women. He loved Da Ji [his consort] and would only listen to her words. He then ordered [Music Master] Shi Juan to compose new licentious music, northern-district dances, and depraved songs. He raised taxes to fill his Lu-tai [Deer Terrace] with money....He showed contempt to the spirits and gods and gathered a troupe to take pleasure at Sha-qiu. By a pool filled with wine, through meat hanging like a forest, he made naked men and women chase one another and engage in drinking long into the night” (Sima Qian *Shiji*, Juan 3; Nienhauser 1994: 49-50).

When other nobles began to resent and resist him, he only grew more cruel, introducing the novel form of punishment of roasting on a rack. It is at this point that the “Lord of the West” (later King Wen of Zhou) and King Wu enter the picture, putting an end once and for all to Zhòu’s dissipation and wickedness.

The series of dynastic decline and succession thus follows a regular pattern. Legitimate but lax rulers, who change and upset musical norms along with their other enormities (Tai Kang and Jie of Xia, Zhòu of Shang) are shuttled off of history’s stage by upright and strong usurpers (Tang of Shang, Wu Wang of Zhou). Since in actual history the Zhou dynasty formally came to an end only with the Qin imperial consolidation in 221 BCE, the model of decline was retrojected far back into the Zhou past. Mencius, cited above, connected Zhou decline with the demise of *Shi* songs. Later Ban Gu dated the disappearance of the refined courtly music to the reigns of King

Cheng and Kang. In this way might and music, right and relaxation, constitute the two poles between which history was thought to oscillate.

Dancing the Seasons: Songs of Chu and Qi of Xia

The two-and-a-half centuries or so leading up to the Qin and, soon after, Han empires were times of social and political turmoil, accompanied by wide-ranging intellectual fervor and cultural innovation. Called the Warring States period, it was also the time of the competing “Hundred Schools” of thought. This time was formative for “Confucianism” as well as “Taoism” (both are in quotes to indicate that for this period the concepts are anachronistic). In this period also the culturally inflected divide between north and south came into sharp prominence, as the southern state of Chu (楚),⁶⁰ centered on the Yangtze River’s lake country in modern Hubei and Hunan, reached its greatest power and became the most important contender in the final military showdown that resulted in the short-lived Qin, and then Han, unifications. Modern historiography and archaeology has revealed a vibrant and distinctive Chu culture, tracking back in time with the earliest cultural centers in the north, and making major contributions to Chinese history and culture throughout classical times. Consequently, a long-standing and pervasive “Northern Bias” in Chinese history has been in recent years increasingly called into question and subjected to critical revisions.⁶¹

⁶⁰ Chu 楚, which means “thorns,” was, from the northern point of view the “sticks” or “bush” country.

⁶¹ Not surprisingly, Western sinology has also absorbed this northern bias, reflected in false stereotypes about the south in early China. Chinese historian Arthur Wright, for example, in his still valuable history

The northern bias was especially definitive in the process of literary canonization. While the *Shi* songs gained the status of *jing* (經 “literary classic”), a collection of Chu songs and poems, called the *Chuci* (楚辭 “Chu verses”) never gained this canonical status, despite the efforts of some to raise it to a *jing*.⁶² While the morals and sentiments in the *Shi* were seen as upright, virtuous, ennobling, and worthy of emulation,⁶³ the *Chuci* was thought to be dominated by an ethos that was “lascivious,” “anti-social,” “escapist,” overly “sorrowful” and even suicidal. This ethos was encapsulated in the biographical legend of Qu Yuan, the fourth/third-century Chu poet to whom is attributed the poem *Li sao* “Facing Sorrows,” and traditionally many of the other *Chuci* poems (though modern scholarship has tended to discount most of these other attributions). Largely based on a biographical reading of the *Li sao*, Qu Yuan is supposed to have been an upright minister to King Huai of Chu (reg. 328-299 BCE), who fell out of favor and was eventually banished to southern Chu. There, despairing at the corruption of the times, he threw himself in the Mi-luo River and drowned.

In Han times, when this hagiographic biography coalesced, Qu Yuan became a hero for courtly ministers who felt misgivings and anxieties about the state and their place in it, and has remained a potent figure of popular veneration and symbol for social critique and protest ever since.⁶⁴ More specifically, Qu Yuan (or whoever did write the *Li sao*) elevated the notion of a celestial ascent and tour of the cosmos, most likely inspired by real shamanic or enthusiastic ritual dramas, into a compelling and

of Chinese Buddhism wrote that in Han times “South China—the Yangtse Valley and below—was a largely uncultivated wilderness inhabited by aborigines” (1959: 7, emphasis added).

⁶² Cf. Sukhu 1999; Yu 1990: 12 & passim.

⁶³ Cf. Nylan 2001: 72-119 on the evolution of the *Shi* from oral songs to moral didactics. See Goldin 1999 for a discussion of how traditional hermeneutics tended to white-wash sex (even sacred or ritual sexuality) out of the *Shijing*.

⁶⁴ Cf. Schneider 1980; Croizier 1990.

attractive literary device. Thereafter it provided an expressive outlet for melancholy mystics or the poetically minded, producing poems of exuberant imagery and emotion that often have much in common with products of literary Taoism.⁶⁵

The *Chuci* anthology includes, along with Qu Yuan's *Li sao*, a set of eleven short, interrelated songs called the Nine Songs (*Jiu Ge* 九歌); an important text on myth and cosmology the *Tian Wen* ("Heavenly Questions"); two important examples of "Soul Summons" (*zhāo* 招), a genre of ritual calling back of the soul of a sick or deceased person; as well as several other poems mostly by Qu Yuan's stylistic and generic epigones.

The Nine Songs are apparently song-scripts for a courtly ritual drama. The first nine are addressed to different gods and spirits, including those of rivers and mountains, while the tenth is an elegy to warriors fallen in battle, and the eleventh is a short coda on the proper completion of the seasonal rites.⁶⁶ Although the language as well as the cultural world described are more luxuriant and florid than anything found in the *Shijing*, the ritual drama has manifest affinities with the ancestral banquets and musical liturgies discussed above. Compare, for instance, the first of the Nine Songs with *Shijing* 301 (already quoted above):

*On a lucky day with an auspicious name
Reverently we come to delight the Lord on High.
Fondle the long sword, the jade hilt-ring,
And our girdle chime and call out, lin-lang.
From the god's jeweled mat with treasures laden*

⁶⁵ Cf. Paul Kroll's (1996) reading and translation of one of these epigone *Chuci* poems, *Yuan you* "Far Roaming."

⁶⁶ Cf. Hawkes 1985: 95-100 for thoughts on why "Nine Songs" are actually eleven in number.

*Take up the fragrant flower-offerings,
The meats cooked in melilotus, served on orchid mats,
And libations of cinnamon wine and pepper sauces!
Raise the drumsticks and beat the drums
in broad and easy measures, a peaceful song.
Marshalling reed organs and zithers, an abundance of musicians.
Now the priestess (靈 líng “spirit”) comes, in lovely robes,
and the hall is filled with penetrating fragrance.
The five notes mingle in a rich harmony
and the god is pleased (樂 yue/le) and takes his ease (康 kang).*

(based on Hawkes, and Goldin 1999)

Here as before food and drink is offered to a god being honored with a feast, and music is involved in attracting and pleasing the visiting spirit. Far from being exotic, these Chu ritual songs unfold along the same lines of ritual logic as we have seen in abundance in the *Shijing* courtly songs of ancestral ceremony.

The Nine Songs were important enough to have a mythical founder attached to them. This was Qi, the son of Yu the flood myth hero, who is said to have obtained the songs from heaven.⁶⁷ In what remains of this chapter the task will be to outline the Qi myth and its variants, situate them in a wider context of mythic cosmogony, and finally to fit Qi within the pattern of dynastic successions discussed above. As we will see, Qi is at once an exemplar of the “completing” successor who finishes the previous ruler’s tasks (like Wu and Cheng of Zhou), as well as (in some versions) a cautionary figure

⁶⁷ Hawkes, commenting on the second mention of the Nine Songs in *Li sao* (ln.363), says “not the ‘Nine Songs’ of this anthology, of course, but the Nine Songs brought back from heaven by Qi” (1985: 95). I doubt this distinction will stand up to scrutiny, however, since the two are clearly implicated in the same tradition. More accurate, in my view, is that the (eleven) Nine Songs of the anthology were a primary entity rooted in ritual (though probably only one exemplar of a more widespread generic occurrence), while the Nine Songs (and other “Nine” musical pieces) associated with Qi are mythical echoes of Nine Song ritual realities. In other words, as I argue, Qi is an origin myth for the Nine Songs.

concerning the impropriety of “excessive” music (like Zhou of Shang, or Kang of Zhou). But even more importantly, his role as a culture hero, bringing the heavenly gift of the Nine Songs to earth, fulfills the cosmogonic tasks begun by his father, Yu, who stemmed the flood and brought order to the Nine Lands. While I will be primarily interested in disentangling the fragmentary myths about Qi, I am working on the assumption that myth is intimately connected to other areas of life and social practice, such as ritual patterns and conceptions of the cosmos. Thus in discussing the Qi myth I will suggest several possible connections to the pervasive number symbolism of Chinese calendrical lore and divination, some of it apparently going back to Shang times (though, for southern Chinese cultures, not necessarily deriving from the Shang themselves).

In the Han cultural synthesis a unified mythic-historical narrative of Chinese antiquity was elaborated. But, not surprisingly, its coherence was based on a highly selective rendering of traditions. Some elements were amplified, others diminished or even effaced. As in late classical and Hellenistic Greece, geographical variety was often ignored, or subjected to a syncretistic leveling that transformed distinctive local gods and heroes into their assumed equivalent in the global(izing) version of legend and history. The divergent fates of Yu “the Great” and his son Qi are good examples of this process, since Yu became one of the most important figures in the Han (and emergent Confucian) version of legendary antiquity, while his son Qi, apparently important in the myths of other times and/or places, fades into relative obscurity, his position and function replaced by other figures. Accordingly, Yu is widely attested and discussed, while Qi occurs only in a handful of brief, fragmentary, and often

ambiguous references (this is true for post-classical texts and for modern scholarship).⁶⁸

In the Han synthesis Yu had an especially prominent stature, comparable to a Noah, Moses, Heracles, or Dionysos in his eventual guise as all-encompassing culture-bearer. He was the last of the pre-dynastic legendary sage kings, an indefatigable instigator and architect of public works, especially relating to agriculture, irrigation, and geography. In this capacity he appears in the apocryphally early *Shujing* chapter the “Tribute of Yu,” where he is described touring the subject lands by river and detailing the tribute that each area gives to the government (the early Chinese version of the Lewis and Clark expedition). In a similar capacity he became the mythical author of the fantastic geographic encyclopedia, the *Shanhaijing* (“Classic of Mountains and Seas”), a temporally stratified compilation of myths and lore that is arranged on an idealized cartography of the center and four quarters. Its chapters spiraling from the center outward to lands “beyond the seas,” it relates briefly the mountains of the known world, their inhabitants and natural resources, their spirits and proper sacrifices. Just as the Hebrews made Moses the author of the books in which he appears, so does Yu get credited with an anonymous, collectively authored text in which he, a mythical figure, plays the role of creative culture-hero.

Yu (禹) first appears in the *Shijing*, where he is referred to, though only very briefly, as one who “made ready the southern hill” (Mao 210.1; cp. 261.1) for later

⁶⁸ The earliest references to Qi are in Mozi and Mengzi (fifth and fourth cent. BCE respectively), though with the cumulative nature of early Chinese texts it is difficult to be sure what “stratum” these references might belong to. Qi also occurs in a late chapter of the *Shangshu*, but the passage is irrelevant to the Qi of musical myth. Finally, the most important texts are *Li sao* and *Tian Wen* in the *Chuci* (both probably no later than the third century BCE), and the *Shanhaijing*, a temporally stratified text (between 2nd c. BCE and 4th c. CE) where Qi appears in early and late strata. He is also in Sima Qian’s *Shiji*, but this text represents the definitive form of the selective Han synthesis (more accurately, the great Han historian helped to create that form, much as Livy did for early Roman “history”).

human agriculture and building; or again, because of “Yu’s work” the “abundant waters flow eastward” (244). In a mythic song about the first origins of agriculture, Houji (“Lord Millet”) is said to “continue Yu’s line of work” (300). The fullest two mentions of Yu come in the Shang-descendent ritual songs. “When the flood waters were vast, vast, Yu spread the low earth’s quarters, and the foreign great states had their boundaries” (304). Finally, also relating to this work of establishing stable borders, in describing the regular gift-bearing visits of vassal chiefs to the Shang king, it is said that “heaven has charged all the ruling lords, build capitals inside Yu’s field of labor. For their harvest duties come the lords: ‘do not make trouble or punish us; in sowing and reaping we have not been idle’” (305). In the *Shijing*, then, Yu appears as one responsible for the flow of rivers, the order of mountains and the general topographic lay of the land. He brought the flood under control by “spreading the low earth’s quarters” (*xià tǔ fāng* 下土方).⁶⁹ His field of labor is the four-square earth, and its bounds constitute the boundaries and borders of the various states subject to the central king, who distributes rights of rule and levies seasonal tribute offerings. These earliest references to Yu help account for his later avatar in the *Shujing*’s tribute geography, and as the mythical author of the *Shanhaijing*. From mythic demiurge of the natural landscape (dredging river channels, arranging mountains, laying out the lowlands) he became the eponymous hero of natural history catalogues, geographical tribute lists, agricultural manuals and encyclopedias of diverse cultural lore, especially of the practical and economic sort.

⁶⁹ Since *fāng* originally meant “square raft,” it perhaps had a particularly strong traditional resonance within the context of a flood myth: the “raft” of earth saved humankind from the drowning waters.

The flood myth is well attested with many variations in detail (cf. Birrell 1997). In fuller versions Yu's father Gun (鯀) precedes him in attempting the task of stemming the waters of the flood. But where Gun fails in the work Yu is successful. The least anthropomorphized accounts are clearly versions of the "Earth-diver" motif that appears all over the Americas and in modern southeast Asia as well. So in the *Shanhaijing*, which may reflect southern sources but at any rate is the best collection of geographically diverse traditions, it says that "the floodwater overflowed heaven. Gun stole Di's (god's) breathing soil to dam up the floodwater, not waiting for heaven's charge. Di charged Zhu Rong (祝融, the fire god⁷⁰) to kill (殺 *shā* "decapitate") Gun on the Feather [Mt.] altar. Gun's entrails gave birth to Yu. Di then charged Yu to finish spreading out the earth to determine the nine territories."

Sources like this one allow a privileged glimpse of a ritual dimension to the myths: incorporated into the narrative of flood control is a sacrifice—perhaps human sacrifice, which also occurs elsewhere in the *Shanhaijing*—the magic of which leads to successful ordering of habitable, cultivable lands. On another side, these less anthropomorphized versions just allow us to perceive the animal forms of the characters: Gun's name means Dark Fish (or, after Birrell, Hugefish); similarly, Yu's name originally had something to do with a reptile's tracks. Moreover, according to the *Tian Wen*, Gun tried to quell the flood by following the lead of owls and turtles (a zoomorphic combination which appears on the Han era Mawangdui silk banner).⁷¹ Also in *Tian Wen*, when Gun was killed he lay on Feather Mountain for three years

⁷⁰ Zhu Rong is often called the fire god; his name, something along the lines of "Invoker Steam," perhaps suggests a functionary involved in ritual sacrifices.

⁷¹ As observed by Allan 1991: 69, 194. This can be seen on the front of the Penguin Classics edition of *The Songs of the South* (Hawkes 1985).

without decaying, when “shaman(s)” (wū 巫) revived him and he turned into a yellow 熊. Sarah Allan argues for reading this graph as *nai*, a three-legged turtle (or possibly a dragon) (Allan 1991: 69-70). David Hawkes in his translation of *Tian Wen*, follows the modern reading of this graph as *xiong*, bear. A seventh century CE Chinese scholar also related a story that Yu turned into a bear (熊?) when he had relations with the Tushan girl who gave birth to Qi (quoted in Birrell 1993: 123). But whether turtle/dragon or bear, it is worth noting that kings of Chu used 熊 as their honorific title. Is there a connection between this myth and the political ideology of Chu elite?

Where the Earth Diver flood myth occurs elsewhere in the world, the story usually tells of various animals attempting to dive to the bottom of the flood to bring up a saving piece of soil.⁷² Failed first attempts are then followed by a successful diver. Often, in fact, the successful diver is a turtle (this occurs both in North America and in Hindu myths concerning an early turtle-form avatar of Vishnu).⁷³ Then the turtle becomes the supporter of earth,⁷⁴ a cosmological image that occurs also in China. *Tian*

⁷² Cf. Kongas 1960; Dundes 1962. In North America its range was from California through the Great Basin, Plains, and Eastern Woodlands, to the Atlantic Coast, and in Eurasia its most prominent area of distribution, is all across northern Asia, Siberia, to Slavic, Baltic, and Finno-Ugric areas in Europe.

⁷³ The following is a Navajo account (Aileen O’ Bryan 1956: 9): “The flood was coming and the Earth was sinking. And all this happened because the Coyote had stolen the two children of the Water Buffalo, and only First Woman and the Coyote knew the truth. When First Man learned of the coming of the water he sent word to all the people, and he told them to come to the mountain called Sis na’jin. He told them to bring with them all of the seeds of the plants used for food. All living beings were to gather on the top of Sis na’jin. *First Man traveled to the six sacred mountains, and, gathering earth from them, he put it in his medicine bag. The water rose steadily.* When all the people were halfway up Sis na’jin, First Man discovered that *he had forgotten his medicine bag. Now this bag contained not only the earth from the six sacred mountains, but his magic, the medicine he used to call the rain down upon the earth and to make things grow.* He could not live without his medicine bag, and he wished to jump into the rising water; but the others begged him not to do this. They went to the *kingfisher and asked him to dive into the water and recover the bag. This the bird did.* When First Man had his medicine bag again in his possession he breathed on it four times and thanked his people” (emphasis added).

⁷⁴ In this, the Lenape of Delaware version, the diving theme has probably been attenuated merely to “prayer”: “The mighty snake firmly resolved to harm the men. / He brought three persons, he brought a monster, he brought a rushing water. / Between the hills the water rushed and rushed, dashing through and through, destroying much. / Nanabush, the Strong White One, grandfather of beings, grandfather of

Wen includes the question: “When the great sea turtle wears a mountain as a cap, how does he keep it steady?” (鼈戴山抃。何以安之). In this regard, Sarah Allan has further argued that the shape of the turtle, flat and cruciform underneath and rounded in a dome above, was either the source, or became a symbolic analogue, of the dominant Chinese cosmological model: a circular heaven above supported by a square earth beneath.⁷⁵

In any case, Gun began a task that his son Yu then accomplished. So the *Tian Wen*’s account of the flood includes the question, “What did Gun plan, and what did Yu accomplish (*chéng* 成)?”—a formula that fits Gun and Yu into the paradigm of father-beginners and son-fulfillers charted above. When the flood has been brought under control and the nine lands charted out (on which more momentarily), the story continues with the rise of the next generation. Yu either marries or has a tryst with a girl of Tu-shan (塗山 Mud(?) Mountain) and when she is petrified by looking at Yu as he drums on a rock in a zoomorphic guise (a myth involving *qìng* stones?), Yu calls out for his son, the girl-rock cracks open on her north side and Qi emerges (cf. Birrell 1993: 122-3). The brief version in *Tian Wen* is even more revealing, where Qi is born of a god’s descent and visitation to a “mountain girl.” “Yu’s strength showed forth accomplishments. He descended (*jiàng* 降) to inspect the four quarters of earth below.

men, was on the Turtle Island. / There he was walking and creating, as he passed by and created the turtle. / Beings and men all go forth, they walk in the floods and shallow waters, down stream thither to the Turtle Island. / There were many monster fishes, which ate some of them. / The Manito daughter, coming, helped with her canoe, helped all, as they came and came. / [And also] Nanabush, Nanabush, the grandfather of all, the grandfather of beings, the grandfather of men, the grandfather of the turtle. / The men then were together on the turtle, like to turtles. / Frightened on the turtle, they prayed on the turtle that what was spoiled should be restored. / The water ran off, the earth dried, the lakes were at rest, all was silent, and the mighty snake departed” (Brinton 1884 [1969]: 179-81).

⁷⁵ Allan 1991: 74-111; see also Major 1993: 32, 69.

How did he get that Tu-shan girl, then penetrate her in the pleasant mulberry?⁷⁶

Longing for a wife, he sized her up and united with her. From her body was his perpetuation.” In this text it is apparent that Yu is a god descending, and his child with the Tu-shan girl is a miraculous birth.

Qi (啓), whose name means “to open, start; explain; clear” (also “kneel”), nearly always appears in conjunction with musical themes. The secondary theme associated with him is dynastic succession. His father’s wise minister Yi did not succeed Yu; his son Qi receives (or usurps) power instead. Thus Qi begins the Xia dynasty on the principle of hereditary succession. Unlike Yu, Qi does not appear in the *Shijing*. The earliest mention of him is in the *Mozi* (ca. mid to late fifth-century BCE and after), among the more severe and morally ascetic of the Hundred Schools of the Warring States period. At the end of the chapter “Against Music,” in which Master Mo rails against what he sees as the useless, wasteful, and harmful excesses of courtly music culture, we find Qi as a legendary example of such musical excess: “The *Wu Guan* says: “Qi gave himself up to pleasant ease and music (康樂), eating and drinking in the fields. *Qiang-qiang*, the flutes and chimestones sounded in unison! He drowned himself in wine and behaved indecently eating in the fields. Splendid was the Wan dance, but Heaven clearly heard the sound and Heaven did not approve” (after Watson 1963: 116). The text purportedly quoted here, *Wu Guan* “Military Observations”(?), is not extant, but the passage indicates that the negative tradition about Qi was current in Warring States times. Note however that, in keeping with concepts encountered above, heaven “hears” the sounds of music.

⁷⁶ The Chinese here is quite explicit: *tōng* 通 means “pass through, penetrate, open a passage.”

But also current was a more positive view of Qi. Mencius (ca. fourth cent. BCE) says that Qi's succeeding Yu instead of his minister Yi was right and proper since Yi had served for too short a time to have proved himself. Moreover, Qi was popular, and for Mencius the voice of the people is a sign of heaven's will: "ballad singers sang (*ōu gē* 謳歌) the praises of Qi instead of Yi, saying, 'This is the son of our prince.'" ⁷⁷ This passage tells us two things. First it demonstrates that in Warring States times some (like the author of this text) took a positive view of Qi. Secondly, on the assumption that this text is itself drawing on available traditions, some versions of the Qi stories painted him positively as well.

Thus in Warring States times Qi was, depending on one's point of view, either a good or a bad legendary exemplar. This is important to bear in mind now in looking at the other texts that give fuller mention of Qi. First are two quotes from *Shanhaijing* ("The Classic of Mountains and Seas"):

"Beyond the southwest seas, south of the River Scarlet and west of the Flowing Sands there is someone whose ear ornaments are two green snakes. He rides two dragons. His name is Lord of Summer, Open (*Xia hou Kai* 夏后開⁷⁸). Open went up on high three times as a guest (*bin* 嬪) in heaven. He obtained the 'Nine Counterpoints' (*jǐu biàn* 九辯)⁷⁹ and the 'Nine Songs' (*jǐu gē* 九歌), in order to bring them back down. This happened in Majestic Heaven's Wilderness, which

⁷⁷ *Mozi* 5.A.6 /chap. 9. Lau 1970: 144-5=Lau 1984 (v.2): 190. The text literally says "those who sing songs sang songs of Qi."

⁷⁸ A Han period editorial note in the text of *Shanhaijing* explains that Qi (啓) is written with the synonym Kai (開 "open") because Qi was the honorific ancestral name of a Han emperor and thus taboo. On this point it might be noted that Birrell 1999 consistently calls him Kai (saying once that he was "also known as Qi"); this usage is misleading, since Qi is the *usual form* and Kai only a taboo formation occurring in one chapter of one text (elsewhere in *Shanhaijing* 啓 is used).

⁷⁹ Alternatively, *biàn* could mean "disputes," "discriminations," or be a borrowing for *biàn* 變 "changes, transformations" (as editors of the *Chuci* have suggested for the same phrase there).

is 16,000 feet high. There Open obtained and began to sing the ‘Nine Summons’ (*jǔ zhāo* 九招).” (after Birrell 1999: 177, much altered)

Then, earlier in the same work:

“The Great Music Wilderness is where the Lord of Summer, Open, danced the ‘Nine Successions’ (*jǔ dài* 九代, also “eras,” “generations,” or “dynasties”). He drove two dragons and clouds covered them three layers thick. In his left hand he grasped a feather screen, and in his right hand he held a jade ring. From his belt hung a jade half-disc. This Wilderness is north of Mount Great Fortune. One author says this happened at the Wilderness of Great Ruins.” (after Birrell 1999: 115)

From different sections of the *Shanhaijing*, these two passages have some interesting similarities. Both agree that Qi “rides two dragons,” that he is otherwise ornately apparelled—green snakes in his ears, or with feather screen, jade ring and so on—and each associates him with music and dance of “nine.” The first text adds the crucial detail that he ascended to heaven and was a “guest” (graph is variant on *bin* discussed above), where he obtained the Nine *bian* and Nine Songs. (Note also the southern/southwestern location of Qi in the first passage.)

Tian wen (“Heavenly Questions”) in the *Chuci* repeats the visit-to-heaven motif and adds further details:

“Qi supplanted Yi and made himself lord, but later met with mishap. How did Qi fall into trouble, and how did he succeed in warding it off? All gave him their allegiance and did no harm to his person. How is it that Yi lost lordship and Yu’s sown seed continued (lit: “descended,” *jiàng* 降)? Qi many times hosted (*bīn* 賓) the High God (*shāng* 商), [with] the Nine *Bian* and Nine Songs. Why did a hard-working (*qìn* 勤) son kill his mother, and then when he died his lands were divided?” (Hawkes 1985: 129; modified)

This account records something of Qi's ambivalence: he made himself lord, but met with mishap, he got into trouble, but warded it off. So too, Qi was "hard-working" but killed his mother (when she cracked open at his birth), and his lands were divided in civil strife when he died. The minister Yi lost the rule Yu had given him, and Yu's seed was continued in a hereditary dynasty. Again, Qi plays host to gods with the Nine-music, but fails to pass down a strong united power over his father's Nine Lands when he dies.

Finally, Qu Yuan's *Li sao* ("Facing Sorrows") has another turn on the Qi myths. This is how David Hawkes rendered the lines in question:

Singing the Nine Songs and dancing the Nine Changes,
Qi of Xia made revelry and knew no restraint,
Taking no thought for the troubles that would follow:
And so his five sons fell out, brother against brother.⁸⁰

It would appear that this version follows the negative image of Qi. But the translation, it turns out, may be misleading. The style of *Li sao* is very compressed and elliptical, often requiring interpretive maneuvers before translation is possible, and in these lines Hawkes has been forced to make a choice based on outside references to Qi. In a more minimalist form the lines actually read: "Qi: nine *bian* and nine songs oh! / Summer ease (Xia Kang 夏康) made merry to indulge himself. // Not looking at the troubles to plan for descendents oh! / five sons caused losses to their family settlements." In this light it is clear that Hawkes has followed more the lead of the Qi myth tradition than the text in hand, since the latter does not spell out, for one, that the five sons fell into civil strife. But most importantly, Hawkes makes Qi the subject of

⁸⁰ Hawkes 1985: 72

the second line, an interpretation not entirely warranted by the text, though it is clear that he is led to do so by the negative tradition concerning Qi (as in the *Mozi* above). But just as, or even more, likely is that the subject of the second line is Qi's son-successor Tai Kang (this has been the traditional interpretation). In this case a contrast is intended: Qi is remembered for the nine *bian* and Nine Songs—whether positively or not—while his son Kang reveled to the point of indulgence, did not plan for the future, and with his five brothers brought losses to the Xia house.

Two lines of evidence support this reading as opposed to Hawkes' translation. The first is that by far the most common account is that Qi was a good son, if plagued by difficulties and not quite equal to his heroic father, and it was Kang who “lost the state” as Sima Qian succinctly puts it (“lost” *shī* 失 is the same word as in the *Li sao* quote). The Han historian followed Mencius, and the “Five Brothers’ Songs” account, which puts the loss of the state in the time of Tai Kang. He calls Qi *xián* 賢 (“worthy, capable”), and says nothing bad about him (Nienhauser 1994: 36).

But stylistic considerations in *Li sao* provide more compelling reasons to doubt Hawkes' translation. The latter asks us to take Xia 夏, the house or dynasty name alone, as referring to Qi. But nowhere else in *Li sao* are legendary persons named in this way. Instead they are always either named with a single proper name, as with Qi 啓 in the preceding line, or Yu and Tang a few lines later (161). When dynasty or state names appear, they stand alone or precede nouns, including proper names. So we find 殷宗 “the Yin [=Shang] clan” (160), 周 “Zhou [house]” (161), 周文 “Zhou Wen” (=Wen of Zhou) (294), 齊桓 “Qi Huan” (=Huan of Qi) (296), and 夏桀 “Xia Jie” (=Jie of Xia) (157). These final three examples set the naming pattern that ought to guide

interpretation of the case in question. Thus, following the last of these examples especially, 夏康 “Xia Kang” in line 146 should be read as (Tai) Kang of Xia.

Given this reading, Qu Yuan in *Li sao* is, at best, noncommittal on Qi himself. He had the Nine *bian* and Nine Songs, and his sons lost the state. We are left to infer the connection, if any, between these two events. Did his music of nines *cause* the later fall? Or was he a good ruler while his sons failed to follow his and Yu’s examples? As with the ambiguous questions about Qi in the *Tian Wen*, Qu Yuan leaves it to the reader to wonder about, and perhaps to decide, Qi’s reputation.

After all, this seems to be Qi’s implicit function in Warring States discourse more generally (in which, it should be remembered, Qu Yuan and *Li sao* must be situated).⁸¹ The son of and first ruler after Yu, a one-time divine creator figure and, in humanized form, a great and wise sage ruler of high antiquity, Qi presented a situation fraught with discourse-generating questions. Should succession rightfully be based on blood or talent? How does one plan safeguards against internecine strife in a world where many sons all might aspire to power? What is the role, purpose, and effectiveness, if any, of musical ritual in the exercise of government? Qi—to pun on his name—opened up this fluid universe of basic moral and political dilemmas, which are posed, in mythic time, as coming into being just after history’s stage, the Nine Lands that Yu drained of floodwaters and set in order, had been established. This done, the Nine Songs were obtained by Qi, who visited heaven as a “guest” and brought them

⁸¹ This conclusion echoes Allan’s thesis (1981) that different Warring States texts present systematic paradigms of the legendary past which predictably unfold according to how certain basic questions are answered (e.g., should rightful succession be by blood or talent). So too, the point of view here follows Puett’s (2001) methodological exhortation not to take any one text’s account of a matter as general and normative, and to recognize instead that those texts are in discourse and debate with one another and to focus on “the tensions motivating the debates” (18). Qi, I would argue, and the question of music more generally, were just such sites of tension. Or, more aptly, ritual music was at issue, and the Qi generation stories provided symbolic language with which to focalize major points of contention.

down. This is, of course, an origin myth for the ritual music by which gods themselves are drawn down to the feast to be “guests” and honored with food, drink, dances, music and songs.

In other words, Qi’s Nine Songs are the appropriate counterparts to Yu’s Nine Lands. To the horizontal and spatial are added vertical and dynamic temporal dimensions. For while Yu had to do with earth (*tǔ* 土), rivers (*chuān* 川), and how the latter divide up the former into territories (*zhōu* 州),⁸² Qi is associated with heaven (*tiān* 天), clouds (*yún* 云/雲) winds (*fēng* 風),⁸³ and the “changing” (*biàn* 變) or “disputing” (*biàn* 辯) seasons.⁸⁴ Seasonality moves from the natural and temporal to the generations of ancestors, who are remembered in succession (*dài* 代)—and reciprocally, the year is a cycle of commemorative festivals that also function to keep the spirits of the seasons (deified ancestors, winds, mountains, rivers, and so on) placated and moving in their harmonious, prosperous rhythms. In other words, Qi and the Nine Songs point to the effective communication between heaven above and the human world below via the medium of song and music. Recall that a primary function of the early Chinese king was to make rain and manage the weather. Music and divination were two sides of that crucial sacral dimension of his authority.

⁸² Cf. the questions in *Tian Wen*, in the Yu section of the poem: “How did he set the bounds to the Nine Lands?... Where did the seas and rivers flow?... Why are the nine territories (九州) dry and the river valleys (川谷) wet?” (Hawkes 1985: 128).

⁸³ Incidentally, *fēng* 風 “wind” becomes by metaphoric extension, “air, song” (already in the *Shijing*), just as *yún* 云 “cloud,” through graphic borrowing and homophony, comes to mean *yún* “speak.”

⁸⁴ It would take up far too much space to elaborate this connection, but the excavated fifth-century BCE Chu silk manuscript has provided fascinating evidence of how the seasonal and ritual calendar was mythologized, each month having its own fantastically imagined “overseer,” and the seasonal cycle first coming to be through a cosmological narrative sequence with divine antagonists and protagonists arguing, competing, fighting, striking deals, or undertaking cosmogonic exploits, much like Homer’s Olympians (cf. Barnard 1973).

Several observations help fill out this reading of Qi. First it should be noted that a primary meaning of Qi 啓 is meteorological. Already in the Shang oracle bones *qi* (written in various ways: 𠄎 / 𠄎 / 𠄎) refers to the “opening” or “clearing” of the sky, especially after wind and rain storms.⁸⁵ Also pointing to celestial regions, in *Shijing* 203 within a longer enumeration of constellations, *qǐ míng* 啓明 (Open Bright) is named as an eastern star paired with a western star or constellation *cháng gēng* 長庚 (Elder Geng, most likely a katasterism for an ancestral spirit). Along different lines, in *Shijing* 210, a song that begins with Yu’s preparing of the land and a description of heaven pouring torrents of rain to grow the many kinds of grain, the ancestral sacrifice is then performed. An officiant takes a sacrificial blade to “open” 啓 the hide of a bull to “obtain blood and fat,” at which point the ancestors come to bestow on them heaven’s blessings. The other main use of 啓 in the *Shijing* is in reference to the “opening” and “clearing” of land for human cultivation and settlement (Mao 241, 300), or to “open” and “lead” a military campaign (Mao 250; cp. Mao 177).⁸⁶ In each situation these collective endeavors called for the ruler to seek and obtain signs from

⁸⁵ Cf. Keightley 2000: 41 for an example of *qi* in the Shang divination charges: “Crack-making on *guihai* [day 60] divined: “In the (next) ten days (no disasters).” (*Verification*): On *yichou* [day 2], in the evening it rained (雨); on *dingmao* [day 4], in the evening it rained (雨); on *wu(ji)* [day 5]...it rained and was windy (雨風); on *ji(si)* [day 6] at dawn, it cleared (啓).”

⁸⁶ Again, cf. Puett 2001: 28-38. There is one other use of 啓 in *Shijing*, which perhaps influenced the connection of Qi with the theme of relaxation and leisure. A relatively fixed formula occurs: “In royal affairs there is no slacking. Don’t take time to *qǐ chǔ* 啓處” (Mao 162, 167 (2x), 168, with the variation *qǐ jū* 啓居). This is usually rendered as “kneel and rest” (*qǐ* taken to mean “kneel”). But both the other terms, and the contexts where this formula occurs—military marching songs—suggest an alternative reading of “Don’t take time to open (the land) and settle;” the formula variant, too, would mean “don’t open the land to reside.” There is grim war humor here, in my view. Hear the commander calling: “we’re on strict military orders men, to do our duty and meet the enemy. We’re only marching through this land, not here to clear and settle it!”

heaven, to see whether the plan and its outcome will be successful or not (as we have seen in previous examples).

啓, therefore, was a complex and multifaceted conceptual web, combining “clear” skies as a particular sort of heavenly sign, “opening” paths, “clearing” lands, and “opening” sacrificial animals for purposes of divination and sacrificial placation. Thus, for Qi to “host” heaven and “gain” the Nine Songs should be read in light of sacrificial language as well: the ritual knife that “opens” the sacrificial bull to “obtain” the blood and fat with which to host the ancestor spirits who descend from heaven to partake. The result, it is hoped, will be “open” skies when these are fitting, rain when this is timely, and altogether a harmonious, productive growing season for crops, animals, and people. When all goes well, the seasons are in harmony, heaven is propitious, ancestors and spirits are feasted with the bounties of labor, and the music of festival celebrations is truly *lè* 樂 (“pleasant”) and *kāng* 康 (“peaceful, relaxing”). But there are dangers here, as the songs and later literate texts constantly remind. One must be vigilant, on one’s guard, ever watchful for changes in the heavens, always diligently planning for the future. But even the best laid plans might not come out well, especially after one’s death. Just recall Qi, who received the ritual Nine Songs from heaven himself—his sons fell into trouble and lost the state.

The symbolism of nine now bears some comment. The result of Yu’s labor were the Nine Territories. Qi gained the Nine Songs and Nine *Bian*, also the Nine Successions and Nine Summons. The *Tian Wen* gives other nine-fold things: there are “nine heavens” with borders, a “Mother Star” with “nine children,” a great serpent with “nine heads,” a “nine-branched plant.” This list is hardly exhaustive. Suffice it to say

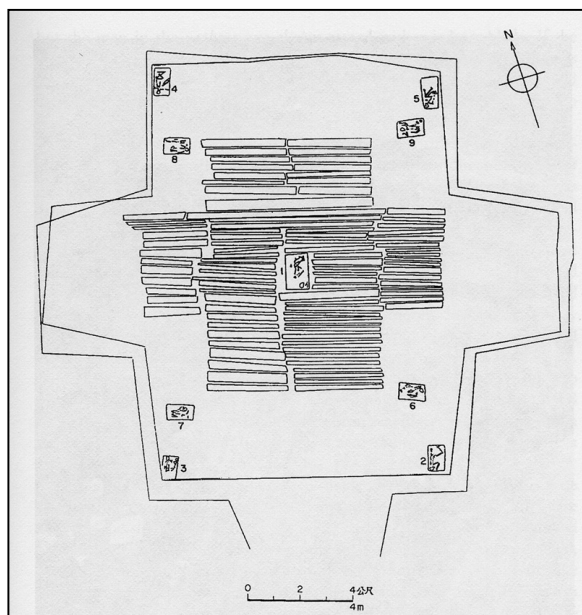


Figure 22. Shang royal tomb at Xibeigang, exhibiting usual cruciform layout, with nine sacrificial victims in center and corners (ca. 13-12th c.BCE).



Figure 23. Turtle plastron for Shang divination, inscribed with oracular charges (ca. 12th-11th c. BCE)

that nine was a symbolically important number. In the *Yijing* divination tradition, nine is the “strong” or “bright” (*yang*) number of heaven. There was, moreover, a myth (one rooted in at least Zhou, if not Shang, political reality¹) involving nine bronze *ding*-tripod vessels, each emblazoned with the heraldic ensign or totem of one of the nine lands and all of them kept in the central, ruling state. Yu was said to have been the maker of these potent symbols of central royal legitimacy. We know, of course, that bronze vessels including bells were exclusive status wealth of Zhou ruling families.

Two distinct systems are operative here, though concealed somewhat in the common term of nine. On one hand there are sets of *ten*: i.e., nine dependent on one (the mother star with nine sons, comparable—and perhaps connected—with the Shang myth of the ten suns). On the other are real sets of nine: nine (vertical) heavens, nine

¹ Cf. Falkenhausen 1993: 34-5, Table 2, which charts the excavated bronzes from the different states over time. Tombs at the highest social level contain nine-*ding* vessels, while tombs of lesser aristocrats have seven, five, or three.

songs, nine *ding*-tripods, and so on. These cases, in turn, can and very often do become *eight* dependent on one, which is higher or central to the surrounding eight (so nine lands, or nine layered heavens). At the root of each of these two types of system, however, and arguably drawing them together into one, is the cardinal layout of the directional compass.

Directional systems have been important in many traditional cultures, and early China was no exception. A four-square or nine-square layout became basic in Chinese temple, palace, and city architecture, while over the centuries calendrical, mathematical, divinatory, and correlative schemes of all kinds were elaborated upon the simple framework of the compass points. That this tendency has roots in Shang times can be seen, for one, in the cruciform layout of Shang royal tombs (Figure 22). Evidence of tomb sacrifices at the center—above where the interred body lay—and eight surrounding points further suggests that the directions were important in the Shang calendar cycle of sacrificial ceremonies and festivities. Compare the *Tian Wen*, which says that there are “eight pillars” holding aloft the heavens.

Shang kings, it will be recalled, worked with a ten-day week, to which they added a twelve-count to elaborate a cyclical sixty-day count. Given that each day had its own distinctive two-character name based on these interlocking cycles, and knowing that in divination charges keeping the days was of utmost importance, it is reasonable to imagine that the cardinal directions were also made to interact with this cycle in some way. Just as Yu’s field of labor was the Nine Lands, so the ritual space where divination, sacrifice, and musical honoring took place might also have been organized in a nine-fold pattern. Moreover, the bony turtle plastrons used as divining

boards had nine natural divisions (cf. Figure 23, and Keightley 1978b: 13-14, fig. 3). That symmetrical patterning was important is clear at the level of the divining boards, for the placement of hollows for cracking was highly regular and their layout exhibits mirror symmetries (ibid.: fig. 6, 23). The same holds for the “ideal” placement of inscriptions on the nine natural suture-delineated spaces of the plastron (ibid.: fig. 17).

Accordingly, each direction’s space on the ritual ground might have had their proper musical compositions and genres of spirit-attractive dance numbers. To know the day was to know the spirits of the day, and to attract the spirits one had to play their music.² When these spirits were ancestors, their music would have involved commemorative song and perhaps mimetic dances of their deeds and accomplishments (as with the Wen and Wu dances of Zhou times, discussed above, or other “ancient” music, the Wan dance, the Shao Dances, the “Yu step,” etc.). We should also bear in mind the strong possibility that the shifting direction of the sunrise and sunset throughout the year may have played a role in how this musical calendar was understood, represented and dramatized. For the seasons have their own directions: the sun rises in the east and sets in the west in spring and fall, in the northeast and southwest in summer, and the southeast and northwest in winter. Thus the year itself dances an annual dance around and through the directions. The Shang kings (along with their contemporary neighbors and their epigone states) may well have done the same.

² A cycling system of five sacrifices has been reconstructed in the Shang oracle inscriptions, actively performed especially in one particular king’s reign. Since kings (and queens) as divine ancestors had names with one of the ten day names, they were offered sacrifices on their name days, and received the successive sacrificial services in a complex cycle that composed a longer ritual “year” of about 380 days (cf. Ito and Takashima 1996: 22-3, 91-106).

Qu Yuan and Chinese “Pastoral”

I have used the textual references to Qi, son of Yu, and the Nine Songs he obtained from heaven to support one possible way of imaginatively reconstructing the ritual musical life of such early Bronze Age elite traditions in China as the Shang and Zhou period states. We must always remind ourselves, however, that just as the passage of time wrought changes on such cultural systems, so also were there geographic variations on these patterns, even if they are seen as “inflections” within a common and shared cultural horizon. Indeed, I have not lost sight of the fact that many of the texts I have been focusing on date around a thousand years after the earliest now-known oracle bone inscriptions, and come from a world far more complex, troubled, and in many ways reaching a kind of critical mass that would eventually result in major socio-political upheavals (one symbol of these upheavals is the loss of two-tone bell-casting technology; cf. Falkenhausen 1993: 189-93, 320-24). In this world, as the *Mozi* reminds us, courtly music, though normal and usual, was viewed by many as an elite distraction from duty, a decadent entertainment and clear sign of moral decline and negligent indifference to worldly affairs.⁸⁹

⁸⁹ The *Mozi* (chap. 32: “Against Music”) condemns music on several grounds, with the common theme that it is a useless luxury. Though obviously pleasant and delightful, such elite extravagances are procured by taxing the common people for materials and labor; they do not help to provide the people food, clothing or rest, nor do anything to stop warfare, banditry, and other social evils; since musicians are men in their prime, it drains the pool of labor for farming and other productive work; most of all, any audience of music was by definition neglecting other more pertinent duties, whether government work, farming, or women’s work of weaving and spinning. For a Warring States rejoinder to the *Mozi* position, see *Zhuangzi* (chap. 33); against Mo’s position that there should be “no singing in life, no mourning in death” the *Zhuangzi* says, realistically, that it is against the heart of the world; “a life that is all toil, a death shoddily disposed of—it is a way that goes too much against us.” Cf. Falkenhausen 1993: 320-23, on the musical cultural changes in the Eastern Zhou (770-249 BCE), where a powerful symbol of the

In the fourth and third centuries BCE, state after small state was destroyed and subsumed by the three largest powers of Qi in the northeast, Qin in the west, and Chu in the south. In 286 Song fell to Qi; in 249 Qin dethroned the last Zhou king, and Lu—Confucius’ home state—fell to Chu. Finally, Qin defeated Chu in 223, then Qi in 221. Throughout this time the able, talented and artistic wandered at large, freebooting their services wherever they might be appreciated, or simply in flight to save their skin after disaster hit home. Retirement from political life, or from the world altogether, became an attractive option many seized upon. In the patchwork text that is the Confucian *Analects* there appears, almost out of nowhere and floating free from any explanatory context except the general theme of retreat from the world, the following register. It bespeaks the general turmoil of the times:

“The grand music master Zhi went to Qi. Gan, the master of the band at the second meal, went to Chu. Liao, the band master at the third meal, went to Cai. Jue, the band master at the fourth meal, went to Qin. Fang-shu, the drum master, withdrew to the north of the river. Wu, the master of the hand drum, withdrew to the Han. Yang, the assistant music master, and Xiang, master of the musical stone, withdrew to an island in the sea.” (*Analects*, chap. 18)

Let us assume, as it has always been assumed, that it was Qu Yuan, the upright and slighted able minister of Chu, who in this time wrote the poetic masterpiece *Li sao*. In his reading of history, Qi son of Yu is an ideal symbol for the sad and corrupt times he finds himself in, when “none is worthy to work with in making good government” (line 371; Hawkes 1985: 78). The Nine Songs have now become a sophisticated escape, and a cultivated means of detachment, from the sorrows of social decay and

breakdown of the Zhou aristocratic order was the expansion of bell orchestras in subject courts beyond their prescribed sizes and configurations.

political chaos. This is how I read the repeated reference to the Nine Songs that comes near the close of this sad poem of elegiac lament:

*We played the Nine Songs and danced the Shao Dances,
Borrowing the time to make a holiday. (ll. 363-4).*

There seems to be already a great deal of romantic nostalgia on Qu Yuan's part for an imagined lost paradise of ritual and musical innocence in the state of Chu. The Nine Songs of Qi, brought down from heaven as a gift from gods to humans, turn out to mark—perhaps *cause* outright—the end of the Golden Age and the beginning, alas, of history. But for initiated and enlightened souls they remain, Qu Yuan and (even more) his later poetic imitators imply, a rewarding and artistic way to reconnect with the divine in song and dance (or their silent simulacra in literary compositions), functioning at least as a palliative against depressing daily currents of base political greed and bureaucratic incompetence.

In other words, Qi brought the mixed blessing of Nine Songs into the world, bringing an end to an age of easy converse between humans and gods, earth and heaven. The fourth-third century BCE poet Qu Yuan, by adapting the oral performance traditions of Chu into a complex and poignant form of social and psychological elegy, transformed the Nine Songs tradition into a literate and lyrical Chinese pastoral. “Nine Songs” in *shao*-style “pastoral” harkened back to a simpler, happier time when the magic of song and dance could link humans and gods.⁹⁰ The central, and eventually

⁹⁰ As Tong 1983: 321-28 explains, *shao*-music was “ancient” or “legendary music” that performed stories and which already in the Zhou classics (~6-4th cent. BCE) was regarded as coming from hoary antiquity (from the time of legendary king Shun). He also emphasizes that the *shao* tradition was a grand musical-ritual feast, involving food, wine, song, and dance. This coheres with the rituals described in the *Chuci*'s “Nine Songs,” as it does also with the general pattern of Chinese social ritual focusing on food, drink, and musical merriment as discussed above; again cf. Paper 1995.

well-worn, trope of a magical ecstatic flight through the heavens recapitulated Qi's magical power to ascend to heaven while it expressed the poet's alienation and desire to escape from a world of inveterate corruption and to articulate and pursue ideals on a higher plane. The imaginary "pastoral" world initiated by Qu Yuan became an escape destination for literary sophisticates in later centuries, when *fu* or "rhyme-prose" modeled on Qu Yuan's poetics became the court poetry of the Han dynasty, and an idealized memory of the beautiful old Chu landscape became its Arcadia.⁹¹

So, by the end of the first century BCE, the scholarly poet Liu Xiang (77-6 BCE) could explicitly name Qu Yuan and the *Li sao* to express his own sense of sorrow and estrangement:

*I should like by music's aid to find relief from sadness,
But my thoughts are tied in a tangle that nothing can untie.*

*Sadly I sang the Li sao to give vent to my feelings,
But I could not get to the end of Jiu zhang ["Nine Pieces"],*

My use of "pastoral" is not the usual cross-cultural comparison offered for the *Li sao*. Qu Yuan is often compared to Pindar, but I think this a false analogy on several counts. First and foremost, Pindar is not very "elegiac" (i.e. sad, plaintive, nostalgic, etc.), a term which most scholars apply to the *Li sao*. If such comparisons have any value whatsoever, I think more fruitful ones could be made, among the Greeks, to Theocritus, or maybe even better would be the Augustan poets, Virgil, Horace, Ovid. That Qu Yuan's Chu landscape became an imaginary Arcadia for the Han poets at least (cf. next note) is one salient point in this comparison; the imagery of the 'countryside' and a longing for a return to 'nature' is beginning to intrude in the face of endemic urbanization and the anxious confines of 'civilized' life. Another salient point is the similarity in longterm reception: Qu Yuan became a poet for the ages in both popular and elite culture, with a level of cultural influence over time easily equal to that of Virgil or Ovid.

⁹¹ As Gopal Sukhu (1999) relates, in the court of the first Han emperor Wu (himself a native of Chu, by then politically destroyed), Qu Yuan and his poem *Li sao*, while immensely popular, became a battleground upon which contending ideologues waged "a sort of hermeneutic guerilla warfare around and between its lines" (p. 157). At stake was the poet's self-image as a heaven-born and heaven navigating shaman figure, which was repugnant to Han Confucianists who considered the strong influences of Chu culture on the developing Han court as marks of barbarism, excess, and decadence. In the early Han, "the literary exclusion of shamanism presaged the eventual political exclusion of shamanism from the Han court" (p. 160). As Sukhu also notes, attempts by some in the early Han to class the *Li sao* as a *jing* (scripture or classic), that is, on par with the Confucian classics, failed, and despite its perennial influence the *Chuci* to this day has remained outside the pale of the Chinese canon of classics (pp. 160-63).

*For the long sobs rose in my throat and choked me,
And the tears collected and ran down in streams.* (Hawkes 1985: 294)

And when he goes on his own magic flight into the heavens—"I raised up the many-colored rainbow. / Drawn by phoenixes, skywards I soared, / Leading a train of black cranes and *jiao-ming* birds" (ibid.: 301-2)—then arrives in the lake country of Chu and casts himself into the Yuan river, we are reminded (intentionally) of Qu Yuan but also



of Qi himself, who, it will be recalled, also rode dragons and soared on the clouds. Finally, although Liu Xiang does not name who he is describing, when he ends his own late and highly literate "Nine Laments" with—

*He was a cloud dragon, floating in watery vapors, like a dense mist;
Billowing formlessly, with thunder-roll and lightning-flash, high aloft he races;
Mounting the void, treading the dark sky, spurning the turbid vapors,
swimming in the clear ones, he enters the House of God;
Shaking his wings and beating his pinions, racing the wind,
driving the rain, he wanders without end.*

(ibid.: 302)

—all the signs and markers would justify identifying this unnamed celestial figure as Qi, Lord of Summer, the shamanic culture hero of old Chu who by now, it seems, had

been more or less forgotten, but who in this tradition had been the first to ascend to heaven and bring back the gift of music to earth.

By the sixth century CE Qu Yuan himself had undergone apotheosis in the folk culture of southern China. In his home area around the Yangtze's Dongting lake country, Qu Yuan was celebrated on the fifth of the fifth, the summer solstice, in an agricultural festival. By now a sort of rice

god, he is still celebrated, during the Fifth of the Fifth Month festival, with Dragon Boat races, or with ritual reenactments of the search for his drowned body and the summoning back of his soul. Known as "China's first poet," Qu Yuan of Chu gave the south a poetic language and emotional music to evoke the magic of the watery, lush landscape, and to express the imagination and longings of its people's spirit. In exchange he himself has become a ghostly voice in the landscape, a literal spirit of the place.



Figure 24-25. Two details from a lacquered *qin-zither* from the tomb of Marquis Yi of Zeng (fifth c. BCE): (previous page) dancing cloud dragon; (above) cloud dragon playing *qin-zither* (source: So 2000)

***Contrapunto: Cast Copper Bells
in Pre-Columbian West Mexico***

*Nine-pound hammer,
ring like silver
ring like silver,
and it shine like gold*

“Roll on, Buddy,” American folk song

While Shang and Zhou kings were having bronze vessels and huge chimebells cast for their ancestral rituals, half way around the world in Central and South America metallurgical industries, of copper, gold, and silver, were developing (Hosler 1988: 834). From seminal regions in the Andes and all along the upper west coast of South America, metal-smithing techniques and artistic styles radiated out through trade and tribute networks to other parts of the Americas. By about 600 CE these technologies had reached West Mexico, apparently from Ecuador through sea-trading networks which, judging from marked similarities in pottery styles and shaft tombs in these two areas, probably go back to at least 1500 BCE (Hosler 1994: 15-6). With a penchant for alloying copper with gold, silver, arsenic and tin, to hammer out thin, shiny, shimmering sheets of metal, artisans both in South America and West Mexico crafted metal tools and ornaments such as needles, open rings, depilatory tweezers, axes, awls, fishhooks, and small jingling bells. Also in South America brilliant, flashing metals were used to shape three-dimensional figures, pendants, diadems, breastplates, masks, plaques, large solid nose rings, and metallic feathers (Hosler 1988: 835-6, 1994: 87-

88). While hammering or solid-metalworking was most common in Ecuador, in lower Central America and Colombia the technique of lost-wax casting was more common (1994: 88-9, 98-9). Both of these areas contributed, in style and technique, to the metallurgical complex that came to characterize West Mexico.

From its introduction until the Spanish Invasion (when indigenous industries were subverted to colonial ends) mining and metalworking flourished throughout West Mexico (modern day states of Guerrero, Mexico, Michoacan, Colima, Nayarit and Jalisco), with a marked expansion and stylistic efflorescence after 1200 CE (1994: 127) coinciding with the rise of the Aztec state centered at Tenochtitlan (1994: 197). What makes West Mexican metal culture especially distinctive from neighboring areas is the prominence of small cast bells, which were made in greater quantities there than any other tools or objects (1988: 833; 1994: 83). These bells, along with small open rings, ceremonial tweezers, and sheet-metal body ornaments, were primarily ritual objects that served to mark status, both social standing and sacred status. West Mexican metalsmiths seem to have been especially interested in exploiting two qualities of their metallic medium: color and sound. Both the diversification of metal alloys and the elaboration of bell size, shape, and design, attest to strong artistic concerns in West Mexico for exploiting metals for their chromatic and acoustic potentials.

Art historian Dorothy Hosler, whose work I have been summarizing, explains that in West Mexico the varied properties of metals were cultivated because the shimmering colors and cascading sounds of metal bells and other ritual objects helped to transfigure the world into a paradisiacal garden of the gods. These little bells with hooks, cast in different sizes and shapes (round, teardrop, seed-like) and threaded with

spiral and zigzag patterns, were attached by the dozens to ritual rattlesticks and rattleboards, to anklet rattles, ritual belts and girdles, or to head-dresses, in order to add their resonating accompaniment to dances and ceremonial performances. Though musicologists, implicitly measuring them against Western tonal music, would call such instruments “untuned,” the complex textured sounds these micro-bell assemblages produced were precisely what their makers desired, and which they celebrated in their songs and poems. There was a kind of homology between the prized visual and aural aesthetics of metals. Just as golden and silvery surfaces in motion glinted and shone with flashing reflections of light—like leaves in wind, flowers, or brilliant bird plumage—so also was the rhythmic echo of dancing bells a clear, pouring tumble of sounds, likened to rain, thunder, birdsong, the rattlesnake’s rattle, or the jaguar’s roar.

Aztec elite poetry (“flower-songs”), which provides much good evidence for such aesthetic conceptions, is richly synaesthetic in its imagery. In lush sacred gardens where Aztec warrior nobles commemorated their glorious ancestors, praising them with music and song, flashing, jingling bells were among the many accoutrements that helped transform normal temporality and consciousness into a sacred space of beauty and light.¹

¹ Cf. Bierhorst 1985; Burkhart 1992; Hill 1992, Hays-Gilpin and Hill 1999.

<p>1) <i>In the house of paintings the singing begins, song is practiced, flowers are spread, the song rejoices.</i></p>	<p>2) <i>The song resounds, little bells are heard, to these answer our flowery timbrels. Flowers are spread, the song rejoices.</i></p>	<p>3) <i>Above the flowers is singing the radiant pheasant; his song unfolds into the midst of the waters. To him reply all manner of red birds, the dazzling red bird beautifully sings.</i></p>
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(León-Portilla 1992b: 95²)

Music, fire, incense, dance, elaborate costume, blood sacrifice, self-inflicted austerities, chocolate, pulque (brewed cactus beer), psychotropic mushrooms, datura and tobacco were some of the many instruments and techniques used by the Aztecs and other Mesoamerican cultures to alter consciousness and achieve heightened states of sense and awareness. The religious and aesthetic sensibility of the Aztecs, as in the Nahua generally, has been described as the “cult of brilliance” or “chromaticism,” in which poetic imagery evokes the iridescence and vivid luster of things to transfigure the here and now into a numinous and sacred “flowery world.”³ Flowers and songs, *xochitl* and *cuicatl*, are coupled in a metaphorical/identical relation, such that songs, like flowers in the natural world, are the ultimate aesthetic manifestation of human being. And because native poets in the sixteenth-century were given opportunity to translate Christian texts and songs into their own language, even Nahuatl Christian devotional poetry preserves this pre-Conquest sensibility. A Nahuatl song for Pentecost announces the Holy Spirit’s arrival with a call to dancing and the music of drums,

² Cf. León-Portilla 1992b: 70-98 attributes this song to Nezahualcoyotl, the famous fifteenth-century ruler of Texcoco.

³ Hill 1992; Burkhart 1992.

flutes, and bells (Burkhart 1992: 95). The Christmas text “There was with the angel a multitude of the heavenly host” (*cum Angelo multitudo caelestis exercitus*), translates angels into birds and vastly expands the text, part of which reads thus:

“From heaven came various precious troupials, trogons, sacred spoonbills [bird species], resonating like precious bells. It seems that they were angels! They went chirping like flutes of quetzal-green jade. They went resonating like precious bells, the various birds, the precious birds, the birds of spring, the angels, Alleluia!....All the rest of the various precious little birds of heaven came flying like quetzal feathers, went saying in song: “May there be peace here on earth! Alleluia!” Their songs came ringing like precious quetzal feather bells. They came rejoicing with heavenly songs” (Burkhart 1992: 96).

In the cities of ancient Mexico song, dance and the playing of instruments were taught to boys and girls, who assembled at their local “House of Song,” close by the temples, each evening before sunset to practice and learn under the guidance of older guardian-instructors. They were taught the steps and to dance in rhythm to the songs and music until well into the evening, then boys and girls were led safely back to their homes by elders appointed to accompany them. When Dominican friar Diego Durán comes to discuss these orderly arrangements for compulsory musical education of youths, he waxes most eloquent about how beyond all other nations the Mexicans “lived in their paganism with such harmony, good organization, and social order,” sustaining “so many ordinances and laws for the common welfare, so just, so well codified,” and with “such reverence, esteem, and awe shown to priests and ministers of the gods” (cf. Durán 1971: 287-300).

“Young people took great pride in their ability to dance, sing, and guide the others in the dances. They were proud of being able to move their feet to the rhythm and of following the time with their bodies in the movements the natives used, and with

their voices the tempo. The dances of these people are governed not only by the rhythm but by the high and the low notes in the chant, singing and dancing at the same time. These songs were composed by poets who created them, giving each song and dance a different rhythm, just as we do with our songs, giving each sonnet, each eight-line stanza, each tercet, and other forms a different tune when sung” (1971: 295).

The Nahuatl world of central Mexico, with an expansionist hegemony exercised at the Mexica capital of Tenochtitlan, was one where friendship and enmity, war and peace, were tightly bound into a unique configuration of thought and practice. Lethal violence was sanctioned within an aesthetic and religious order that conflated poetic performance, rituals of warfare, and the phenomena and processes of the natural world. Flowers, songs, the hearts of captives—natural beauty, poetic compositions, and human sacrifices—were tangled together in a ritual economy that sustained the gods, the human world, and the fragile natural order.

The conflation of the musical and the martial can be glimpsed by considering Mexica festival practice. For the most important of the calendar’s festivals, captives from other towns were required. To gather captives so-called “flower wars” (*xochiyaoyotl*) were waged.⁴ Cities were bound in alliances to wage regular battles against one another, and captives taken would become mortal participants in the capturing city’s festivals. At Tenochtitlan rulers of other states were also invited to attend the festivals as highly honored guests. Hostility and hospitality commingled.⁵

⁴ Or “flowery wars,” see León-Portilla 1992:233-35; Durán 1994: 286, 402, 410; Hassig 1992 for a history of warfare in Mesoamerica, in which the flower war in the Aztec period was but “one aspect of a larger military process” aimed at inducing submission of enemies to tributary status.

⁵ In Durán’s account (1994: 402), when Moctezoma invited his enemies to his coronation ceremonies, his emissaries were charged with the message: “wars have their time and place and that between the Aztecs and these other cities there was no real enmity. But that the flower war that did exist had as its purpose recreation for the army, on the one hand, and, on the other, pleasure and food for the gods. They all knew...that in everything else they were brothers, kinsmen, all related to each other.” In an earlier

Like the Shang, the Aztecs followed a complex ritual day-count, only theirs was a version of the pan-Mesoamerican 260-day round based on interlocking counts of thirteen and twenty. The Aztec variation further comprised eighteen “months” of twenty days—and inside this, twenty-eight “weeks” of thirteen days—with a five-day intercalary period; by this scheme the 260-day count system overlapped with a festival-solar year of 365 days.⁶ This ritual calendar prescribed a cycle of agricultural, social, and military rites, most of them with some dimension of musicality, dance, or theatrical ceremony. It was also used as the basis and framework for literacy, historiography, and literature.⁷

Many descriptions of pre-Columbian Aztec rites and public festivals are extant, principally in the works of sixteenth-century friars who devoted enormous energies to documenting the vanishing patterns of indigenous Mexican cultures, and they nearly

similar episode of enemy-hosting, on the occasion of the installation of the Round Stone on which captives were sacrificed, Durán implies a deeper ideological function of such hosting—as a device for instilling fear and compliance in tribute-states—when he says the “noble guests who had come to the feast and sacrifice were horrified, beside themselves, on seeing so many men killed, sacrificed in this gruesome way. They were so frightened that they dared not speak.” The king’s speech to them on their departure is to the same point: “You should be very happy to have witnessed and enjoyed the feast and rites for our god, and to have seen this city where he is honored. What I beg of you is that you remain calm, are quite and tranquil, because while you are so, you will enjoy our friendship and be favored by us. This way you can return to your homeland with our good wishes” (Durán 1994: 276). Clearly, to be a guest was a perilous position, and to be hosted was also in a sense to be held hostage.

⁶ Cf. Durán 1971: 383-470; Clendinnen 1991: 35-36, 295-97. The two calendrical systems together completed a longer cycle every 52-years (called a “year bundle”), and as each day had its own character the rituals of day-counting and mythology of day-names were used both for historical record-keeping and for divination and horoscope-casting. Durán 1971: 389 compared the celebrations that marked the completion of a “year bundle” to the ancient Jewish 50th year jubilee.

⁷ The Aztecs, like several other Mesoamerican peoples, were in their own fashion fully literate, with a keenly developed historical consciousness. As Durán 1971: 395-6 relates, discussing the day-name glyphs: “the symbols representing each day of the month functioned as letters. In general, these painted characters were used as picture writing, describing native history and lore, memorable events in war, victories, famines and plagues, prosperous and adverse times. All was written down, painted in books and on long papers, indicating the year, month, and date on which each even had occurred. Also recorded in these painted documents were the laws and ordinances, the census, and so forth. All this was set down painstakingly and carefully by the most competent historians, who by means of these paintings recorded extensive chronicles regarding the men of the past. These writings would have enlightened us considerably had not ignorant zeal destroyed them. Ignorant men ordered them burned, believing them idols, while actually they were history books worthy of being preserved instead of being buried in oblivion, as was to occur.”

always attest to musical components—drums, flutes, rattles, singing, dancing, processions, and always participants in sumptuous costumes.⁸ Festivals for the gods, coronations, architectural installations, agricultural rites, state funerals, every ceremonial occasion had its appropriate musical accompaniment.⁹ For warriors fallen in battle, for instance, their widows were given opportunity to honor their husbands' deaths and express their own grief in public solemnities. When the deaths had been announced to the widows,

“the singers whose sole profession it was to sing for men who had died in battle came into the square. On their head were tied black leather bands. They brought out an instrument and began to play sad and tearful music. The lamentations began with hymns for the dead according to their own special manner. When the playing of the drum and the singing had started, the widows of the dead warriors appeared, carrying the cloaks of their husbands on their shoulders and their breechcloths and waistbands around their necks. The hair of the widows was loose and all of them, standing in line, clapped their hands to the beat of the drums. They wept bitterly and at times they danced, bowing their heads toward the earth. At other times they danced leaning backward.” (Durán 1994: 283-84)

Thus they offered their lamentations to the sun, as the elders said: “let the great resplendent sun, which passes and encircles the world above our heads, console you.” After the dances of mourning, the women were offered condolences by the men in charge of the funeral, and many speeches were made in honor of the fallen warriors.

⁸ When the conquistador Bernal Díaz del Castillo in his chronicle of the conquest dilates on the riches of “Montezuma” he moves from describing the women of the ruler’s house to his entertainers: “Let us go on and tell about the great number of dancers kept by the Great Montezuma for his amusement, and others who used stilts on their feet, and others who flew when they danced up in the air, and others like clowns, and I may say that there was a district full of these people who had no other occupation” (Díaz del Castillo 1956 [1996]: 214).

⁹ For descriptions of other festival occasions rich in music see also Durán 1971; 1994: 342-43, 367-70, 434-35.

The Nahua poets of the Aztec empire were deeply aware that the world they lived in could be sad and grim, and almost always short-lived. The exultant, victorious warrior today might tomorrow be the captive victim in a rival city's sacrificial rites. Hear Cuacuauhtzin of Tepechpan sing, turning the traditional theme of life's evanescence (León-Portilla 1992b: 109):

*1) Where would we go
that we never have to die?
Though I be precious stone,
though I be gold,
I will be dissolved,
there in the crucible melted down,
I have only my life,
I, Cuacuauhtzin, I am dispossessed.*

*2) You make resound
your kettle drum of jade,
your red and blue conch shell,
you, Yoyontzin, Panting One,
Now he has come,
now the singer has risen.
For a short time be happy,
come and be present,
those with the sad heart.
Now he has come,
now the singer has risen.*

“Though I be gold, I will be dissolved.” Expressing skepticism in a traditional origin myth, in which the first man and woman were made not of clay but of imperishable metal (see Hosler 1994: 227-46), the Aztec flower-singer takes consolation in the momentary now of song and conviviality, with hopes only in the permanence of song itself. It is only song's flower that lasts, it alone is wealth (León-Portilla 1992b: 283):

*1) One by one I bring together
your songs.
I am linking the jades,
with them I make a bracelet
of everlasting gold.*

*2) Bedeck yourself with them;
they are your wealth
in the region of flowers,
they are your wealth
on the earth.*

“In vain we have come, / we have blossomed forth on the earth. / Will I have to go alone / like the flowers that perish?” asks Ayocuan Cuetzpaltzin in another song. “Will nothing remain of my name? / Nothing of my fame here on earth? / At least my flowers, at least my songs!” (León-Portilla 1992b: 221). In a world of unavoidable finality of the flesh, the enduring fame of one’s flower-songs is held up as a hope and promise.¹⁰

Among the most important of the yearly festivals in Tenochtitlan was the second-month celebration of Tlacaxipeualiztli, the “Flaying of Men” (held in March, surrounding the equinox).¹¹ In this ritual drama, unfolding over several days (and more broadly over several months), conceptions of cosmic economy, mortality and fertility, and a shocking theatrics of martial power were played out in song, dance, gladiatorial battles, and captive sacrifice. The “Flaying of Men” honored above all deities Xipe Totec, “The Flayed Lord” or “Lord of Flaying.” In preliminary rituals, captives were dressed up in the paraphernalia of several divinities including Xipe, thus becoming “god-impersonators” (*teotl ixiptla*).¹² These captives were then sacrificed, their hearts offered up to the sun, and their skins flayed. These flayed skins of captives-made-gods then in turn became the costumes of local men, who again thereby became god-

¹⁰ On the cultivation in public performance of flower-song see Clendinnen’s (1991: 218-23) always vivid imaginings and insightful analyses. Durán 1971: 299, discussing the salaried temple composers of songs, and comparing them to royal and ecclesiastical choirs in Europe, exclaims: “Let these things be noted by those who look with contempt upon the way of life of these Indians and who doubt that they have civilization.”

¹¹ I offer only the briefest summation of a highly elaborate festival sequence, based especially on Broda’s (1970) reconstruction from the various 16th century accounts (including Durán 1971: 172-85, 415-17; 1994: 169-74, 272 –77); cf. also Clendinnen 1991: 233-34, 257.

¹² On the concept of *ixiptla*, “likeness, stand-in,” cf. Brundage 1985: 45-58; Clendinnen 1992: *passim*.

impersonators. As such they came to the temple square, where they were seated in places of honor as the divine audience for the gladiatorial sacrifices to follow.

Meanwhile other captives were assembled in the square, who were made to dance as they waited their inevitable turn to fight and die on the gladiatorial-sacrificial stone. They wore only paper breechcloths, their bodies and faces whitened with chalk, eyelids blackened and mouths painted red, with melted rubber and feathers on their heads.¹³ Before the fights began, musicians played as the “eagle-ocelot” warriors entered, dancing a war dance with their shields and clubs. So Durán (1994: 171):

“When the images of the gods [the “god-impersonators”] who were to perform the sacrifice had been seated, then came the old priests called Tecuacuiltin and the temple singers. A drum was brought forth and to the rhythm of its beat they began to dance and sing.”

The intense drama that followed, accompanied by the ongoing music, involved stylized battles, where one by one each captive, tied atop the round stone, was given four wooden balls and a wooden shield and sword with which to defend himself. Then the warrior-dancers took turns trying to strike a first blow on the captive. It was a great honor for the captors if their captive fought well and bravely. But once he had been struck and wounded, he was taken down and given a drink of pulque (cactus beer) mixed with tobacco, datura, and other drugs, then brought to the sacrificial stone. There his chest was opened and his heart removed. The vapor of the steaming heart was offered up to the sun, and the heart was placed in the bowl of a stone altar.

In the days and weeks that followed, the elaborate disposal of the slain captives’ bodies, and the continued activities throughout the cities’ neighborhoods of

¹³ Durán 1994: 170, Broda 1970: 210.

the god-impersonators were implicated in social integrative and fertility ritual functions. The skins passed from the captors to humble beggars, who for twenty days went around the neighborhood districts, arrayed as the god Xipe begging for alms. In addition to the flayed skins, they were costumed in Xipe's insignia, most importantly a particular cone-shaped cap, golden ear and nose pendants, a red and yellow shield, held in the left hand, and in the right hand the god's rattlestick (*chicauaztli*). The Xipe-impersonators, who were also the patrons of metalsmiths, went around the city, striking the ground with their resonant rattlesticks, begging and collecting alms, and engaging in mock battles with warriors. They received first fruit offerings. After twenty days of begging round the cities, their rattlesticks were "sown" in the temple of the god Yopico, where old men sat singing and rattling their rattleboards all day, flowers and first fruits were offered, and the commoners danced. In a following ceremony the flayed skins were finally buried (Broda 1970: 229; Durán 1994: 173).

An enormous amount of scholarly research and analysis has gone into reconstructing and interpreting the symbolic significances of these ritual complexes. Among the many meanings enacted was the identity of captors and captives and, on another level, of mortals and gods. Captives arrayed as gods die to become the fleshly costumes of other god-impersonators, who then act as the audience of divinities for the drama of the gladiator sacrifices. These same skins then pass on, from captor-owners to humble local alms-beggars, who enact a social ritual of wealth redistribution and ultimately of fertility rites connected with agriculture and metallurgy. In parallel rites (not detailed here) more closely involving the warrior captors—whose captives, in a sense acting as surrogates and doubles of themselves, are sacrificed—metaphors of

kinship and even identity are employed to level the distinction between victorious captor and conquered captive. The captive is to the captor his “beloved son, his own flesh” (Broda 1970: 265). After the sacrifices a banquet was held in the captor’s house, where pieces of the captive’s flesh were eaten along with a corn stew. The captor, however, did not eat of the flesh, saying “shall I, then, eat my own flesh?” (Broda 1970: 217). The slain captive’s thighbone and paper breechcloth were “planted” on a pole near the captor’s house—and arrayed in a mask these poles were called “god-captives” (Broda 1970: 231)—as a display of his prestige and status as a captive-taking warrior. The captor’s deep symbolic identification with his captive was expressed in earlier rites too, where he had been adorned as a captive, an indication of his status as a warrior bound in a relation of debt, to die either by war or sacrificed as a captive in another city’s festivals (Broda 1970: 204).

Thus in the “Flaying of Men,” as in other festivals throughout the calendar year, musical performances were integral to ritual complexes that hedged sacred violence within a sanctioning cosmological network of correspondences and symbolic exchanges of substances, identities, and forces. This ritual economy was on some level understood to uphold the cosmos itself, since the world was in the age of the “Fifth Sun.” Four suns had already once existed and failed in succession in the past, and now the sacrificed hearts of mortals fed the current sun, keeping it in motion (cf. León-Portilla 1992b: 46-48). The songs, dances, and musical performances were basic ingredients in this world-sustaining work of wars, sacrifices, and festival celebrations.¹⁴

¹⁴ When Bernal Díaz del Castillo (ca. 1495-1584), the conquistador chronicler of the conquest, recalls the Aztec temple areas, he is overcome by the bloodiness and sensory revulsion of it: “They had an exceedingly large drum there [in a temple precinct], and when they beat it the sound of it was so dismal and like, so to say, an instrument of the infernal regions, that one could hear it a distance of two leagues,

So when Hernando Cortes' army of Spanish conquistadors, while biding their time at Tenochtitlan in May, 1520, with Moctezoma under arrest in their quarters, took advantage of the festival atmosphere of Toxcatl to slay all the nobles gathered there, it was not the violence per se that was out of the ordinary for Mexica ritual festival.¹⁵ Instead, the Spaniard strangers, intent on seizing the city's incredible riches, upset an orderly, if indeed grim, economy of ritually sanctioned bloodshed with a planned assault aimed to topple that order. While Cortes was away in Veracruz fighting against other Spaniards, Pedro de Alvarado, who had been left in charge, had the courtyard where the festival was underway surrounded with armed guards. The Dominican friar Diego Durán, writing probably in the 1570s, recounts it thus:

“The day for the festivities having arrived, some eight or ten thousand men of the highest order and purest lineage appeared, wearing all their finery as we have said, and formed a great circle in the temple courtyard. While they were dancing, all with contentment and pleasure...[soldiers took up positions at the courtyard gates, and others stood] next to those who were beating drums where the most important lords had gathered. The soldiers were told to kill the drummers and after them all those who surrounded them. In this way the “preachers of the Gospel of Jesus Christ,” or rather, disciples of iniquity, without hesitation attacked the unfortunate Indians, who were naked except for a cotton mantle, carrying nothing in their hands but flowers and feathers with which they had been dancing. All of these were killed; and when the other Aztecs saw this and fled to the gates, they were slain by the soldiers who were on guard there....Everywhere were intestines, severed heads, hands and feet.

and they said that the skins it was covered with were those of great snakes. In that small place there were many diabolical things to be seen, bugles and trumpets and knives, and many hearts of Indians that they had burned in fumigating their idols, and everything was so clotted with blood, and there was so much of it, that I curse the whole of it, and as it stank like a slaughter house we hastened to clear out of such a bad stench and worse sight” (Díaz del Castillo 1956 [1996]: 220).

¹⁵ Cf. León-Portilla 1992a: 70-90; 1992b: 136-45; Clendinnen 1991: 267-73; Olivier 2002 for a descriptive analysis of the Toxcatl festival complex dedicated to Tezcatlipoca, during which his flute-playing impersonator broke a flute on each step as he climbed the temple stair to his sacrificial death.

Some men walked around with their entrails hanging out due to knife and lance thrusts” (Durán 1994: 537).

In the lamentable wake of the massacre Durán has “some captains” sing a ballad about a pitiless Nero watching Rome burn. Another account, originally written in alphabetic Nahuatl (from the *Codex Aubin*), recalls that some of the Mexica suspected their guest’s goodwill, but Moctezoma urged them to trust the strangers:

When the day of the fiesta arrived, Motecuhzoma said to the Sun: “Please hear me, my lord. We beg your permission to begin the fiesta of our god.”

The Sun replied: “Let it begin. We shall be here to watch it.”

The Aztec captains then called for their elder brothers, who were given this order: “You must celebrate the fiesta as grandly as possible.”

The elder brothers replied: “We will dance with all our might.”

Then Tecatzin, the chief of the armory, said: “Please remind the lord that he is here, not in Cholula. You know how they trapped the Cholultecas in their patios! They have already caused us enough trouble. We should hide our weapons close at hand!”

But Motecuhzoma said: “Are we at war with them? I tell you, we can trust them.”

Tecatzin said: “Very well.”

Then the songs and dances began. A young captain wearing a lip plug guided the dancers; he was Cuatlazol, from Tolnahuac.

But the songs had hardly begun when the Christians came out of the palace. They entered the patio and stationed four guards at each entrance. Then they attacked the captain who was guiding the dance. One of the Spaniards struck the idol in the face, and others attacked the three men who were playing the drums. After that there was a general slaughter until the patio was heaped with corpses.

A priest from the Place of the Canefields cried out in a loud voice: “Mexicanos! Who said we are not at war? Who said we could trust them?”

The Mexicans could only fight back with sticks of wood; they were cut to pieces by the swords” (León-Portilla 1992a: 80-81).

Another, longer alphabetic Nahuatl account, from Franciscan friar Bernardo de Sahagún's ethnographic collections—after describing in rich detail the preparations of the cult-image of Huitzilopochtli, “Hummingbird on the Left [i.e. South],” the war god celebrated in the festival—picks up the story of the dance turned massacre:

“All the young warriors were eager for the fiesta to begin. They had sworn to dance and sing with all their hearts, so that the Spaniards would marvel at the beauty of the rituals.

The procession began, and the celebrants filed into the temple patio to dance the Dance of the Serpent. When they were all together in the patio, the songs and the dance began. Those who had fasted for twenty days and those who had fasted for a year were in command of the others; they kept the dancers in file with their pine wands...[a paragraph about how these leaders kept the dancers in line, under threat of physical punishment.]

The great captains, the bravest warriors, danced at the head of the files to guide the others. The youths followed at a slight distance. Some of the youths wore their hair gathered into large locks, a sign that they had never taken any captives. Others carried their headdresses on their shoulders; they had taken captives, but only with help.

Then came the recruits, who were called “the young warriors.” They had each captured an enemy or two. The others called to them: “Come, comrades, show us how brave you are! Dance with all your hearts!”

At this moment in the fiesta, when the dance was loveliest and when song was linked to song, the Spaniards were seized with an urge to kill the celebrants. They all ran forward, armed as if for battle. They closed the entrances and passageways....They ran in among the dancers, forcing their way to the place where the drums were played. They attacked the man who was drumming and cut off his arms. Then they cut off his head, and it rolled across the floor.

They attacked all the celebrants, stabbing them, spearing them, striking them with their swords....The blood of the warriors flowed like water and gathered into pools” (León-Portilla 1992a: 73-6).

While the Jesuit missionary Mateo Ricci was en route on his fateful voyage to China, and Florentine lutenist and music theorist Vincenzo Galilei was composing his *Dialogue on Ancient and Modern Music*,¹⁶ in Mexico scholar-priests like Diego Durán and Bernardino de Sahagún were continuing, under unfavorable, even hostile, circumstances, their lifelong labors of salvaging indigenous Mexican cultures from the relentless ravages of Spaniard occupation (this included their own missionizing efforts, as they well knew). Durán (1537-1588) a Dominican friar born in Seville, Spain, who moved early with his family to Mexico where he grew up (Durán 1994: xxv-xxvi), was fully fluent in Nahuatl and pursued university studies in the New World. He was a tireless researcher into the indigenous cultures, and composed works that relied on painstaking collection of information from native informants and collaborators. In these tasks he was a follower on the path set by Franciscan scholar-priest Bernardino

¹⁶ Galilei's *Dialogue* (1581), a magnum opus of musicological theory and history, opens with a brilliant summation of the trajectory of European history as it looked from the daring heights of Renaissance self-fashioning: "The ancients numbered Music among the arts that they called liberal, that is, worthy of a free person. The Greeks, masters and inventors of music—along with all the other sciences—rightly held it in great esteem. Since it is a delight of life and also useful to virtue, the best legislators ordered that it should be taught to those who were born to attain perfection and human blessedness, which is the goal of a city. But in the course of time, the Greeks lost music and also the other disciplines along with their empire. The Romans had a knowledge of it, taken from the Greeks, but they exercised principally the part suitable to theaters in which tragedies and comedies were performed without appreciating much the speculative part. Continually occupied in war, they did not pay much attention to this side of music and so easily forgot it.

Meanwhile, Italy for a long time suffered under great floods of barbarians. Every spark of science was extinguished, and as if everyone were overwhelmed by a heavy lethargy of ignorance, people lived without any desire for knowledge. They had about as much understanding of music as of the West Indies, and they persisted in this blindness until first Gaffurio, then Glarean, and finally Zarlino—truly princes in this modern practice—began to investigate what it had been and sought to rescue it from the darkness in which it was buried. Little by little, they restored the part that they understood and appreciated to the state in which we now find it. But some intellectuals do not believe that it has attained its ancient heights, as we may gather from countless places in the ancient histories and from their poets and philosophers. Nor do they believe that we have reached the true and perfect knowledge of music, which may be owed to the courseness of the times, the difficulty of the subject, and the scarcity of good interpreters. Nevertheless these writers deserve the highest praise, and the world owes them perpetual obligation, if for nothing else, at least for having given many others the opportunity to work more intensely to try to bring it to perfection" (Galilei 2003: 6-7). On Galilei and other 16th-17th music and harmonic theorists, and the part played by musical investigations in the scientific revolution generally, cf. Cohen 1984, Gouk 1999, Gozzo 2000.

de Sahagún (1499-1590), who had come to New Spain in 1529 in a second wave of idealistic brothers of Christ eager to save the souls of native Mexicans. In the course of his long life in central Mexico Sahagún pioneered the ethnographic field method of gathering intensive and extensive accounts and reports from native informants, and has justifiably been called the first anthropologist. And since the sixteenth century friar-scholars like Sahagún and Durán were also well-attuned to the many prominent musical dimensions of the indigenous cultures they labored to chart, they might also be reckoned as pioneers of ethnomusicology—then as now a “conflicted” discourse, one founded on conflicts, inner and outer, and rooted in tragic ironies.

Sahagún might also be called the New World’s first classicist: among his scholarly specialties was the Latin classics, which he taught to young native students at the first college established in 1536 at Tlatelolco, in northern Mexico City.¹⁷ It was here that Cortes’ long siege of the city had ended in August, 1521, when the last fighting Mexica under the valiant leadership of Cuauhtemoc, many dead or dying of starvation and smallpox, at last surrendered.¹⁸ The conquistador Díaz del Castillo, struggling to express the enormity of the widespread carnage he witnessed on entering the surrendered city, compared it to the destruction of Jerusalem (1963: 405), and the inconceivable collapse of such former grandeur he likened to the vanished ruins of Troy (413).

But what struck the aged conquistador the most, when he called to mind his experience of how the three-month siege of Tenochtitlan-Tlatelolco ended, was first,

¹⁷ Cf. León-Portilla 2002: 95-99.

¹⁸ For native accounts, cf. León-Portilla 1992a: 115-49. Durán’s brief account (1994: 554-57) centers on Cuauhtemoc’s noble request that, now taken in war, Cortes should give him a warrior’s death.

the heavy rain and thunder the night of the surrender, and second, his profound sense of deafness after three months of nonstop mortal noise:

“It rained and thundered that evening, and the lightning flashed, and up to midnight heavier rain fell than usual. After Guatemoc’s capture all we soldiers became as deaf as if all the bells in a belfry had been ringing and had then suddenly stopped. I say this because during the whole ninety-three days of our siege of the capital, Mexican captains were yelling and shouting night and day, mustering the bands of warriors who were to fight on the causeway, and calling to the men in the canoes who were to attack the launches and struggle with us on the bridges and build barricades, or to those who were driving in piles, and deepening and widening the channels and bridges, and building breastworks, or to those who were making javelins and arrows, or to the women shaping rounded stones for their slings. Then there was the unceasing sound of their accursed drums and trumpets, and their melancholy kettledrums in the shrines and on their temple towers. Both day and night the din was so great that we could hardly hear another speak. But after Guatemoc’s capture, all the shouting and the other noises ceased, which is why I have made the comparison with a belfry” (Díaz 1963: 404-05).¹⁹

Many of the cultural recovery operations of sixteenth-century Spaniards and Mexicans were virtually lost in archives and libraries until the last two centuries. Even in their author’s lifetimes they were confiscated and banned by hostile Inquisitors. They began to come to light in the eighteenth century, and to be increasingly studied and appreciated by scholars in the nineteenth.²⁰ American anthropologist Daniel G. Brinton entitled his volume of twenty Nahuatl sacred hymns *Rig Veda Americanus* (1890), a comparison hardly inappropriate. Even in its fragmentary form, the Nahua poetic tradition is easily the equal, in beauty and depth of thought and feeling, of any of the

¹⁹ It is slightly odd that Díaz does not mention the cannons, which no doubt were partly responsible for his real deafness in old age.

²⁰ Cf. León-Portilla 2002: 11-19.

Old World “great traditions.”²¹ A violent world violently ruptured in the early sixteenth century with the Spanish Conquest, we have at least the records, salvaged wreckage really, of some of the most beautiful and heartfelt music ever made by human voice, that fair flower of the transitory earth (León-Portilla 1992: 203; Bierhorst 1974: 66):

“Flower and song—

is this perhaps the only truth on the earth?”....

*I am a singer, my fragrant songs, my flowers,
fall like strewn petals in the presence of others.
Great are the stones as I carve them
massive the beams as I paint them
they are my song, for it shall be heard when I have departed.
I leave my song-sign behind me on earth
here my soul will continue to live
a remembrance of me, that my name might endure.
I weep as I speak, I cry to my soul,
would that I might see the song-root,
would that I might transplant it....
Sweet flower of cacao bursts opens with perfume
The fragrant flower of peyote falls in a raining mist.
I the singer, I live.
My song is heard, it takes root.
My transplanted word is sprouting.
Our flowers stand up in the rain.*

²¹ Cf. Bierhorst 1985 (but *caveat lector*: on Bierhorst’s “ghost songs” thesis, cf. León-Portilla 199b: 41-44, Lockhart 1991: 141-57); León-Portilla 1980, 1992b; León-Portilla and Klor de Alva 1992; León-Portilla et al. 2001.

ॐ AUM, Vāc, Ātman-Brahman: The Creative Force of Sound, Voice, Breath ॐ

“In spoken word there is a *dramaturgy of voice* which is essentially musical. Music amplifies the dramaturgy of sound.”

(Ihde 1976: 159)

When a society adopts a script it begins a history of textualization, an historical process of cultural change that while having some common themes is nonetheless hardly uniform in its stages nor its end results. In India textualization began comparatively late, a thousand years or more after China and five hundred years after Greece’s reacquisition of letters (recall the Bronze Age Mycenaean Linear A and B scripts). In India’s case, in fact, the prehistory of this textualization process seems to have been positive resistance to letters on the part of the Brahmanic intellectual elite whose traditional culture was deeply invested in the values of orality. In the literate power-centers of both Greece and China textualization involved a devaluation of oral poetics and performance—and the worldviews encoded in oral verbal art genres—on the part of the new privileged class of writer-thinkers who first exercised intellectual power via the technologies of writing. But in Brahmanic India, by contrast, orality itself was key to the chosen strategy for preserving tradition as well as restricting access to it. When the Brahmins finally did adopt writing (gradually after about 300 BCE), they were slow and methodical, eventually creating the world’s most phonologically precise and systematic script, up until the development in the last century of the International Phonetic Alphabet (which, however, is, and probably only ever will be, used by

linguistic specialists).¹ Nevertheless, the primary means of transmission for the Vedic tradition remained oral even well into the first millennium CE.²

Actually, we are lucky to have an early description of the rigorous Brahmanic oral educational system from a western outside observer. For when Alexander of Macedon—Sikandar Makduni in Indian traditions³—undertook to subdue the East and made it as far as northwest India in the latter half of the fourth century BCE, Greeks began to write about their experiences in these strange new lands that military and colonial ambitions opened up to them. Megasthenes (fourth-third cent. BCE), under the post-Alexander Seleucid kings in northwest India, wrote a history describing the land and its peoples. His work does not survive, but significant fragments are quoted in later authors. The Augustan geographer Strabo quotes his description of the division Indians made between two types of “philosophers,” the Brahmins as opposed to the Sramans (more on the latter in Part Two). Megasthenes’ attention to details, as well as the fact that this passage survives, are not surprising given the Greeks’ consuming interest in childrearing and education (*paideia*):

“The Brachmanes are more highly honored [than the Sramanes], for they are also more in agreement in their doctrines. As soon as they are conceived they have caretakers, learned men who come forward to sing a charmed word (*logon*

¹ The Semitic and, based on it, Greek alphabets are in random order with respect to the phonology represented. By contrast, Devanagari (also based on a Semitic prototype) proceeds first with thirteen vowels, long and short, and diphthongs, then the thirty-five consonants, arranged in regular series according to sound quality and point of oral articulation.

The other side of how India’s oral-focused culture developed textuality, of course, is that there are very few texts that offer a stable, reliable historical date. For the most part chronology of early Indic texts is a matter of reasoned guesswork, only relative to other texts, and notoriously up in the air. E.g., cf. Gonda’s discussions on dating different texts (1975: 20-5, 357-60). It would seem that, unlike China and the West, India never felt any pressing need to render time into a single, unilinear chronology.

² Jamison and Witzel 1992: 3 n. 5. On the other hand, it was “heterodox” traditions, chief among them Buddhism, which exploited the powers of literary composition and transmission in the earliest periods of writing in central Asia, north India, and south Asia generally.

³ Cf. Vassiliades 2000: 108

epadein) which is supposed to bring the mother and the fetus to successful childbirth. But in truth they give certain prudent instructions and counsels; and the women who most gladly listen are thought to be blessed in childbirth (*euteknos*). After they are born the child's care is given over to one after another, and as they get older they get ever more accomplished teachers. The philosophers spend their time in a grove outside the city, behind a moderately sized enclosure, living simple lives on straw beds and hides, abstaining from eating animals and from sex, listening to serious, weighty words (*akroômenous logôn spoudaiôn*), discoursing also with those who are willing. But for the listener it is not right (*themis*) to speak, nor cough nor even to spit, or he will be thrown out of the gathering that day for being intemperate. After having lived in this way for thirty-seven years they return each to his own estate and live free, even leisurely lives, dressed in linen and modest amounts of gold on their arms and in their ears, eating the flesh of such animals as are not useful in labor, avoiding bitter and spicy foods.”

Megasthenes goes on to relate that the Brahmans marry many wives and have many children who attend to their needs, though the women do not engage in philosophy (for fear they would reveal teachings to the profane, he says, or, wising up to their servitude, abandon married life altogether). He relates their views on life and death, and about the universe (on which, he says, they agree with the Greeks on many things), and states finally that they “weave many myths, like Plato, concerning the soul's immortality, and about judgments in Hades, and other such things” (the entire passage is of great interest; for a summary and discussion cf. Vassiliades 2000: 50-54).

In their thirty-seven years of formal oral training young men of the Brahman class would have learned the Vedic verses and songs (*R̥g* and *Sama Vedas*), according to their hereditary lineages; how to sing the verses, and the complicated and exacting ritual knowledge that accompanied these (*Yajurveda*); the proper procedures to follow for births, weddings, funerals, sacrifices and other festival occasions; and the extensive

exegetical meaning of the sacrificial orders (such as became the *Upaniṣads* and *Brahmanas*), which encompassed the full range of Brahmanic knowledge: epistemology, metaphysics, physics, psychology, morality, mythology, linguistics, medicine, and so forth. Some families would have specialized in medical practice and would have learned repertoires of the *Atharvaveda* variety; others would have spent time mastering jurisprudence and legal theory as later became the text of the *Laws of Manu*.⁴

If the Brahmins were committed to preserving their elite oral culture even in the face of major changes in social, economic, and political realities, this is understandable since it was their venerated, successful ancestors whose deeds and history were recorded in the traditional lore. They, the *Pitaras* or “fathers,” had achieved their conquests in and through the musical performance culture of their gods, especially Indra the lord of the martial thunderbolt, whose ritual voice in the sacrifice was the Dundubhi earthen drum. Some time between one and two thousand years before Megasthenes, on the heels of Alexander’s conquering armies, observed the pacific Brahmins at their lessons, their ancestors had driven as mighty war-bands on horse-drawn chariots into these very same river valleys. Worshipping a warrior god whose chief manifestation was the terror of a thundering sky, we can almost hear and

⁴ The best scholarly introduction to the structure and contents of the Vedic tradition is Gonda 1975. One caveat is not inappropriate: Gonda (1905-1991), a powerhouse of Indology who almost single-handedly advanced Vedic philology in the West out of its nineteenth-century framework, nevertheless in this work still very occasionally betrays “scripsist” assumptions about the social contexts of Vedic verse: “The *texts* were not sung, but rather—as in other traditional societies—recited in some form of singsong recitative” (81, emphasis added). I take issue here less with the stock scholastic distinction between “singing” and “singsong,” of which the value and validity to me is not readily apparent (see p. 105 above), than with the image that Vedic songs, in their primary performance context, were *written documents* (“texts”) read aloud. While no doubt increasingly true for centuries after the Vedas took on fixed form and were written down, for the time when it was a living, that is still evolving, tradition we should think rather in terms of a song culture of formulaic *composition-in-performance* (cf. Lord 1991: 76-9; Nagy 1996: 17, 29-40). There is considerable development of his position in Gonda 1989a: 152-85.

see the warrior bands dance and sing around a bonfire, firing themselves to battle with the loud earthen war drum (*dundubhi*),⁵ thundering Indra's earthly counterpart (*RV* 6.47.28a-31d):

*To Indra's lightning, the Maruts' storm-leader,
Mitra's offspring, Varuna's navel,
these gifts we offer for your satisfaction,
godly chariot, grab hold the gifts before you,
over earth and sky at once in many directions
unleash yourself on scattered human settlements,
this war drum, friend of Indra and the Devas,
far into the distance drive away our foes,
roar out strength and instill us with vigor,
thunder down with trouble those who oppose us,
neighing war drum, drive away disaster,
like Indra's thieving fist steel our sword-hands,
lead the troops away and bring them back returning,
war drum, you have spoken loud and clear.
Together those on winged steeds are gathering:
men, let's all to our cars, with Indra conquer!*

The conceit of this ritual rousing of spirit is clear: the warrior bands are to storm the foe in a literal blitzkrieg, just as Indra flashes and the Marut's thundering tempests let loose fearsome blasts. The drum is Indra's counterpart on earth, and it works to rouse in the men the courageous fervor and battle frenzy needed to win the game of plundering conquest.

The Vedic warriors here were probably gathered at night around a sacrificial fire (*agni*), and had drunk the ritual intoxicant soma, which Harry Falk has argued was

⁵ It was possibly a wooden frame drum. It is difficult to tell. Sachs 1940: 152-3 mistakenly says that the *dundubhi* does not occur in the *Rgveda*.

Ephedra—the source of the ephedrine “speed” that keeps long-haul truckers’ eyes open and focused on the road (1989: 82-90).⁶ But whatever its pharmacology, soma gave strength, wakefulness, and inspired fluency of song composition.⁷ Like Agni with its effusive light, Soma also gave “vision” (*dhī*) in the darkness of night, an inspired state of clear understanding that facilitated lofty, divine utterance (*brahman*) full of mysterious order and truth (*ṛta*).

The dark of night was the usual setting for martial male devotions to Indra,⁸ and his ritual counterpart was the god Soma, the “extraction” (*suta*, also “child”) or “juice” (*rasa*), “golden” or “tawny” (*hari*, *hariṇa*) in color, that kept the divine warrior awake in his battle with his arch-enemy Vṛtra (the “Concealer”),⁹ who once stole the soma and hid it; but Indra defeated Vṛtra and took back the gods’ immortal elixir. Just as

⁶ While Falk makes a persuasive case for Ephedra, against the older vogues of mushrooms or some other hallucinogenic drug, he is less convincing in his attempt to *exclude* other, residual components from the Soma mix, like alcohol (from honey-mead, for instance, cf. his p. 84), or a psychotropic alkaloid from some other added ingredient. Alcohol’s soporific effect, a point on which he rejects it, would have been counteracted by a stimulant like Ephedra, while considerably enhancing the latter’s intoxicating effects. Furthermore, Falk’s discussion generally elides the issue of regional variation of cult practice, which must have been considerable across Indo-Iranian central Asia. Secondly, while briefly footnoting cross Indo-European evidence (the cognate mythology of Nordic *mead*, p. 82 n. 25), he overlooks the fact that soma must have been the Indo-Iranian *innovation*, while honey-mead was the ancestral intoxicant cultigen (as shown by the shared lexical item PIE **medhu-* “sweet, mead,” which in Greece was transferred to grape-wine (*methu*), and in India to soma (*madhu*). Fossilized artifacts of the mythology of mead cultivation—probably mixed with (fermented) mare’s milk (*dadhi*)?—is preserved in the *Rgveda* and later texts (cf. Doniger 1975: 56-61).

Also debatable is Falk’s categorical claim, against hallucinogens, that “there is nothing shamanistic or visionary either in early Vedic or in old Iranian texts” (79). Contrast Gonda 1963; 1975: 65-73 on poetic inspiration and “vision” (*dhī*); George Thompson (2003) has addressed this issue in an article with a critical review of Falk that rebuts this very claim. As Thompson notes (n. 29), many scholars seem dubious in general about poetic composition under the influence of a strong drug like soma (whatever it was). This naive, rather puritan, skepticism ignores mountains of ethnographic and ethnohistorical evidence to the contrary, both inside and outside Indo-European cultural spheres. Bergaigne 1969 (v.1): 150-237 analyzes soma as it appears in the *Rgveda*.

⁷ Datta 1999 deserves mention, especially as a promising example of young scholars in India entering into dialogue with Western-based oral formulaic theorists for one way of re-imagining the vibrant oral culture of the Vedic period.

⁸ To be sure, ritual performances were held at all times of the daily cycle; but nighttime was important for the staging of the cosmogonic fight between the forces of light and darkness, a sacred drama that culminated with the sunrise, which then took on the character of a divine epiphany.

⁹ On Vṛtra see Lahiri 1984.

Indra is literally the “Dropper,” Soma is Indu, the “Drop.”¹⁰ The mortar (*ulūkhala*) pounding out its loud rhythmic beat is likened to the *dundubhi* drum (*RV* 1.28.5). The soma-pressing stones (*grāvan*, also *adri*), as they “devour” the soma-plant, are “like a hundred, a thousand [men? horses? bulls?] roaring with yellow mouths” (*RV* 10.94).¹¹ The warrior is the storm, his ritual intoxicant the rain, and the overnight soma drinking and song bout is when an endless stream of soma and song “showers down” (*vṛṣā*) (cf. *SV* 4.2.1.2.1-3.2). When the soma is pressed for him, Indra races on his tawny steeds (*hari*) to receive the reviving drink and to hear his songs of praise (*sāman*, pl. *sāmāni*). Drunk and pleased (*mada*), Indra grants courage and victorious strength to the “companions” who praise him, and wealth both in battle, in cattle raids and in song contests.

This wealth of imagery flows together and constantly interpenetrates in the Vedic songs. Sung verses “pour” for Indra, as in an earlier verse of the above song: “To you Indra as waves down a slope / praises, prayers, streaming songs are pouring” (*giro brahmāṇi niyuto dhavante*, 6.47.14ab). And Indra’s storming rain is a procurement of riches, as in the next line: “for us broad prosperity, daily soma-pressings, abundant / water, cattle, Thunderer you gather, together with your drops (*Indu*)” (6.47.14cd). The

¹⁰ This of course refers to definitions, not necessarily etymology. *Indra* has at least semantic connections also with *ind-* “to be powerful,” related to *inv-* “to invigorate, give strength, to take control.” *Indu* is from *und-* > *ud-* “to flow, wet,” IE **wed-* “water, wet,” (G *hudor*, L *unda*) and Indra could easily be from this, directly comparable to E winter (**we-n-d-*) “wet season.” The meteorological link between rain and wind is matched in the early lexicon: just as Indra is often paired with Vāyu the wind god (from IE **wē* “to blow” > E both wind and weather)—cf. *indravāyu* at *RV* 1.2.1-6, 1.14.3a, 1.23.2b, 1.139.1c, 7.90.7b etc—so too in the Old Norse *Prose Edda*, Snorri Sturlson (directly before naming Odin and his many kennings) names the father of Vetr (“Winter”) as Vindloni (Wind-fetter?) and Vindsval (Wind-cool). That the gods are richly multifaceted already in the proto-language and culture should make any insistence on a single “primary” or “original” meaning somewhat of a methodological flaw.

¹¹ This entire hymn is to the pressing-stones (more below). The verb *krandanti* “neigh like a horse, cry aloud” etc., should probably nudge the metaphor more in the direction of horses.

image of “pouring prayers” is of common Indo-European heritage,¹² but in Vedic India as nowhere else the identification of pouring liquids and the flowing voice of sung praises reached its fullest and richest elaboration.

Vedic poetry makes persistent, almost obsessive use of wordplay of all sorts. Paronomasia (puns), polysemy, double and triple entendres, secret meanings and ritual names, all combine into a panoply of ritual poetic language that is conceptually polyphonic, layering ideas and images into clustered constellations or potent, resonating chords of meaning. These pyrotechnic effects of voiced sound, which threatened the dull-witted or inexperienced with bafflement and confusion and distinguished the wise from the unwise, are at their most pronounced in reference to matters at the heart of the ritual culture, especially words concerning soma and song, and the reciprocity exchange network of sacrifices, praise-songs and material goods comprising wealth.

A paradigmatic case of Vedic ritual poetics is the near homonymy of *soma* and the song-form unique to its ritual pressing, offering and drinking, the *sāman* (*sāma* in prosodic composition). While *sāma(n)* itself appears relatively infrequently in the *Sāmaveda*, at least once it is brought into close enough association for the homonymy to register. A soma-song emphasizing the importance of wakefulness in the overnight soma sacrifice ends with the verses (*RV* 5.44.14-15 = *SV* 4.9.2.5-6):

yo jāgāra tamṛcaḥ kāmāyante
*yo jāgāra tamu **sāmāni** yanti. /*
*yo jāgāra tam ayaṃ **soma** āha*
tavāham asmi sakhye nyokāḥ. //

Who stays awake, him the verses (ṛcaḥ) love
who stays awake, to him sāmans come,
who stays awake, to him this Soma here says
“with you as a companion I am pleased.”

¹² Kurke 1989.

<i>agnirjāgāra tamṛcaḥ kāmāyante</i> <i>'gnirjāgāra tamu sāmāni yanti. /</i> <i>agnirjāgāra tam ayaṃ soma āha</i> <i>tavāham asmi sakhye nyokāḥ //</i>	<i>Agni is awake, him the verses love</i> <i>Agni is awake, to him sāmāni come,</i> <i>Agni is awake, to him this Soma here says</i> <i>“with you as a companion I am pleased.”</i>
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Here not only are *sāma* and *soma* juxtaposed in successive verses; not only are the songs (*ṛcaḥ* and *sāmāni*) personified and attributed emotions and actions, just as *soma* is personified as a speaker. More generally, the interlocking themes of alert wakefulness through the sacred fire-lit night, inspired singing, *soma*-drinking, and companionship are brought together into a refrain with normative force: “stay awake!” But *sāma*’s infrequency is in fact belied by the constant repetition in the *Rg* and *Sama vedas* of similar syllables like *sam*, *ṣam*, *saṃ*, *śam*, and so on.¹³ A good example of this sound-play is an epithet for Indra, *ṛcīśama* “*ṛk*-like” (*SV* 1.3.2.8.7=4.7.1.2.1c, 4.8.1.103a) which clearly took shape under the influence of the formulaic pairing of *ṛc* and *sāma* (on which more below). Also important is the verbal form, related in sound and sense to *sāma* if not in etymology, *śams-* “recite, praise, announce, tell, declare” (occurs 23x in *SV*; cp. cognate Latin *censeo*, “appraise, express opinion or judgment”); in ritual language *śams-* was actually deformed to *śoms-*. In this way, the singers employ, and even amplify, the near identity of phonemes to express an insistent poetic message, *soma* is *sāma*, drink is song.

¹³ In the *Samaveda* the syllable *som-* (*soma*) occurs 315x; *sam-/sam/-sam-* occurs 223x; *-sam* 135x; *sma/-sma-* 63x; *-ṣam* 57x; *ṣam* 46x; *smā* 39x; *sum* 35x; *śam*, *śams*, and *ṣām* 24x each; *ṣām* 19x; *sām* 11x; and *śam* 9x (total 661 in addition to the 315x of *soma*). That a few of these syllables are common word and case endings does not affect the argument here. Poets in general exercise a high level of control over the formal features of language that interest them, and for the Vedic singers an important one of these was sound. Thus even highly constrained features like case endings are still subject to choice in composition.

The metaphor is liable to heightened imagery, as in this *sāman*, which relates in miniature an entire creation myth through Indra and soma, then ends with the singers’ boasting dedication that the song has been “cooked” or “brewed” (*tapatā*) for the patron’s pleasure (*SV* 4.6.2.19):

*When you were born, unparalleled Maghavan, Vṛtra’s slayer,
 then you spread the settled earth and propped up even the sky,
 then the sacrifice was born, this bright song,¹⁴ and merriment,
 all this you overpower, what has been born, what will be,
 what is raw you make it cooked, and raise the sun in the sky—
 as in a kettle, a sāman brewed with excellent verses, that the song-lover’s joy increase.*

The image of a “song-kettle” is an Indo-European inheritance, appearing also in Old Norse mythology as Odrerir, the kettle of mead made out of the gods’ spit, honey, and blood from the all-wise giant Kvasir, who was murdered by two dwarfs, Fialar and Galar (“Concealer” and “Singer/Enchanter”). Odin finally rescued the mead after it was stolen (or stole it from its rightful owners, depending on how one reads the story), and in bird-form returned it to the kettle Odrerir. A drink of this mead inspires *skalds*, the Norse poet-singers, those who know the secret, complicated language of traditional song. Like Indra and Indu, Odin’s name is also linked to the kettle Odrerir, with the common element of *óðr* “madness, vehemence,” in other words, both courageous battle frenzy and poetic inspiration. One of the dwarfs who killed (sacrificed) the all-wise giant corresponds even to the name with *Vṛtra*, the “Concealer.” Furthermore, Kvasir, the sacrificed giant whose name probably comes from *kveða* / *kvað* (“speak, recite,

¹⁴ “Bright song” translates *arka*, which means both “sunray, lightning flash” and “praise song / singer,” both from *arc*. Though the two divergent meanings of *arc* probably go back to different roots (*ruc* “shine” and *rc* “praise / verse”), the Vedic singers intentionally conflate the two in both directions (on which more below).

pronounce, determine, settle”),¹⁵ is comparable to the primeval sacrifice that was among Indra’s acts of creation, referred to here and many other places. The bird form of Odin returning with the recovered mead is also matched by Indra in his form as the eagle or hawk (*śyena*), who comes to the soma sacrifice.¹⁶ Therefore it is plain that in Vedic, as elsewhere in Indo-European, a basic myth for the creation of the world involved theft, murder, brewing and drinking a ritual intoxicant, frenzied madness, and fluid song. Soma made *sāma*, which in turn made the sun to shine.

But for now the world is still dark, and we are attending with the *brahmanas* to the pressing tasks of the ritual, focused on the bright, crackling flames of *agni* and the singing voices pouring praises to the gods, both serving to define, visually and aurally, spatially and temporally, the ordered sacrificial locus. Indeed, *this* space (*idam*) is *all* space (*sarva*), the sacrifice (*yajña*) is the world (*jagat*), the person configured in the

¹⁵ *kveḍa* = OE *cwythian*. Based on series like PIE **g^wem* > G *bainō*, L *venio*, Skt *gam-*, OE *cuman* “come,” and PIE **g^wiH₃-* > G *biotōs*, L *vīta*, Skt *jīva-*, OE *cwic* “alive,” then *kveḍa* should be from PIE **g^wet-*, and be related to G *bazō* “speak, address,” L *vātes* “prophet” (later “poet”), Skt *gad-* “speak (articulately), say, tell, relate.” Pokorny 1989 relates *kveḍa* etc. with Skt. *gad-*, but poorly accounts for G *bazō* (calling it an “unreduplicated” form of the root for “stammer, babble,” e.g. G *barbaros*, which seems to me unlikely). Pokorny, and common opinion, in fact relate L *vātes* to *óðr*, Odin, Wotan, etc. “frenzied.” This gets no complaints from me at the semantic level; but the above series also deserves consideration, as the phonology of *vātes* is better accounted for by it, if I am not mistaken (i.e. it is precisely what should be predicted for a Latin reflex). While the connection of *vātes* to **wet-* > ON *óðr* etc. in fact rests on a hypothesized *borrowing* from a Celtic source akin to Old Irish *fáith* “seer” (cf. Watkins 2000: s.v. *wet¹*).

¹⁶ Cf. *RV* 4.18.13, 9.3.1, 9.38.4, 9.48.3 (where the hawk “brings down” soma), 9.57.3, 9.62.4, 9.65.19, 9.67.14, 9.68.6 (the hawk brings soma from afar), 9.71.6, 9, 9.72.3, 5, 77.2, 9.82.3, 9.86.13, 24, 35 (entire hymn is an important locus for the complex mythology and imagery of soma), 9.87.6, 9.89.2, 9.96.6, 19. *RV* 1.93.6, in a hymn to Agni and Soma jointly, relates that “one of them [Agni] from the sky Mātariśvan carried off and twirled, the other [Soma] the Hawk churned from the mountain.” The line is tightly compressed, and hinges on a shared verb *amathnat* “rotate” which means both to spin fire with firesticks and to churn, metaphorical here for the pressing of soma. Similarly, *adri* “mountain” refers to the fact that soma was acquired in the mountains, but it also means the soma pressing stones. The myth of the theft of fire (cognate with Greek *Prometheus*), plays on the correspondence of *math* “rub, twirl” and the (in Sanskrit) rarer *math* “rob, steal” (cf. Watkins 1995: 255 n. 3; *math-* as “rob” is exceptionally rare in Vedic, as far as I can tell; but see *RV* 8.53.8d / *Valakhilya* 5.8; more common is *muṣ-* “rob, steal,” e.g. *RV* 1.175.4a / 4.30.4c, Indra steals the sun’s chariot). To “rub / rob” also has sexual connotations: the *mathin* “firestick,” “churning-stick” is a metaphor for a phallus. Similarly, when Odin recovers the mead, he *bores* into a mountain, and seduces the daughter of the giant who possesses the mead; after lying with her for three nights she gives him the mead and he flies off with it (cf. *Prose Edda*, *Skaldskaparmal*, Faulkes 1987: 63-4).

sacrificial ground *is* the cosmic person (*puruṣa*). This Person has “a thousand heads, a thousand eyes, a thousand feet,” he is “this all (*idam sarvam*), what has been and what will be born.” When the gods (*deva*) were first intent on sacrifice this Person was their sacrificial victim. “Springtime was the clarified butter, summer the fuel, and autumn the offering.” From that sacrifice were born the birds and land animals tame and wild, horses, cattle, goats and sheep. Moreover, from that great sacrificial offering of all (*yajña sarvahuta*) were born the verses and songs (*ṛcaḥ sāmāni*), the fire-chants (*chandās*) and sacrificial formulas (*yajus*), the four classes of metrical verses used by the four orders of priests. Further in the cosmogonic dissecting of Puruṣa, the “Brahmans were born from his mouth,” as were Indra and Agni among the gods, and his breath (*prāṇa*) was Vayu, the wind (cf. *RV* 10.90).

It begins to be clear that the cosmogonies of the Vedic singers are oral-centric, that their special province of measured and well-ordered song is among the most important of creative forces in the world. If anything, this point of view is subdued and muted in the above cosmogony, because the Puruṣa mythology is in fact more closely tied to the ideology of Vedic royalty (the *rājāna* “kings” of the *kṣatriya* or warrior class), and a variant on the *aśvamedha* or horse-sacrifice, a rite that configured the authority of warrior rulers and sacred kings.¹⁷ But when the Vedic singers are engaged more fully in self-reflexive mythologization, their narratives are unabashed cosmogonies by the power of song.

¹⁷ On which see the beginning of *Brihadaranyaka Upanisad* (*BU*).

Let us return our attention, then, to the fire and song of an overnight soma rite (*atirātra*).¹⁸ Having partaken of soma, the singers are energized, “heated” like soma itself in its kettle, pouring out their verses to the gods—to Indra, Agni, Soma, and others—even as Indu-soma is poured out for Indra. Groups or troops (*senā*) of companions (*sakha*), probably following lines of kinship and common descent, each have their songs, and are given their chance to sing. Each too has their heroes or champions (*śūra*, and other terms¹⁹), their great singers who win the contests for them, gaining prizes and high honors for their clan. Here is one troop’s stanza of entry into the contest (Pavamāna is the ritual name for soma as it is being pressed out):

*Into the contest, Pavamāna, goad us
with your strong and god-delighting drink,
injure our rivals as they shout for joy.
Drink Indra! Enjoy our soma, smite our foes’. (RV 9.85.2)*

The “contest” (*samara*), is literally a “coming together” or gathering. While it has martial connotations (“engagement”), this is only a metaphor, though an animating one, for the song contest, which is indeed a form of male competitive display, substituting (perhaps only seasonally?) for military conflict.²⁰ This troop’s song continues:

¹⁸ On the *atirātra* cf. Bodewitz 1990: 115-30, and references. I am less concerned here with strict ritual details than with placing the imagery and concepts of the songs in an oral ritual setting, even if only generically conceived.

¹⁹ At 9.3.4b Indra is the “hero,” at 9.15.1 and 9.16.6 it is Soma; at 9.96.1 there is a good possibility that the “hero” is a winning singer, now identified with Soma and Indra, the one being now inside him, the other being his divine model as the victor in battle: it refers to the “hero” in the forefront winning cattle as his “troop” rejoices, his robes are dyed with soma as his companions praise Indra, and he is called the companion of Indra (*indrasya sakhā*). Of course, this may all refer to Soma, but it seems to fit with a winning singer, a song-troupe’s “hero.” Cp. *RV* 10.42, another song that plays with the relations and ultimate identity of the “hero” Indra, Soma, and the soma-inspired singer.

²⁰ Cf. Dunkel 1979 for metaphorical language of fighting in Vedic and Greek song contests.

*Most delightful Indu-drops, pour unhindered;
to Indra's spirit you are the most refreshing,
many mindful ones sound out a song of praise to you
king of every creature, so they kiss you.*

*adabdha indo pavase madintama
ātmendrasya bhavasi dhāsiruttamaḥ
abhi svaranti bahavo manīṣino
rājānamasya bhuvanasyanimṣate*

*A thousand clever songs, a hundred wondrous streams,
for Indra Indu pour your sweet desirous mead (madhu),
winning land, flow onward to us, winning waters,
make us a wide path, Soma, flooded with bounty (mīḍhvah)...*

*Ten nimble ones rub down the pitcher's steed,
as inspired singers' mindful voices rise
flowing clear, streaming to its lovely hymns of praise,
into Indra pour the Indu, drops of liquor... (9.85.3-4, 7)*

I have juxtaposed the translation of the first stanza with the original text, to show the dense sonic layering at work in these songs. Each line takes up the acoustic echo of the last, varying it slightly to shift and move forward the sense while maintaining the sonic pattern. The results are often arrestingly beautiful, and utterly untranslatable. Song after soma song plays on these basic images, of soma pouring, pressing out for the delight of Indra to the sound of the singers' songs, which themselves flow, stream, cook, boil, seethe, swell, and so on, like the soma on the stones or in the kettles, which delights in hearing its praises and rewards those who praise it best.

The Vedic singers had several names. They were called *ṛṣi* "seers."²¹ Another name was *vipra* "excited ones, inspired singers" (probably from *vip* "shake, tremble,

²¹ *ṛṣi* is usually accounted for with *drś* "see," which is indeed used of the *ṛṣi*s activity. But the word could just as easily come from the root *ṛṣ* "flow (quickly), glide, move with quick motion, dart," a word that is a basic component of the soma-song lexicon (cf. *arṣa* "flow" at *RV* 9.1.4, 9.4.7-8, 9.6.3, 9.9.2, 9.20.4, 9.39.1, etc. (29x more in *RV* 9, including twice in the song quoted here, 9.85). The semantics of flowing (a flowing mind, a fluent tongue) are manifestly as relevant to the Vedic singer's world as is the imagery of seeing.

quiver”). They were also known as *kavi*, often glossed as “gifted, skillful, cunning” and the like, but while part of its definition, this is probably not its etymology.²² Apparently from *kū* (with inflected forms like *kavate*, etc.), “to sound, make a noise, cry out, coo (like a bird),” *kavi* was the basic term for a “singer” per se, and it takes its other meanings, relating to intelligence, wit, and talent, from the basic social role and presence of the singer. Soma is also at times called a *kavi*, as in *RV* 9.107.18: “Soma the singer engenders thought” (cf. Falk 1989: 80). This image continues the close connection between soma and singing explored above. Again at *SV* 4.5.1.1, it is said that soma was “a child born eager and inspired (*vipra*).” He is a “*kavi* in songs (*kavirgīrbhiḥ*), a *kavi* of *kavis*, soma goes gurgling through the purifying filter, // *ṛṣi*-minded, *ṛṣi*-maker, light-giver, leader of a thousand songs, path-breaker for *kavis*.”

As usual another significant pun crops up here, one that often recurs: *gir* “voice, song” plays on *gir/giri* “mountain.” This play is activated because soma comes from the mountains; it “inhabits mountains” (*giriṣṭhā*), which is where the Indra-hawk brings it from (cf. *RV* 9.62.4), and where it was actually harvested; again, the “great bird” “dwells in the mountains” (*giriṣu kṣayaṃ*, 9.82.3). Just as these epithets are liable to be heard as “inhabiting, dwelling in songs,” so too the “*kavi* in songs” in the above is also the “*kavi* in the mountains.” This interference pattern of singers and mountains likely colors the language further on that soma is a “leader” (*-nītha*)²³ and a “path-breaker” or “tracker” (*padavī*). Singing itself is like a trek or march on a mountain trail,

²² On the traditional lore of Kāvya Uśanas, the archetypal *kavi*, see Dumézil 1986, an engrossing study. Dumézil understands the *kavi* as originally a “free magician” (p. 44), that is, a practitioner of ritual/practical knowledge who is, unlike a Brahman, less bound to kin-class networks of obligations and thus free to serve whomever he wants and on his own terms. This opposition between *kavi* and *brahman* is reflected in another form in the story of Kavaṣa discussed below.

²³ I have translated *sahasranītha* as “leader of a thousand songs,” because *nītha* seems to be a double entendre, meaning a leader; a trick or strategem; and (though perhaps not yet in the *RV*) a musical mode, air, song, hymn.

and soma is the guide, the trailblazer for *kavis* whom he inspires, who are his “companions.” (These metaphors of singing and tracking should be compared with the *hymn to Hermes* and the likely meta-musical themes in its tracking scene).

The singer in Vedic society is in many respects comparable to his Greek cousin the *aoidos*.²⁴ The *kavi* was one whose good reputation and livelihood rested upon his ability to sing well and impress an audience—including the all-important audience of divinities—with his songs of praise. The probable link between *kavi* and *kū* used for birdsong (and bee buzzing) also compares with the *aoidos*, with its pun on *aēdōn* “nightingale.” While access to privilege and knowledge in Vedic society seems usually and largely to have depended upon birth and inherited social status—and increasingly so as class hardened into rigid caste boundaries, upheld by strict laws of purity—there does seem to have been some modicum of upward social mobility for those with natural talents for singing and composing songs. As with the Greek *aoidos*’ situation within a broadly working-class origin and ethos, several *Ṛgvedic* songs evoke social backgrounds in humble and specialized service labor. The short and light-hearted soma-song found at *RV* 9.112 bespeaks the diversity of talents people employ and the various yet common ends they pursue in making a livelihood:

*Diverse we are in mind, creatures with contrary callings,
craftsman a crack, surgeon a break, and brahman a pressing seeks
Indu for Indra flowing over*

²⁴ On the rich common inheritance of Indo-European poets and poetics Watkins 1995, while not without limitations, deserves to be read attentively and consulted often (especially chapters 3-16, pp. 28-193); also Nagy 1990b, 1990c, 1999; Benveniste 1973. One drawback of Watkins’ critical vocabulary, as I see it, and which probably derives from his solidly linguistics specialization, is his privileging of terms like *word, speech, poetry, utterance*, etc., while rarely making explicit the *musical* nature of Indo-European poetry, either by resort to musical vocabulary (*sing, song*, etc.) or by elucidating the musical social contexts of performance.

*With old dried-out sticks, with feathers of great birds,
the smith with his stones all day for a man with gold looks out,
Indu for Indra overflowing*

*I make songs, papa's a healer, at the grinding stone is mama,
with different minds desiring profit like cows we pursue it,
Indu for Indra flowing over*

*A horse to draw a swift-wheeled car, seducers laughter,
a phallus a bushy parting, a frog a pond is longing for
Indu for Indra overflowing*

Here the singer calls himself a *kāru*, a “maker, artisan,” in other words a poet (cp. Greek *poetēs*, “maker”), and points to his parents’ more or less humble occupations, his father a doctor or healer (literally, one who “sets breaks”), his mother grinds grain, each of them striving for prosperity “following their desires like cattle.” The *kāru* through his similes aligns himself with the *kārmāra*, “smith,” (from the same root, *kr*, “do, make”), and the *takṣan*, “carpenter, craftsman” (cognate with Greek *tekton* “carpenter,” which occurs in conjunction with the *aoidos* at *Od.* 17.384, quoted above).

A story in the *Aitareya Brāhmaṇa* (*AiB* 2.19)²⁵ tells how one low-born, even outcaste, but talented singer aspired and gained access to the status of *ṛṣi* and *kavi*. Once when the *ṛṣis* sat at the Sarasvati river for their great soma session, they excluded *Kavaṣa* from soma, since he was not a Brahman but rather the son of a gambling servant-girl (*dāsa*, implies non-Aryan, or at least the *śūdra* “servant” class). Being thus

²⁵ On which see Gonda 1975: 339-422, esp. 344-6. *AiB* is a *Brāhmaṇa* of the *Ṛgveda*, generally considered the most important and oldest; the first five of its eight books are an authentic unit (the last three are suspected of being later additions), and deals mostly with the origins, meanings, and lore surrounding the soma rites. I have used Haug 1974 [1922]: 76-7 (orig. pp. 112-14). The story is also told in the related *Kauṣītaki Brāhmaṇa* 12.3. As literature the *Brāhmaṇas* fit Megasthenes’ description of the Brahmins in India in his day, that they “weave many myths, like Plato.”

impure and unworthy, they barred him from consecrating himself with them to soma, and from drinking the holy river's waters. They drove him out into the desert to die of thirst. But there when he "knew thirst" *Kavaṣa* "saw" (i.e. "received in a vision") the *Apo Naptrīyam* "Grandson of the Waters" (*RV* 10.30). The waters were pleased with his song and left their abodes, excited, and the Sarasvati surrounded him on all sides. When this happened the Brahmans said "the gods know him," and they called him back, inviting him to their gathering.

From this vision quest the parched and thirsting *Kavaṣa* received a song about the newborn sun, the Agni born of the Waters, an image of the sunrise over a watery horizon. Moreover this song (*RV* 10.30) is addressed to the Adhvaryu priests, as they go to collect and prepare the waters from the river for the morning soma pressing. The Adhvaryus were, of the four classes of priests, the "grunts" of the sacrifice: they measured the ground, built the altars, prepared and tended to vessels and implements, fetched the wood and water and, finally, they slaughtered the victims. They also tended the fires and pressed the soma. We are entering into territory that should look familiar from the *hymn to Hermes*, with the "woodman," the fire-drilling, and the cattle sacrifice at Olympia. What is more, etymology offers intriguing Indo-European parallels: *adhvaryu* is taken to be from *dhvr* "to bend, cause to fall, hurt, injure," and is apparently cognate with Old English *dwellan* / *dwolian* "lead astray, hinder, prevent, deceive" (in a passive sense, "be led astray, wander"). Related to this are *dwolma* "chaos," *dwollic* "foolish," *dwola* "madman" (cp. German *toll* "mad, crazy," and English dull and dolt) but also "heretic" (thus in Christian times a term for "occult arts, magic" was *dwolcraft*). These semantics cohere well with the *Kavaṣa* story: the "fool" who is led astray and "prevented" from drinking, but who then, in the distress that has

befallen him, becomes the composer of a key song for the Adhvaryu “working” priests.²⁶

There are indications in this song that the other dimension of the “fool” in English—humor—was active with respect to the Adhvaryus as well. Most prominent is the sexual innuendo of the language describing the “relations” between the Adhvaryu young men and the feminine “waters.” “Give those waters,” the singer asks the Agni of the morning sun, “which soma delights in and stands upright for, like a young man among ready, youthful girls” (*RV* 10.30.5ab). And again, “just as to a youth young women bow, whom they long for, longed-for by him he comes, // with the same idea in mind, the same intention, are the Adhvaryus, with the soma cup, and the goddess Waters.” We saw the same open sexual language in the *kāru*’s song above, and *Kavaṣa* being enveloped by the rising Sarasvatī’s waters carried the same intimations.²⁷ From these themes of youthful sexuality and sacrificial service it would seem that the Adhvaryu functions were often manned by young men, the sacrificial “grunt” labor they performed being part of their training, education, and initiation.

The nomadic or semi-nomadic pastoral tribes of Vedic Aryans lived along a great river they called the Sarasvatī, the “Stream-like” goddess of waters, the “most motherly, most resounding river (*nadītama*), most divine” (*RV* 2.41.16). In the one

²⁶ Recalling that *Kavaṣa*’s mother was a “gambler,” it was also the adhvaryu’s job to build and tend the fires that burn in the gambling-hall (cf. Gonda 1991: 82). Gambling was both an avidly pursued pastime and a theme for moralizing in Vedic times (cf. *RV* 10.34, a “gambler’s lament;” recall that the *Mahabharata* epic’s protracted series of tragic events are set in motion by a fatally unlucky game of dice.)

²⁷ Just as the *kāru*’s song pairs sexual longing with frogs longing for water (9.112.4), so in a famous song to the Frogs (*RV* 7.103), which has as its subject an overnight soma sacrifice upon the commencement of the rainy season, the Adhvaryus are focalized at the end, “boiling, sweating” as they go about their tasks preparing soma. Waters, sexuality, and the Adhvaryus appear together again and again. Cf. the related *Apām napāt*, “Son of Waters” song (*RV* 2.35), also full of sexual imagery. *Apām napāt* appears in the Iranian *Avesta*, and is always paired with the waters. He bears the epithet “lord of females” (cf. *Khorda Avesta, Haft Amahraspand Yasht* (II).9).

hymn devoted entirely to her (*RV* 6.61) it says that “with strong, loud rushing waves she dashes mountain ridges,” and “whose boundless, straight, brilliant wandering, foaming flood // spreads out and shatters with a mighty roar.” Beside this decidedly stormy aspect to her, which she inflicts on the foes of those who sang this song, she was “also to us dear among dear ones, with seven sisters, most loved,” “with three sources, seven streams, dividing five tribes, may she be vigor and bounty in our sacrifices.” While Gonda, assuming that the Sarasvatī is the small northwest Indian river traditionally associated with that name, speaks of the “paradoxical grandeur of these descriptions of an insignificant river” (1985: 7-8), there are reasons to think that the ancient Sarasvatī was either not so insignificant then,²⁸ or was not the same river. Good arguments, if not conclusive, have been made for the Helmand river, west of the Indus valley, that flows southwest through Afghanistan (Kochhar 2000).²⁹ Not only is

²⁸ Much has been made of hydrological surveys of ancient stream channels through the Thar desert east of the Indus valley and parallel to it. There seems little doubt now that before ca. 1600 BCE a major river artery once flowed, to which the waters of the Satluj and the Yamuna were confluent, where now little but arid waste remains. This was the life-blood of a riverine civilization contemporaneous with that of the Indus Valley (Harappa / Mohenjo-Daro) that arose out of a Neolithic village settlement culture. But recent attempts to claim this now-deserted river valley as the Sarasvatī of the Vedas is not supported by common scholarly opinion for the chronology of Vedic migrations: specifically, if Vedic tribes did not enter the Indus area and beyond until after 1600 BCE, they would have found the Thar area essentially as it is now, a dried (or drying up) desert. The debates, between the “Aryan Invasion Theory” (AIT) and the “Out of India” view (OoI), get very heated. The former is the (near) academic consensus; the latter is championed by many in India, some of whom would make India not only the homeland of Aryans but also of all Indo-Europeans.

On closer inspection, in fact, the objectivity of the OoI hypotheses are often vitiated by pious fictions, bolstered by undercurrents of Indian nationalism, about a great “Bharata” civilization. This narrative dates the events of the Mahabharata epic to around 3000 BCE (or earlier), equates the Indus Valley civilization with the Vedic texts, and in some versions interprets all Vedic references to soma as really referring to the mining and smelting of gold and electrum. (These accounts often follow with an endorsement of one or another half-baked “decipherment” of the Indus Valley seal script, finding in it Dravidian or Sanskrit or both). Political undertones are involved here, made manifest by a glance at a map: the Indus is in modern Pakistan, India’s bitter enemy; an ancient Sarasvatī civilization east of the Indus and on Indian soil would satisfy yearnings for a venerable autochthonous antiquity. It has, moreover, become the foundation myth for land reclamation proposals that would reopen the desert to agriculture through irrigation. If nothing else it is an interesting case of political mythology, how the past is constructed to serve the needs and aspirations of the present.

²⁹ As for the music of the Indus Valley cities, some of the archaeological evidence is presented by Flora 1988. One of the most interesting, if inconclusive, pieces is the Indus Valley Script symbol in the shape

this waterway closer to the area of the putative Indo-Iranian divide; before major climactic changes dried up many regions in central Asia and northwest India after about 1600 BCE, the Helmand, even today not a small river, was then much more impressive. Moreover, Afghan archaeology makes it plain that the Helmand and its tributaries would have provided the Aryan raiding bands plenty of village and city settlements to drive their economy of plunder. The rivers, flooding their settled enemies, were their natural allies, and their unerring guide to booty: cows, horses, gold, slaves. “Sarasvatī lead us to riches. Don’t kick us while we’re milking, do not harm us, // approve us in your friendship, and may we not go off to foreign countries” (*RV* 6.61.6).

Vāc, Goddess of flowing sound

But Vedic tribes did move into foreign countries, gradually shifting their centers of power eastward into and beyond the Indus (from *Sindhu* “the River”), and as they migrated Sarasvatī became a transferable toponym given to new rivers as a reminder of home. The most important development was the growing association and eventual identification of Sarasvatī with Vāc, the divine and heavenly “Voice,” goddess of speech, song and sound, an apotheosis of echoing utterance. The epithets Sarasvatī accumulated over time attest to her connection with voiced speech, such as Vāgdevī (goddess of voice), Vāgīśā (mistress of voice), Jihvāgrāvāsīnī (she who dwells on the front of the tongue), Śabdavāsīnī (she who dwells in sound), as well as with the

of an arched harp, looking very similar to ones found in Sumerian iconography (cp. Flora 1988: 215 with Rashid 1988: 201).

technologies of memory that typify oral traditions, Smṛtiśakti (the power of memory), Jñanaśakti (the power of knowledge). Her function as an inspiring goddess of learning in oral arts of song and speech carried over into the era of writing, and she took on epithets reflecting this, such as Sarvaśāstravasīnī (she who dwells in all books), and Granthakāriṇī (Book-binder). Traditional iconography depicts her holding in her four hands a book, a *vīṇā* (Indian lute), a rosary, and a water pot, drawing together the threads of her long history of diverse associations with the sacred river and holy water, music and oral performance, and later, learning in written forms.³⁰ Incidentally, in both her origins and her history of extended functions and symbolism, Sarasvatī is probably the closest Indic parallel to the complex imaginary of the Muses in Western civilization.³¹

The equation “Sarasvatī is Vāc” occurs in the *Yajurveda*.³² The tradition of glossing Vāc as Word, by insinuating a parallel with the Western metaphysical and mystical tradition of Logos, Reason, and the Christian Trinity, in my view likely conceals more than it reveals. For it leads to interpretive habits that threaten to short-circuit a clear understanding of the attractive and uniquely Vedic constellation of ideas surrounding Vāc. First of all, the Word, and Logos, are neutered abstractions (and theologically masculine); Vāc, by contrast, is explicitly and emphatically female, feminine, a goddess. As a goddess Vāc is a personification of the common Sanskrit

³⁰ Kinsley 1986: 55-60; Gonda 1985: 5-67; Vyas 1989; on Vāc and divine sound in later Tantric traditions cf. Padoux 1990, and in Hindu traditions generally, Beck 1993.

³¹ It will be recalled that the Greek Muses in their earliest form were also associated with water, the Hippocrene fountain on Mt. Parnassus.

³² *YV* 2.1.2.6 (= *YV* 2.2.9.1): *vāg vai sarasvatī*. Thus, it also relates, that one who cannot speak properly should offer a ewe to Sarasvatī to attain a good voice (for passage in translation cf. Keith 1914 ad loc., now available online at http://www.hinduwebsite.com/sacredscripts/yajur_veda_intro.htm).

noun *vāc*, “word, voice, speech,” a widespread Indo-European word cognate with Greek (*w*)*epos*, Latin *vox*, and English voice.³³

Here is a good case where comparative etymology and divergent semantic histories can be instructive. In archaic Greek *epos* (“word,” whence modern “epic”) preserved a connection with the root meaning “voice,” the physical quality of speech.³⁴ But in Homeric epic *epos* had become the “unmarked,” or more general and semantically colorless, member of a binary pairing with *muthos* (“authoritative formal utterance”), and occurring often in the plural it simply means “words” in a very general sense (but still always oral, since Homer’s Muse was still illiterate).³⁵ In the fifth century and later, with Plato and the epistemological valorization of *logos* (“speech, account, thought”)—later translated by and equated with Latin *ratio* (“account, reckoning, reason”)—*muthos* suffered a conceptual reversal (“[lying] tale, myth”) and *epos* became effectively otiose, an archaism increasingly only found in fixed phrases (such as *hos epos epein* “so to speak”). In another direction it underwent semantic specialization, coming to denote the literary genre of (Homeric) epic, by the late Hellenistic period a text-based genre.³⁶ In this way the physical, sonic qualities of voice, *epos/vox*, along with traditional arts of speech, *muthos*, were victims of the rapid interiorization and textualization of meaning and truth that took place as the metaphysics of Logos developed; along the way material reality—and along with it the

³³ Voice is, of course, a late borrowing from French *voix*, itself from Latin *vox*. Actually, Old English seems to preserve a native Anglo-Saxon cognate, *woma*, “outcry, howl” as in the Old English poem the *Wanderer* (l. 103): *wintres woma, þonne won cymeð*, “winter’s howl, then dark comes.” Here too what remains of the root’s original semantic sphere is an acoustic event, a sound.

³⁴ Cf. Martin 1989: 16, 18.

³⁵ *Ibid.*: 29-30. A comparable use of *vox* in the plural (*voces*) to simply mean words, what is said, is common in Latin verse.

³⁶ For discussion of the history of textualization for the Homeric poems, cf. Nagy 1996.

material reality of sounded speech—increasingly diminished in value and ontological status.³⁷

In Vedic Sanskrit the semantic history of *vāc*, though cognate with *epos*, took quite a different path of conceptual development. To highlight the emphatically sonic and vocal emphasis of Vedic *vāc*, when translated I prefer to render it as often as possible as “voice.” As mentioned, in the Vedas *Vāc* was a goddess, the divine voice who spoke the artful-truthful³⁸ speech that the Brahmanic seers, in turn, heard and then uttered in the sacrifices and in sacrificial song-contests. Two Vedic hymns especially relate to *Vāc*, *RV* 10.71 and 10.125.³⁹ The first of these describes the social context in which sacred poetic speech and song were crafted: the ritual sacrifice and song-contest. One verse relates: “Through sacrifice they traced the path of *Vāc* and found she had entered the sage-singers (*ṛṣi*); they brought her forth, portioned her out into many; the seven singers all together praised her” (10.71.3). Continuing the personifying imagery the next verse describes how *Vāc* is not known and heard equally by all: “One who looked did not see *Vāc*, and another who listens does not hear her. She reveals herself to one as a loving wife, beautifully dressed, reveals her body to her husband” (10.71.4).⁴⁰ Those who hear and see *Vāc* are special and privileged, as a man who alone knows his wife’s body. In the other Vedic hymn, 10.125, focused exclusively on

³⁷ While I suppose many modern philosophers’ deconstructions of western metaphysics could be cited here, Ihde 1976: 3-16 is a succinct and readable tracing of the two-fold visualist and atomist reductions that underlie Western metaphysics and serve to deprive the senses of authenticity. Abram 1996 also deserves mention.

³⁸ Of recent contributions to critical appreciation of Vedic thought Mahony 1998 is worthy of high esteem for drawing out the deep relationships and affinities in the Vedic ideal of *Rta* (“cosmic order”) between beauty, truth, and the good, or aesthetics, epistemology, and ethics. As in ancient Greece and, for that matter, in common with many ancient and traditional societies, the Vedic sage-poets based many of their notions of what was true and right upon what was perceived as elegant, lovely, well-proportioned, aesthetically pleasing, and beautiful.

³⁹ Both are translated by Doniger 1981: 61-4, whose translation I have largely followed here.

⁴⁰ After Doniger 1981: 61, but I have modified her translation from neuter to feminine pronouns, as is appropriate with the sexual and marital metaphors.

Vāc, she describes in the first person her position and power in the cosmos. In it we can clearly see her role as a powerful creative goddess who pervades and suffuses all things:

*“I move with the Rudras and Vasus, the Adityas and all the gods.
I uphold Mitra and Varuna, Indra and Agni, and the twin Asvins.
I bear⁴¹ the pressing Soma, Tvaṣṭṛ, Pūṣan and Bhaga;
I give wealth to the mindful sacrifice-patron offering up and pressing the Soma.
I am queen, the gathering of riches, cunning, first one worthy of sacrifice.
The gods portioned me out into many,⁴² my seats are many, many I enter.
Through me one eats, perceives, breathes, hears what is spoken.
Without knowing they abide in me. Hear what’s been heard,
I speak things worth hearing:
I indeed declare myself what is pleasing to gods and men.
Whom I love I make mighty, a Brahman, a wise sage-singer (ṛṣi).
I stretch Rudra’s bow that the enemy of truth be slain with his arrow.
I incite people to strive in contest, I permeate earth and sky,
I birthed the father on the world’s peak, my womb is in waters, in the ocean,
from there I spread over all creatures, and touch the sky with my forehead.
Like the wind I blow, beginning-and-completing every being,
beyond the sky, beyond the wide earth I have grown in greatness.*

Although it is common in Vedic songs of praise for the deity addressed to be accorded preeminence (so-called “henotheism”), there is here nonetheless a wealth of imagery and details consistent with the later more explicit elaborations of Vāc that we encounter in the *Upaniṣads*. Besides her watery abode and source, already mentioned above in connection with Sarasvatī, principal among these are the associations of Vāc with food, the other bodily faculties, breath, and the wind. These associations are mulled over and

⁴¹ The verb translated “bear” here is the same as “uphold” in the previous line, *bhr*, which possesses all the semantic multiplicity that its cognates English “bear” and Latin *fero* do, including birth.

⁴² This formula is identical to that cited just previously in 10.71.3.

ruminated upon time and again in the various Upaniṣadic commentaries, until Vāc, the cosmic voice, becomes a principal component in a small number of dyadic and triadic conceptual schemes that unify the self and world, being and becoming, inner and outer, matter and spirit. But before moving to the Upaniṣadic Vāc, one other Vedic hymn, rich in imagery, is also worth some attention.

RV 1.164 is, by all accounts, one of the densest and symbolically complex of the entire corpus. Its singer revels in riddling questions and in enumerative imagery—e.g. the “three-naved wheel,” the “seven-wheeled car.” There are also the “seven sisters who together call out in praise to where the cow’s seven names are kept” (v.3b). The singer’s overall concern seems to be with the proper apportioning of order (*Ṛta*) in the world, and he sounds out his vision of order in the natural world, in the human world of ritual and economic activities, and the formal order in language and song-meters. Among the images of all-encompassing order that the singer returns to is that of the milk-cow. As a symbol of fertile prosperity she is connected both with the waters, especially of Sarasvatī, and with Vāc. At first the milk-cow appears as a cosmic figure (vv. 7-9), dawn, the “cow who wears all forms (*viśvarūpa*),” the mother of the calf who seems to be, on one level, either the day or the year, or both. Later on in the song the cow becomes the embodiment of Vāc, of a “thousand-(imperishable)-syllables.” The lowing or mooing of the Vāc-cow is presented as the creative flood out of which all the poetic meters flow as well as the whole universe. “The cow mooing formed the flood-waters—one-foot, two-foot, four-foot, eight-foot, nine-foot—the one with a thousand-syllables in the highest heaven. From her flow out in all directions the oceans that

enliven the sky's quarters; from the imperishable syllable that flows out of her all things exist" (vv. 41-42).

There is an important double or triple pun in this last line's phrase *ksharati aksharam*, "pours out the imperishable-syllable": while the latter term, *akshara*, means both "imperishable" and "sound/syllable," it is also a negated form of the preceding verb (*a-kshara*, "not-flowing"). The phrase is thus paradoxical, meaning something like "flows out the unflowing", and suggesting an inexhaustible pouring forth of primordial sound or cosmogonic utterance. Also, the image of Vāc as a cow here plays not only on *pada*, "foot," used as a term in metrics, but it also draws potency from reference to a real cow's powerful voice that bellows out in a sustained and reverberating moo (*mīm*). The moo is emotive and evocative, calling in the calf to suck warm milky nourishment from her bountiful udder (cf. vv. 28-9). Along the same lines, *vāc* is said in other places to "give milk," milk that is "the milk of voice itself."⁴³ That the Sanskrit word *mīm*, like our "moo," is mimetic and onomatopoeic for the cow's voice most likely also feeds into the symbolic elaboration of the AUM chant syllable, which receives such reverent attention in the *Upaniṣads*.

Returning to 1.164, the singer then offers his take on the originary partitioning of Vāc: "Voice was divided into four portions (*pad-* root "foot") which the wise Brahmans know; three parts are kept in secret, unstirring, the fourth part of voice is spoken by men" (v. 45). Three-quarters of Voice is secret, unspoken, established elsewhere than in the mouths of mortal humans. This again seems to presage the Upaniṣadic unfolding of the cosmic and ontological significance of flowing sound energy, heard and unheard. On the other hand, bearing in mind the bovine metaphor for

⁴³ *CU (Chandogya Upanisad) 1.3.7=1.13.4=2.8.3*

Vāc's voice, perhaps part of those secret three-quarters comprised other animal voices, conceived of as meaningful and divine but mysterious and enigmatic to human ears.

A story told in the *Yajurveda* connects the goddess Vāc also to the sounding of musical instruments, by way of the voice of trees:

Vāc went away from the gods, not being willing to serve for the sacrifice. She entered the trees. She is the voice of the trees, the voice that is heard in the drum, the flute, and the harp/lute (*vīṇā*). In that he offers the staff of the initiated, he wins *vāc*. The staff is of Udumbara wood; the Udumbara is strength; verily he wins strength. (*YV* 6.1.4)

This short “just-so” type of story serves to connect the voices of musical instruments, each made out of the same Udumbara wood, to the cosmic *vāc* who is a property dwelling in the wood itself.

So *vāc*, “voice,” which indeed covers what we mean by “speech,” also has musical dimensions and associations not covered by our word speech, which is more closely connected with language and reference, with utterance less as sound than sense. By contrast, the semantic sphere of Sanskrit *vāc* combines an awareness of both sound and sense in its basic meaning of “utterance,” with manifest emphasis on the former. In this regard it is worth asking whether or not it is our usual idea and concept of speech that is impoverished. As Peter Fletcher notes, linguistic analysis of the physical phonation of which speech is composed has shown that the elements of speech—vowels, sounded consonants—are actually short micro-tones with the same sonic properties as musical notes. Thus the process of comprehending spoken speech can be understood as a marvelously complex learned ability to analyze and decode in real-time

the micro-music of phonation: “in recognizing a vowel in speech we are again identifying a sound that extends in time, a sound with a changing structure in both frequency and intensity—a ‘chordal structure’ on an infinitely small scale, a musical element” (Fletcher 2001: 11). Of course, understanding the message content of speech requires that we be at least somewhat unconscious of (“attuned” to) the sound-medium that carries the message. As the Vedic sages said, perhaps, three-quarters of voice is hidden, unmanifest. Nevertheless, in contemplating the sound of speech, of voice, and in cultivating awareness of sound, those same sage-singers seem to have come to some precious and hard-earned insights into the musical marvel that is sounded human utterance—insights arrived at in the West only lately, and largely in dependence on the technologies of sound recording and *visualized* sonic analysis.

The rasa of sāma, sweet sap of song

In general, and as has often been said, a main aim in the *Upaniṣads* was to formulate equations of the inner reality of the individual (*ātman*) with the outer totality (*brahman*).⁴⁴ Both these terms are strongly connected with air and breath. Sanskrit *Ātman* is cognate with Greek *atmos/atmē/atmis*, Old English *ædm*, and German *Atem*, all meaning air, wind, or vapor. *Brahman*, for its part, in all likelihood derives from Sanskrit *br̥h* “to increase, expand, swell,” and indicates something, usually a word or prayer, that is expansive, or, as we might say, deep. A *brahman* in the Vedas was a

⁴⁴ Though its precise meaning is still debated, Olivelle 1998: 24 proposes that *upaniṣad* meant “connection” or “equivalence” (etymologically, “set down near”); the particular equation of *brahman* and *ātman*, so emphasized by later Vedānta and western scholarship alike, is only one of many of the *upaniṣad*’s “connections.” Indeed, in the earliest texts (*BU*, *CU*), though important, it is certainly not the most often discussed.

riddling speech, a potent formula, image, question, or formulation. As such *brahman* was both a specific genre of poetic speech and an evaluative aesthetic term for speech that is judged to be *br̥hat*, “great, strong, loud-and-clear, solid, vast, bright.”⁴⁵ In the *Upaniṣads*, however, *brahman* became the ontological absolute, totality, the All, and since the sages very often came to regard breath (*prāṇa*) as the unifying force and vital principle of the body, *brahman* became its counterpart on the universal plane.

So in *Bṛhadaranyaka Upaniṣad (BU)*, generally held to be the oldest in the corpus,⁴⁶ a sage asks how many gods there are, and his respondent successively narrows the number from 3306 to one: “Which is the one god?” “Breath (*prāṇa*),” said he, “he is called Brahman, that out there (*tyad*).” (*BU* 3.9.1-9). Again, in a cosmogonic account in the same text, all begins with *ātman*, and this is who “comes to be called breath when he is breathing, voice (*vāc*) when he is speaking, sight when he is seeing, the eye, hearing when he is hearing, and mind when he is thinking” In the beginning it “knew only itself, thinking ‘I am Brahman.’” (*BU* 1.4.7, 10).⁴⁷ Everything is wind or atmosphere in the analysis of a later section of this Upaniṣad (*BU* 2.3), in two different forms of Brahman: the formed and the unformed. Material things, including the body—“whatever is different from the wind and atmosphere” (2.3.2)—are manifestations of Brahman in one form; all such things are sustained by heat and sun, and are perishable.⁴⁸ All else is wind and atmosphere, formless, immortal, moving. Perhaps comparable to the reduction in modern physics of everything to matter and

⁴⁵ For discussion of the word’s etymology, cf. Gonda 1950; also Gonda 1989b.

⁴⁶ Cf. Olivelle 1998: 30.

⁴⁷ As throughout, unless otherwise stated, translation by (or based on) Olivelle (1998: 47).

⁴⁸ Similarly at *BU* 5.1.1: “*Brahman* is space. The primeval one is space. Space is windy.” And at *Taittiriya Upaniṣad* 1.1: “Homage to *brahman*! Homage to you, Wind (*Vayu*)! You alone are the visible [or perceptible] *brahman*!” (see Olivelle 1998: 291).

energy (with matter being but a relatively stable configuration of energy), so here, all is wind or air (*ātman/brahman*), material things being but a temporarily more solid though less durable permutation of air.

The importance of air and breath in Vedic thought is consistent with the high importance of these phenomena and realities in many early traditional and many indigenous cultures around the world. David Abrams, cited earlier, has surveyed concepts of holy wind, breath, speech, mind, and song in several indigenous cultures, including the Lakota of the Great Plains, the Diné or Navajo, and in the Hebrew tradition, finding many interesting commonalities. Introducing his survey he begins:

“Nothing is more common to the diverse indigenous cultures of the earth than a recognition of the air, the wind, and the breath, as aspects of a singularly sacred power. By virtue of its pervading presence, its utter invisibility, and its manifest influence on all manner of visible phenomena, the air, for oral peoples, is the archetype of all that is ineffable, unknowable, yet undeniably real and efficacious. Its obvious ties to speech...lends the air a deep association with linguistic meaning and with thought. Indeed, the ineffability of the air seems akin to the ineffability of awareness itself, and we should not be surprised that many indigenous peoples construe awareness, or “mind,” not as a power that resides inside their heads, but rather as a quality that they themselves *are inside of*, along with the other animals and the plants, the mountains and the clouds” (Abrams 1996: 226-7).

Admittedly, Abram’s penchant for easy generalization across wide cultural divides (e.g. “oral peoples” *tout court*) might prompt many to seek out counter-examples. Nevertheless, I think his perspective holds remarkably well for the Vedic evidence, deriving again from oral cultural contexts, where it is clear that air and breath are central concepts and root metaphors upon which wider paradigms of thought and

imagery have been built. Vāc for the Vedic singer-sages, as meaningful sounded breath that surrounds all and unites all, is akin to what Abram describes here, a quality of the outside phenomenal world that they, being inside of, participate and partake in.

Breath, *prāṇa*, manifestly related to the concept of *ātman*, is among a small handful of the most important concepts in early Vedic philosophy. Intimately bound up with it are *vāc* and OM (AUM) the “primordial chant syllable,” as it often described. Breath and AUM are encountered widely as unifying and totalizing ideas in Vedic texts. For example, *Chāndogya Upaniṣad* (CU), a commentarial tradition linked to the *Samaveda*—the Veda of songs (*sāmāni*) for the Udgātri priests who sang them at the Soma sacrifices—opens with the following fascinating chain of connections:

OM—one should venerate the High Chant (*Udgitha*) as this syllable, for one begins the High Chant with OM. Here is a further explanation of that syllable.

These growing beings ⁴⁹ <u>taste</u> of earth	<i>eṣām bhūtānām pṛthivī rasaḥ</i>
Earth itself <u>flows</u> with water	<i>pṛthivyā āpo rasaḥ</i>
Water is the <u>sap</u> of plants	<i>apām oṣadhayo rasaḥ</i>
Plants are <u>vital juice</u> to persons	<i>oṣadhīnām puruṣo rasaḥ</i>
a person’s <u>pleasure</u> is the voice	<i>puruṣasya vāg rasaḥ</i>
Voice <u>runs</u> with verse	<i>vāca ṛg rasaḥ</i>
Verses <u>flow</u> in song	<i>ṛcaḥ sāma rasaḥ</i>
And song’s <u>sweet juice</u> is the High Chant.	<i>sāmna udgītho rasaḥ</i>

This High Chant is the nectar of all nectars [*rasānām rasatamaḥ*, lit. “the most-*rasa* of *rasas*” or “the juiciest of juices”]; it is the highest, the ultimate, the eighth.

⁴⁹ The term *bhūtānām* “growing beings” is cognate with Greek *phuo* “grow/be” and *phusis* “nature;” this is good to keep in mind, I think, in order to appreciate this text (and the *Upaniṣads* generally) as early speculative natural philosophy, i.e. attempts to find viable and valid first principles for physical reality.

In this passage the word linking each phrase is *rasa*, with the basic meaning of “sap” or “juice,” principally of plants (like Soma); from here it developed over time a rich metaphorical semantic sphere that included “vital fluid,” “taste,” and “pleasure.”⁵⁰ Thus I have departed from the standard translation to render each line with a slight nuance on *rasa*, in attempts to capture the multiplicity of senses that *rasa* seems to express here (in the translation, the words and phrases rendering *rasa* are underlined and the transliterated original is provided for comparison).

As is typical of the Vedic tradition, there is a beautiful and powerful movement of thought from the cosmic and natural world—earth, water, plants—into the human sphere, via food and drink which flows through the human body; then, at a central juncture, the human voice, *vāc*—characteristically conceived as a liquid—modulates the focus onto the world of ritual song and ritual performance, where voice is the flowing heart of *ṛc*-verses, verses flow with *sāman*-song, and the vital pith of all *sāmāni* is the Udgitha, the “loud chant” of which the principal ritual context is the pressing of intoxicating, inspiring Soma juice. Thus *rasa* (also used of Soma) provides a powerful conceptual string with which to draw all existence, earth, water, plants,

⁵⁰ The standard translation of *rasa* here as “essence” is just one example of the many ways Western translators have leached the Vedas and Upaniṣads of much of their beauty and sense. “Essence,” an outdated and colorless term from medieval scholastic ontology, is hardly an appropriate rendering of a word that would later become “the key word of all Sanskrit literary criticism, the word that Abhinava [Abhinavagupta, fl. c. 1000 CE] says sums up the whole of the critical literature” (Masson and Patwardhan 1970: 23). Meaning “sap,” “flavor,” “taste,” sometimes connoting “emotion,” it is a term of aesthetic response evoked by an engagement with art. But as Masson and Patwardhan also relate, Abhinavagupta in his commentary on the *Nāṭyaśāstra* “seems to take particular delight in the richness of the “associations” the word calls up,” and “does not seem to wish to restrict its meaning too narrowly,” since “Rasa has so many connotations in Sanskrit that it would indeed be limiting to always apply its purely technical sense of the experience of the reader” (ibid.: 25). To be sure, the same cannot be said of English “essence” (except perhaps in its specialized use in the perfume industry). The closest would probably be the literary critical use of Latin *sapor* “flavor” that flourished in medieval European discourse on aesthetics. I opt therefore for a suggestive multiplicity of translations. (see also Gnoli 1968: Introduction; Masson and Patwardhan 1969).

one's person, voice, and the linguistic and musical components of social and religious ritual, into one complex and tightly mnemonic conceptual equation. The root image of this equation, moreover, is again that of vitality and vigor as a flowing fluid. And all this the sage-teacher has extracted and expanded out of just the one opening chant-syllable, AUM. (The Brahmanic initiate, indeed, had to learn patient attentiveness in the face of such prolix oral commentary!)

The real significance of AUM in Upaniṣadic discourse can be heard only when emphasis is put on the fact that as a word AUM is (per se) virtually meaningless, a semantically empty syllable, a nasal hum basal and prior to articulate speech, and it is from the live and continually repeated performance context of the sacrificial chant that it derives its rich symbolic meanings. AUM is the opening of ritual song. AUM is also its closing. AUM also indicates assent, a great Yes. It is the vitalized vibratory energy of the body as it experiences the sound and emotive effect of singing. *Chandogya* goes on (1.1.5-7):

*The R̥g is nothing but vāc, the Sāman is prāṇa,
and the High Chant is this syllable [akshara] AUM.
Vāc and Prāṇa, R̥g and Sāman, each of these sets, clearly, is a pair in coitus.
This pair in coitus comes together in the syllable AUM,
and when a pair come together, they satisfy each other's desire.*

Voice and Breath, *vāc* and *prāṇa*, in ritual song unite to produce AUM, the all-consuming utterance likened very pointedly here to the consummating sound and sensation of sexual orgasm—AUM, after all, as the text immediately relates, also means “Yes” (1.1.8). In a marriage rite at the end of *BU* (6.4.20) we find the same imagery, only here the tenor and vehicle of the metaphors are reversed: where, above,

Ṛg and Sāman were likened to a couple joining in love, here a couple about to join in love compare one another to Ṛg and Sāman.⁵¹

<i>I am he (ama), you are she (sā),</i>	<i>'mo'ham asmi, sā tvam</i>
<i>You are she (sā), I am he (ama)</i>	<i>sā tvam asy, amo aham</i>
<i>I am song, you are verse</i>	<i>sāmāham asmi, ṛk tvam</i>
<i>I am heaven, you are earth</i>	<i>dyaaur aham, pṛthivi tvam</i>
<i>Come, let us embrace</i>	<i>tāv ehi saṃrabhāvahai</i>
<i>together place our seed</i>	<i>saha reto dadhāvahai</i>
<i>to get a son, a male child.</i>	<i>puṃse putrāya vittaya iti.</i>

In the same way that the union of *sāman* and *ṛk*, and of man and woman, issues forth with the satisfied sound of sexual reproduction, so AUM was the eternally self-

generative sound of creation itself. A brief cosmogonic account makes this point:

“Prajapati (literally, “lord of creatures”) rested in life-giving meditation over the worlds of his creation; and from them came the three Vedas. He rested in meditation and from those came the three sounds: *bhūr*, *bhuvah*, *svar*.⁵² He rested in meditation and from the three sounds came the sound AUM. As all leaves are held together by a stem, so all voice (*vāc*) is held together by AUM. Truly everything here is AUM, indeed, everything here is AUM” (*CU* 2.23.2; based on Hume 1971; Olivelle differs slightly).

Voice and breath form an often recurring conceptual dyad, though the forms it takes and the images used to express it vary considerably. Along with the eye and vision, the ear and hearing, and the mind, voice and breath are among the five bodily functions or sense-faculties. Many stories and analyses discuss the hierarchy and

⁵¹ A variant of this marriage rite formula occurs in the *Atharvaveda* (Saunaka recension, 14.2.71).

⁵² Three other so-called “mystical syllables” which, like AUM, receive a great deal of symbolic elaboration in the *Upaniṣads*. They indicate, among many other levels of significance, the three worlds, earth, sky, and heaven; *bhurbhuvahsvah* was pronounced after AUM by every Brahman at the opening of his daily prayers.

interrelationships of these functions. *Prāṇa* is by and large preeminent, yet *vāc* very often comes in second place (cf. *CU* 5.1). In a myth narrative at *BU* 1.3, *prāṇa* is a “sixth sense” and preeminent, along with the above four plus the sense of smell. In the primordial struggle between the *deva* and *asura* (“gods” and “demons”) the *deva* called upon the sense-faculties to sing the Udgitha for them, to overcome the *asura*. In succession the senses sang the Udgitha, but were overcome by the *asura*. Finally, when *āsanya prāṇa*, the breath of the mouth, sang the Udgitha, it dispersed the *asura* and freed the other senses from their power. Thus is *prāṇa* called Āṅgīrasa, the vital sap (*rasa*) of the limbs (*āṅga*).⁵³ Then the intimate connection between *vāc* and *prāṇa* is expressed through traditional epithets involving *bṛhat* and *brahman*. “*Prāṇa* is Bṛhaspati. Bṛhati, after all, is *vāc*, and he is her lord (*pati*)...And it is also Brahmanaspati. *Brahman*, after all, is *vāc*, and he is her lord.” In this way, breath and voice are figured as a male-female divine pair, moreover, one raised to the highest degree of importance by its equation with *brahman*, the ultimately real and the utmost in quality. Implicit in this analysis is a clear and concrete understanding of the imminent residing of *brahman*, the universal, within the *atman*, the individual soul: the manifest and physical properties of one’s breathing and one’s voice are to be focused on as signs and substance of that *brahman*. It goes on, equating *prāṇa* also with *sāman*. “And it is also *Sāman*. The *Sāman*, after all, is *vāc*. ‘It is both she (*sā*) and he (*ama*)’” (*BU* 1.3.22).

A key word for these ubiquitous “unions” is *saṃhita*, also the word for the “compilations” of songs that comprise the Vedas. Characteristically, *vāc* was identified

⁵³ Āṅgīrasa is one of the seven legendary *ṛṣi* to whom are attributed, as visionary mediums, much of the “eternal Vedas.” Specifically Āṅgīrasa was made the author of *RV* Mandala 9, the *Rgveda*’s collection of soma-songs and counterpart to the *Samaveda*.

as the *saṃhita*: “*vāc* is the *saṃhita*, for by voice the Vedas are united (*saṃhita*), by voice the meters composed (*saṃhita*), friends unite through voice, all beings unite through voice, therefore speech is everything here....when we recite or speak, breath (*prāṇa*) is absorbed in *vāc*, *vāc* swallows *prāṇa*; when we are silent or asleep, *prāṇa* is in *vāc*, breath swallows voice....the two swallow one another. Truly voice is the mother, breath the son.”⁵⁴ Breathing and voicing, the vital and vocal forces, are manifestations of a single respiratory system that also underlies the interactive ecology of beings.

In another cosmogonic account, Prajapati (“Lord of creatures”) made seven kinds of food (*anna*). Three of these kinds he made for himself; these were mind, voice, and breath (*manas*, *vāc*, and *prāṇa*). It is on these three “foods” that the creator sustains himself, and the *ātman* (the individual soul) consists of these three.⁵⁵ Then the following triadic equations are made (*BU* 1.5.1-13):

	<u>Vāc</u>	<u>Manas</u>	<u>Prāna</u>
Worlds:	terrestrial	atmospheric	celestial
Vedas:	Rig	Yajur	Sama
Beings:	gods	Manes (fathers)	men
Relations:	mother	father	offspring
Knowledge:	known	to be known	unknown
Body:	Earth	Sky	Water
Light:	Fire	Sun	Moon

The connection made here between voice and terrestrial fire is made elsewhere as well.

In a later passage in *BU*, describing the dissipation of the body’s function as a person

⁵⁴ *Aitareya-Āraṇyaka* 3.1.6.13-14 ≈ *Śāṅkhāyana-Āraṇyaka* 7/8.3.18; cf. Gonda 1975: 428.

⁵⁵ In a related passage (*CU* 5.2.1) breath asks what is his food. The response is that everything is breath’s food; food (*anna*) is breath (*ana*).

dies, the deceased's voice is said to go into the fire, his breath into the wind, his eye into the sun, etc. (3.2.13).⁵⁶ In an analysis of the four cardinal directions and the center, the god of the center is given as Agni and he is “based on” *vāc* (BU 3.9.24). In a later analysis that likens the various parts of different things to the elements of the sacrificial fire, we find that in a person the open mouth is the fuel, breath is the smoke, *the voice is the flame*, the eye is the coals, and the ear—also a nice image—is the sparks (BU 6.2.12). Then, in a lovely case of synaesthesia, another dialogue results in the following series concerning the different lights that a person lives by. First is the light of the sun, but when it sets one's light is the moon; when the moon sets one's light is fire; when the fire goes out *one's light is the voice*—“where one does not discern even his own hands, when a voice is raised, then one goes straight towards it”⁵⁷—and when the voice is hushed, one's light is *ātman*, the soul (BU 4.3.1-6). Breath and voice were considered the preeminent vital signs. When a mother gave birth to a son, the father would build a fire, take him on his lap, prepare and make an offering of ghee and milk, and would offer into the newborn child his own *prāṇa*. Then he would put his mouth up to the child's right ear and say: “Vāc, Vāc” (BU 6.4.24-5).

Another passage in *BU* makes explicit the equation of *vāc* with the cow that we saw previously in the Vedic hymn: “One should revere *vāc* as a milk-cow. She has four udders: *Svāhā* (the ritual Invocation), *Vaṣaṭ* (Presentation), *Hanta* (Salutation), *Svadhā* (Benediction). The gods live on two of her udders, *Svāhā* and *Vaṣaṭ*. Humans live on *Hanta*, and the ancestors on *Svadhā*. The bull of this cow is breath, and her calf is the

⁵⁶ Cf. also BU 2.5.3, where in the course of consecutive verses that, among other things, connect various external phenomena to internal correlates (water/semen, wind/breath etc.), fire and voice are correlated.

⁵⁷ Cp. in Greek Sophocles *Oedipus at Colonus* 138-9: “I am he, for by your voice I see (*phônêi gar orô*), as it is said.” Apparently it was proverbial. As phenomenologist Don Ihde has noted, “It is to the invisible that listening may attend” (1976: 14).

mind” (*BU* 5.8). The last equation, of *prāṇa* as the bull and *manas* the calf of the *vāc*-cow, varies the version we saw just above, where *vāc* was the mother, *manas* the father, and *prāṇa* the child.⁵⁸

Living by the fruit of one’s voice

For the Brahmanic caste of Vedic society, especially the Udgātri priests whose job it was to sing the *sāmāni*, or praise-songs, on ritual occasions, one’s voice was one’s livelihood. Having a good voice and being a skillful singer could mean life or death. The voice was the means to food and drink, and by it the singer fed his family. Singing was the path to wealth, for one earned gifts from patrons who hosted sacrifices in exchange for singing the *sāmāni*, and other forms of praise-songs. Thus cultivating voice and breath-control was key to these singers earning their living. “*Ut* is breath, *githa* is voice,” we learn, the Udgitha is sung only by means of breath and voice (*BU* 1.3.23). To possess good tone of voice is to have property, a means of wealth, and gold. This is expressed, typically, by means of punning language: The *sāman* itself (*sva*) is tone (*svara*); he who knows this has possessions, wealth, friends (*sva*).⁵⁹ So too the *sāman*’s gold (*suvarṇa*) is tone (*svara*). The singer who knows this comes to have gold (*BU* 1.3.25-6). The singer with good *svara*, vocal tone, has *sva* and *suvarṇa*, possessions and gold. Good singing is the singer’s means to becoming wealthy, in

⁵⁸ A cosmogony in *BU* also employs the union of female *vāc* and masculine *manas*. In the beginning was nothing but hunger-death-desire. This nothingness desires the universe into being. At one point he desired that a second of himself existed. “*With his mind (manas) he copulated with voice (vāc).*” The semen of this union became the embryo that developed into the year (*BU* 1.2.1-4).

⁵⁹ *sva* is the reflexive pronoun (cognate with Lat. *suus*), “one’s own,” as a substantive meaning what one owns, one’s belongings, property or possessions, as well as one’s “own people,” i.e. family and friends.

family and friends and in material riches. These punning connections in the commentary tradition match certain ever-present double-meanings in the formulaic language of the songs. To sing, *gāya-*, is also *gaya*, one's wealth, property, house. This derives in turn from the verb *jaya-*, to win, conquer: *gaya* is "what has been won," and as a Brahman one wins by singing. Along the same lines, another meaning for *sāman* "song," is "acquisition, property, abundance."

Thus it is no surprise to find that *Chāndogya Upaniṣad*, the specialist teaching and commentary appended to the *Samaveda*—again, the corpus of songs cultivated and tended by the Udgātri-priests—contains material that reads like a *musica practica* for these ritual specialists whose principal occupation was to please the gods and (perhaps more importantly) the wealthy patrons who were their auditors with the suasive and moving power of their singing. The specialist teaching of the *chandoga*, the singer of the Samaveda songs, aims both at the mastery of the traditional songs and their meters (the *chandas*), and of the art of *pleasing* the patron of songs, fulfilling their *desires* and *wishes* (also *chanda/chandas*). His songs (*chandas*) are pleasant and charming (*chandaka, chandana*). The same web of ideas are implicit in the word *sāman*, which is associated with (and, if semantics are any indication, probably etymologically related to) both *sāman*, "wealth, abundance", and *sāman*, "calming, conciliatory (words)". The former term goes back to the verb \sqrt{san} , meaning to gain, acquire, bestow, give, to be successful, as well as to wish to gain or give. The latter term is taken to be related to the verb $\sqrt{sāntv}/\sqrt{sāntv}$ ("console, soothe, conciliate") from which is derived the very common and all-important word *śānti*, "peace, tranquility, ease, prosperity," used as a blessing and greeting (like "peace be with you") and to express a high ethical and

religious ideal (full happiness, rest, bliss). The adjective (or substantive) *sāntva* means mild, consoling words and sweet, gentle sounds. Thus *sāman* “song” is soothing, conciliatory utterance, a gift or boon, and the granting of desires.⁶⁰

Puns are no doubt a feature common to all human languages. The allure and charm of similar sounds, which yet refer to different objects and ideas, is that there exists a subtle, intimate, and natural link between such disparate things covered by the same phonic sign. Depending on one’s culture, puns might be merely humorous, the province of the wit and comic, as tends to be the case in our language and culture, with its epistemological dependence on reason and explicit, demonstrable predication for the making of legitimate conceptual connections. But in other languages and cultures the pun is a deeply meaningful symbol, a mode of semiosis and signification in itself, and one’s ability to unravel and make such punning connections is a sign of one’s skill in language and meaning, a mark of knowledge and understanding of deeper connections and subtler shades of language’s sound-shapes. The Vedic sages, as said before, were positively committed to the pun in this mode of making symbolic meaning.⁶¹ One way to unpack a syllable was to analyze it into constituent parts. Thus, as we have seen above, *sāma* “song” was separated into *sā* and *ama*. These constituent sounds, in turn, were explicated in a myriad of ways, including as “she” and “he,” which was the basis of the first line in the marriage rite cited above. *CU* 1.6-7 offers these sounds as meaning the following pairs: earth and fire, atmosphere and wind, the lunar abodes and the moon, the white/bright and the dark, speech and breath, the eye and the soul, the ear and the mind. Knowing these associations, the skilled Udgātri can ask the song-patron,

⁶⁰ Cf. *CU* 2.1.1-4 where *sāman* “song” is paired with *sāman* as “goods” and as “kindness, gentleness.”

⁶¹ Smith 1979 writes of the ubiquitous “unhumorous puns” in Vedic texts (though his discussion tends to be impressionistic).

“What desire may I win for you by singing?” “For truly he is lord of winning desires by singing, who, knowing this, sings the Sāman” (CU 1.7.8).⁶²

They also milked the various other meanings of the phonemes *sam/sām* which, as mentioned before, are extremely common in Sanskrit. There was *sama* “same, equal, constant” (cognate with Lat. *similis*, Eng. same). So, for example, “one should revere the sun as the sevenfold *sāman*. It is always the same (*sama*)....It is the same with everyone, since people think: “It faces me! It faces me! Thus is it a *sāman*-song” (CU 2.9.1). This is followed by a description of the parts of the day, as the sun progresses across the sky, as equivalent to the seven parts of the *sāman*. This is a variation on an image presented earlier, which identified the sun as an Udgitha: “on rising (*ud-yan*), he sings aloud (*ud-gāyati*) for creatures” (CU 1.3.1). So for the Udgātri singer each day itself is a song sung for creation by the brilliant moving sun. Then again, the pun on “same” is used as a mnemonic for thinking about the names of the seven parts of the *sāman*, how the numbers of syllables in the words are in various ways equal (*sama*) to one another (cf. CU 2.10.1-6).

Such puns were part of a greater overall musical training through which the Udgātri singer learned to perceive the order and motion of the *sāman* ritual procedure in all aspects of life, in the day’s progress, in the round of the seasons, in the making of a fire, in the rainstorm, in the body’s parts and the world’s regions, even in the act of making love with a woman (cf. CU 2.11-21). Such training was the discipline whereby the Udgātri learned to identify with his art of singing, and to experience, day to day, the

⁶² Cp. BU 1.317-18: “The breath within the mouth procured a supply of food for itself by singing, for it alone eats whatever food is eaten and stands firm in this world. But the other deities said to it: ‘This whole world is nothing but food! And you have procured it for yourself by singing. Give us a share of that food.’”

world as though it were pervaded by and actually sustained by his singing and the songs. The astute and deeply feeling Udgātri, thus, was one who could bring these deeper dimensions of experience to his performance and, presumably, thereby be a more effective charmer and mover of his patrons' own feelings, arousing to the fullest their sense of satisfaction with the song. As the *Chandogya Upaniṣad*'s litany after each of these identifications proclaims, "he who knows [these things]...reaches a full length of life, lives long, becomes great in offspring and in cattle, great in fame."

Since in Vedic society all the world was a song, it was richly rewarding for those gifted few who were able to learn how to sing it. This ability required, not least, coming to know deeply and effectively the full range of powers contained in the body's own instrument—that mistress of *brahman*, the milk-cow, Vāc, that blissful outpouring of creative cosmic energy—both a rushing flow of fresh water and a bright, crackling sacrificial fire—that is heard and enjoyed by mortals and gods, averting of evils, productive of peace, and, along with mind and breath, one of the three eternal foods of creation itself.

Voices (p)raising the sun

Thus our Brahmans have been singing all night round their sacred Agni fires, brewing their songs as they brew the soma, having poured the god Soma into themselves and poured out inspired *sāma* in response. Now rippling surface waves of the Sarasvatī (or whatever river they dwell along, still ritually it is Sarasvatī) begin to shine with the gold, the seed of Agni, from the first light of the dawns (*Uṣas*), the brides/mothers of the sun who is now being born, Child of the Waters. The waters are voice, Sarasvatī is

Vāc. Indra has fought with Vṛtra the concealer, and the dark is now retreating, overcome with the collective forces of sacral endurance rendered in ritual action, thought, attention, memory, and creative song. As the newborn sun pours dazzlingly over the watery horizon, the flow of song syllables continues, and the following celebrates the liquid clarity of the moment (*SV* 4.8.3.15.1a):

ā bhātyagnirūṣasāmanīkamudviprāṇāṃ devayā vāco astuḥ
 (bright| fires| of dawns| face| over/out| of singers| divine| voice| has raised)

Younger, initiate Adhvaryus and Hotars struggle—their minds nodding off—to make out morphemes of sense in the phonetic stream, even as older, wiser Udgitaras and Brahmans imbricate multiple meanings and blurred lines of sense, to win fame and the contest’s prizes, to baffle the unwary, defeat their opponents. One “straightforward” sense crystallizes out in one listener’s mind (word divisions marked with dashes):

ā bhāty|agnir|ūṣasām|anīkam||ud|viprāṇāṃ devayā vāco astuḥ (=“raise”)
 Bright fires, the face of dawns raise out of the inspired singers’ divine voice.

While another listener hears a different—a *brahman*, “expansive, deep”—pattern of sense:

ā bhāty|agnir|ūṣa|sāmānī|kam||ud|viprāṇāṃ devayā vāco astuḥ (= “praise”)
 Towards bright fires, dawn *sāmāni* yes,⁶³ (p)raise aloft with singers’ divine voice.

The difference between the first, “correct” translation and the second, “oblique” translation is a lengthened *a* and shortened *i* (*sāmāni* instead of *sām anī*) and an attenuated aspiration on *sth-* (*astuḥ* instead of *asthuḥ*), as well as intonation and emphasis in the singer’s delivery. The second punning reading is supported by explicit

⁶³ *kam* is a postpositive particle that gives the sense of “yes,” “well” to its preceding word, and usually comes at the end of the pada (verse), as is the case here.

passages in the *Chandogya Upanṣiad*, as we have seen, which equate the Udgātṛ singer's musical devotions with the rising of the sun, making the latter dependent on the former: the Loud Chant "raises" the sun with its praises (the verb *arc* is both to "shine" and "sing," to "praise" and "cause to shine"). Chanted praises raise the newborn sun. Sacred songs made the Vedic world go round.⁶⁴

Counter-narratives: Dances of death, Buddhist savors of song

That was the Brahmins' standard view of things, anyway (recall Megasthenes' statement that Brahmins were held in higher esteem than Sramans "because they were more in agreement in their doctrines"). It was, after all, how they made their living, how they had been doing so for a very long time. A notable story appears in the *Brāhmaṇas*, however, that begins to intimate other facets of the wider cultural context in which this ideological system held sway, revealing tensions of musical styles, secular versus sacred contexts, and most importantly issues of gender.

In the *Jaiminīya Brāhmaṇa* it takes the form of a typical cosmogonic narrative. The lord of creatures Prajapati and Death (Mṛtyu) held a competitive sacrifice. They were performing an *iṣṭi* rite (i.e., one without soma or animal sacrifice, but rather of the more common and daily sort with offerings of fruit, butter, rice, and so on). The Udgātṛ's song, the Hotar's verses, and the Adhvaryu's acts were with Prajapati, but what was sung to the *vīṇā* (anciently a harp, later a lute), danced (*nṛyate*), and done

⁶⁴ At the center of the *Odyssey*, when Odysseus and his men return from the underworld, they reach Circe's island again, "where are early-born Dawn's (*Eous*) home and dances (*choroi*) and the sun's risings" (12.3-4). In light of the insistent Vedic conception of celestial motions as musical, the Greek epic passage perhaps points to related associations between dawn and dancing not, so far as I know, well attested in other Greek materials.

frivolously (*vṛthā*),⁶⁵ were with Death. The two sides were equally matched, and for many long years neither one overcame the other. Then Prajapati willed, “may I overcome Death!” He saw the sacrifice’s successful fulfillment—its full measure—and its correct calculation, and with these overcame Death. Conquered, Death grieved. Falling down he went into the women’s hall, and the wives took up Death’s manner of sacrifice. What had been his songs and verses are now what people sing to the *vīṇā*, dance, and do frivolously for pleasure. His sacrificial post (*yūpa*, the center of the sacrificial ground, to which the victim was tied) is now the neck of the *vīṇā*; his tie-ropes are its bindings; his soma-pressings are its basket; his soma-pressing skin is the *vīṇā*’s leather covering; the sound-holes in his pressing-stones are now the *vīṇā*’s sound-holes; his pestles are the plectra for playing the *vīṇā*; his seven metrical patterns with fourfold increment are now the strings; and his ten-night song contests are now the ten fingers as they play. Because the sacrifice was twofold he came to grief; since the sacrifice is really one, it is just Prajapati himself.

The story sets up a series of transparent oppositions, creative life versus death, the Brahmanical sacrificial order versus instrumental dance music; then, secondarily, male ritual seriousness versus female frivolity and vanity.⁶⁶ It is, in fact, an origin myth for the latter that provides metaphysical justification for Brahmanical misogyny and a negative attitude towards “popular” or “secular” music culture generally. It takes advantage, yet again, of a carefully selected pun: *nṛtya* is *mṛtyu*, dancing is death.⁶⁷

⁶⁵ Doniger O’Flaherty 1976: 219 renders this “art for art’s sake.”

⁶⁶ Doniger [O’Flaherty] 1975: 219-20 situates this myth in the wider panoply of imaginative discourse in India about the origins and nature of death and evil (her total omission, however, of this text’s gender themes is inexplicable, even granted her methodological proviso of selective summary at p. 10-11).

⁶⁷ Coomaraswamy 1937: 102 is eager to exculpate the author from maligning “dance,” but I doubt the aural link between *nṛtyate* and *mṛtyu* is accidental or without significance. Cf. also Bhise 1989 who cites other texts that describe the wives of the sacrificial priests playing the *vina* to accompany the chants.

Song in a sacral framework, strictly ordered by ritual tradition, with “equal footing” (*sampada*) and measurement, is contrasted with, and made to overcome, what is *vṛthā*—at will, ad lib, at random or for the sheer pleasure of it. The choice of this word rings with the older, victorious battle of Indra and his forces of Ṛta (“Order”) against the demonic, concealing Vṛtra, the soma-thief.

In this context recall the Yajurvedic story cited above, where Vāc “departed from the gods, not willing to serve in the sacrifice,” and went into the trees, which then become the materials for musical instruments that have their own voices. Here Vāc is a wayward goddess, willful and unruly, very much the woman, and imparts her nature to the musical instruments made out of the wood she hid in. A similar story in the (*Kānva*)*Śata-pathabrāhmanam* (4.2.4.1-5), which relates to the purchasing of soma, tells how when the Gandharvas⁶⁸ had swiped the soma the gods sent Vāc to get it back, because the Gandharvas love women and Vāc would be an irresistible seduction. In this way did Vāc become the exchange currency for soma—but at the same time the Gandharvas made the *vīṇā* and sang a song to please Vāc. Like a frivolous woman she turned to them, switching to dance and song from prayer and praise. Thus do women “take after Vāc” and are attracted to those who perform such vanities, dancing and singing.

It is not too difficult to see through these elite Brahmanical myths to lively undercurrents of other musical cultures, including no doubt secular styles as well as “folk” religious traditions that would eventually emerge into view as the diverse

⁶⁸ Early on Gandharva was a heavenly guardian of soma; in later mythology they became a class of lusty heavenly musicians, often paired with the apsarases (watery “nymphs”), and ever ready to play various parts in imaginative fictions (like satyrs, fauns, or cupids in the classical Western imaginary). Cf. Thite 1989.

popular devotional sects to Vishnu, Krishna, Kali, Śiva-Śakti, and so forth. In many of such traditions more exuberant forms of song and dance took on ritual and religious significance, the most famous example being Śiva as the Cosmic Dancer, an ecstatic lord of life and death whose feet trod the cremation ground of earth in a reveling, life-and-death-embracing whirl of energy. Also to be connected with these divisive social tensions, between elite-priestly and popular social strata, are the various “sramanic” movements that gave rise to sects like the Jains and, most enduringly, Buddhists. Followers of the Buddha, it will be recalled, defined themselves largely against and in their rejection of certain Brahmanical “orthodox” positions. Among these was the religious marginalization of women, who were by contrast allowed to enter the Buddhist *saṃgha* (community).

The rise and spread of Buddhism between ca. 500 BCE (?) and 1000 CE into nearly every corner of Asia west of the Caspian Sea was, as a world historical process, comparable in effects and importance only to the rise of Christianity and, later, Islam. Early on Buddhism received strong support from various royal patrons, including Aśoka (ca. 299-237 BCE), the founder of the Mauryan empire, and (at least according to Buddhist texts) Greco-Bactrian rulers like Menander (“Milinda,” reg. ca. 120 BCE). It was at this same time that literacy was taking hold in the Indian cultural sphere, principally used in trade and, related to this, in defining and proclaiming political power. Aśokan Rock Edicts—at least one, found at Kandahar, Afghanistan, written in Greek and Aramaic—attest to the overlapping, contesting spheres of power of Greco-Persian overlords and their contemporary rivals further east.⁶⁹ As the Rock Edicts make

⁶⁹ Vassiliades 2000: 56-89 gives the Greek text of the Kandahar Edict (p. 56), which enjoins people to follow the king’s lead in “abstaining from eating living things” and tells the king’s “hunters and fishers

clear, one way Aśoka defined his sphere of power (equated with the whole world) was as the realms where *baṃhmane cā śamane cā*—Brahmans and Sramans—existed, who were found everywhere “except among the Greeks” (*Yoneṣu*, “Ionians”) (see Vassiliades 2000: 57, n. 71). (The epic *Mahābhārata* is even more Brāhmano-centric, saying that either because of the absence, or the anger, of Brāhmins, such “Mlecha” (barbarian) tribes of Kṣatriya or warriors as the Śakas, Yavanas (Greeks), and Kambojas (living around Kapisa in the area of Gandhara), had degraded to the status of Śūdras, the lowest of the four castes.⁷⁰)

With the rise of the somewhat mysterious Kushans in central Asia in and after the first century CE, Buddhism became one of the most prominent of the diverse religions that flourished in the cities and on the hillsides along the sprawling Silk Road that linked in trade the Mediterranean and East Asia.⁷¹ While Chinese silks, piled on camel-back, traded their way across Asia to adorn Hellenized Roman empresses in Rome and, later, Constantinople, wandering ascetics might commit to memory an ocean of venerable songs, mantras, sutras, ślokas and śāstras in some hilltop Indian monastery, then later wind up in China translating this store of learning into Chinese for the local devout.⁷²

Such a one was Kumārajīva (fourth century CE), with whom this chapter will conclude. This native of the oasis city of Kucha—(*gūi zī* 龜茲 “turtle grassy” in

to stop their hunting.” By the first century CE there were Indians in cosmopolitan Alexandria (the Egyptian one) (cf. *ibid.*: 79-80, citing Dion Chrysostomos), while Buddhist caves in Gandhara (in and around the Peshawar valley, Pakistan) list “Yavanas” (Greek) benefactors, and Buddhist formulas written in a “Bactrian Greek” script have been found in Afghanistan (*ibid.*: 72-3). Meanwhile Buddhist Sramanas had definitely reached, or were known in, the Han capital of Chang-an by the second cent. CE (see Wright 1959: 21).

⁷⁰ Cf. *Mahābhārata Anuśāsana Parva* 33.19, 35.17-18; Vassiliades 2000: 108-37; also Tarn 1984: 170.

⁷¹ An indispensable read is Foltz 1999.

⁷² An engrossing classic on the bustling cultures of the Silk Road at its medieval zenith is Schafer 1963.

Chinese), situated on the northern edge of the Tarim basin, a key stop on the Silk Road's northern route and famous for its music⁷³—whose father was Indian, had studied Vedic (and “heretical”) traditions in Kashmir, then returned home where he converted to Mahayana Buddhism. He was then taken captive in war and ended up in northwest China where he became a famed monk and translator of Buddhist scriptures into Chinese. Once, while engaged in translation work and discussing with his native assistant Hui-jui similarity and difference between India and China, he related what he saw as key cultural and linguistic differences between his native and adopted lands:

“Custom in India (**thientuk* 天竺 “Hindica”) holds literary composition (*wén zhì* 文製) in high regard. Its tonal cadence and formal consonance (*yùn* 韻 “rhyme”) for setting it to music (lit. “to strings” *xián* 絃) is what make it good. Every time the king holds court there will always be odes sung in praise (“acclamations” *zàn* 贊) of his virtue, and when people attend a religious ceremony, it is the songs and praises (*gē tàn* 歌歎) that are held in highest honor. The *gāthā*-songs (Middle Chinese **get* 偈) and praise-hymn *śloka*s (*sòng* 頌) which occur in the sutras are all of this type (*shì* 式). But in the process of translating a Sanskrit text into Chinese it loses all its subtle adornment. Even if you get the main idea, you are still far cut off from its sophisticated form (*wén tǐ* 文體). It’s something like chewing cooked rice and then feeding it to another person. Not only has it lost its flavor (*wèi* 味); it will also make him want to throw up.” (After Mather 1992: 6, and Mair and Tsu-Lin 1991: 382-3, 387-8)

This passage, fascinating in several regards, attests to the enduring values of orality and musical performance within the Indo-Iranian cultural areas of India and Central Asia. Even in a place and time in which textuality had definitely risen to high levels of importance for learning and the preservation of knowledge both sacred and

⁷³ Cf. Schafer 1963: 50-57, this for Tang times at least.

secular, still for Kumārajiva “style” or aesthetics are aurally and musically centered; good poetry is that which can be sung and enjoyed as live, performed song. The wholesale loss of these musical aspects in translation to Chinese (of which the difference to Indic languages could, in any case, hardly be more radical) was to Kumārajiva nauseating and loathsome at a very basic, visceral level, like being fed already-chewed rice.⁷⁴

It is curious, finally, that he chose that particular simile, that what is lost in translation is the “flavor” of his native Sanskrit or Prakrit songs. For it was *rasa* “juice, flavor,” that was already found above to be so untranslatable into English. It was *rasa*, with its “richness of associations,” that had made *sāma* and *soma* so mutually implicating, had flowed through uniting all creatures, earth, water, plants, persons, the voice, verses, song, and the High Chant in the *Chandogya Upaniṣad*, to become the “the key word of all Sanskrit literary criticism.” For indeed, it is the *rasa* of orality itself, the lived experience of singing and performing music for the gods in communal ritual with one’s “companions” (*sakha*) or “school” (*śākhā*), that is lost in the translating reduction of voice to script, of undulating, evanescent sound to silent but durable written sign.

⁷⁴ See Mair and Tsu-Lin 1991, for an important and intriguing study of how the musicality of Sanskrit (specifically, through Buddhist texts) most likely influenced the development of “Recent Style” poetic lyricism in sixth-century China; they begin their study with Kumārajiva’s lamenting comparison (p. 382). Chinese prosody basically lacked the phenomenon of meter, and in admiration of the “marvelous sound” effects of Buddhist songs Chinese poets (in Mair and Tsu-Lin’s thesis) “invented” a system of tonality rules to imitate the admired metrical effects of Sanskrit’s richly melodic quantitative verse.

Coda: Islands of Musical History

In the South Pacific, between the Solomon Islands and Vanuatu (formerly the New Hebrides), lies a small archipelago called the Santa Cruz Islands.¹ The largest isle, Nidu, a mountainous spine of volcanic rock fringed by limestone reefs, is equidistant from Moscow and New York. Off shore to the north stands Tinakula, a 2,000 foot high capricious volcanic cone that erupted around 1840, killing its inhabitants.² The area is also subject to frequent and strong earthquakes.³ The Melanesian natives of Nidu and

¹ All information (and interpretation) on the culture of Santa Cruz Islands presented here is based on the work of William Davenport (1962, 1964, 1975, 1989).

² In fact Tinakula has been constantly active since at least 1951, with a record of eruptions that includes the years 2002, 2001, 1999, 1995, 1989-90, 1984-85, 1971, 1965-66, ?1955, 1951, 1909, 1886, 1871, 1869, 1857, ?1865, ?1860, 1855, ?1840, 1797, 1768, 1595 (cf. <http://www.volcanolive.com/tinakula.html>, accessed 4/14/04; the site contains photos).

³ Lying on the tectonic boundary of the Australian and Philippine/Pacific plates, the Santa Cruz islands are subject to frequent seismic activity in the magnitude 7 range. Quakes of magnitude 8 hit Santa Cruz in 1966, 1980, 1997 (<http://www.geo.lsa.umich.edu/~MichSeis/QUAKEVIEW/970421SantaCruz/tecto.html>).

Primary (P) seismic waves are compression waves that travel through solids and liquids, and are directly analogous to sonic compression vibrations. The frequencies of seismic waves are too low for human hearing, but “sometimes animals can hear the P waves of an earthquake” (<http://www.geo.mtu.edu/UPSeis/waves.html>). They can be sped up to be rendered humanly audible (audio examples are available at <http://www.seismo.unr.edu/ftp/pub/louie/class/100/seismic-waves.html>, and “The Sounds of Seismic” <http://www.seismo.unr.edu/ftp/pub/louie/sounds/>, and from the USGS, <http://quake.usgs.gov/info/listen/>). The seismically active Earth is thus a loud and noisy planetary body.

The science and technological infrastructure of seismology represents another aspect of the pervasive globalism of the modern world. An interacting global network of seismic stations not only monitors all seismic activity (natural and artificial—weapons testing etc.), seismic data has also been used to map and model the hidden, internal structure of the earth. It has been used to map the hidden topography of the earth’s surface, and to reconstruct the geological history of its shifting plates. Many evolutionary theorists have come to think of this dense and multifaceted network of technological awareness, in all its forms (from news media to seismic stations, literature to telecom satellites), as composing a “noosphere,” the latest level of information generation and exchange evolving out of the biosphere, and like it reflecting and effecting processes and events on both local and global levels. On cultural levels of exchange, seismic activity provides a good analogy for the complex interrelation of local and global contexts: (most?) events are like earthquakes in being *epicentral*, that is, emanating from a discrete location and radiating from that central locale. Like earthquakes too, events are usually

the surrounding islands speak three related non-Austronesian languages. Their ancestors apparently arrived here sometime before, perhaps long before, the Mycenaean palaces burned, the Shang were overthrown by Zhou invaders, or the Vedic tribes penetrated the Indus Valley. The Spaniard explorer Alvaro de Mendaña happened upon Nidu in September, 1595, apparently during an eruption of Tinakula, which may have been responsible for the sudden loss of one of the expedition's four ships and nearly half the total crew. Interaction between sailors and islanders turned hostile, a mutiny in the ship's own ranks turned bloody, and Mendaña died there of malaria. Only two of the fleet's remaining three ships made it, separately, to the Philippines several months later.

Largely ignored by outsiders for the next 250 years, in the late nineteenth century an Anglican mission ship, and blackbirding abductors, began to make stops at Nidu. The islanders were still resistant,⁴ the missions largely failed, but foreign diseases killed as much as half the population. In the 1920s British established direct administrative rule,⁵ until 1942 when the Japanese invaded the Solomon Islands. They never occupied Nidu, but a massive U.S.-Japanese naval battle took place nearby in October of 1942, when the *USS Enterprise* shot down more Japanese planes in half an hour than most battleships did throughout the war. After the war until 1978, when the Solomon Islands gained independence, Western-led development on Nidu proceeded

most strongly felt, and often cataclysmic, at their epicenters, while their effects at greater ranges are less noticeable and more diffuse.

⁴ Islanders killed one Bishop John Coleridge Patteson in 1871, and a commodore James Graham Goodenough in 1875 (*Encyc. Brit.* 11th ed. s.v. Santa Cruz; the article adds that in the past the natives "have proved treacherous, and cannibalism is not extinct. The work of missionaries, however, has borne good fruit").

⁵ The 1911 *Encyclopedia Britannica* (11th ed.) identifies Santa Cruz as a Melanesian archipelago "belonging to Great Britain," and relates that the British protectorate was declared in 1898.

quite quickly, as native councils, courts, health and medical programs, churches,⁶ and local schools were established. Nidu, for good or ill, had joined the modern world.⁷

Until the 1930s the Santa Cruz Islands were linked by a complex commercial trading network.⁸ Large sailing canoes—outfitted with crab-claw shaped sails made of woven pandanus leaves⁹—carried traders to other islands, goods and women were exchanged, the prized currency being long coils made of pigeon feathers and the bright red plumes of the scarlet honey eater. Ten of these coils bought a bride; a hundred would buy a group of men a collective concubine. Islanders cultivated gardens of several crops, raised pigs, fished, hunted, and gathered forest resources. Men and women pursued different activities and generally avoided one another, while men were each expected to ply an economic specialty to earn and accumulate wealth in the form of feather currency. Related men gathered in associations, in which they cooperated to defend district territories, conduct trade and engage in hostilities with other districts. Each man has a tutelary deity responsible for his success; those who succeed are understood to have attentive, powerful deities.

⁶ After the war Nidu were far more receptive to missionizing than in previous generations, partly because of the mistaken belief, fed them by Anglican preachers, that God was responsible for the awe-inspiring technological superiority of Europeans (Davenport 1989: 275-76).

⁷ Davenport 1989 is a more recent and lively account of some of the effects and aftermath of WWII on the Santa Cruz Islanders, in which the violence and coercion of colonial presences becomes apparent, as well as the readiness of Solomon Islanders including Santa Cruz islanders to object to and resist colonial orders. One of the principal interests for pre-War colonial powers in the region was extracting timber from Vanikoro island to the south of Nidu, work carried out by an Australian logging company and for which labor was recruited and repatriated from all around the islands by the British district officer, who held a monopoly on trade in the area. Vanikoro also housed the jail where islanders were incarcerated for crimes. An example of the arbitrary violence endured by Nidu residence was when protectorate police marched through villages burning all their sacred houses (1989: 262). Equally arbitrary and inexplicable to islanders were some of the curious behaviors of American military men. Out of the sheer fortunes of war, Nidu twice avoided becoming an American base of operations (267-68).

⁸ Davenport 1962 documented the complex economics of this trade network.

⁹ On which cf. <http://www.aloha.net/~vaka/return.html> (accessed 4/14/04).

Traditional Nidu ceremonial life was defined by “an extended series, lasting many years, of invitational feasts and dances sponsored by a small group of men to propitiate their tutelary deities. As well as being costly religious rituals, these were, and still are, the most enjoyed social events, and they are the occasions at which much of Nidu aesthetic and expressive culture is displayed” (Davenport 1964:). Nidu ritual songfests, as described by anthropologist William Davenport in the 1960s and 1970s, “portray a total picture of Santa Cruz society” (Davenport 1975: 47). In fact, they exemplify many of the patterned rhythms of music culture we have overheard many times already in the course of this work, and thus provide a suitable point of closure.

When a village or family group has suffered misfortune, like sickness, death, bad crops or trouble at sea, spirit mediums are engaged to determine the cause. When it is discovered that gods have been angered, the group may build or rebuild a dance ring, and establish a festival cycle. Doing so will work to rectify the transgression that caused the misfortune, by pleasing the offended deity with musical celebration. The dance is an invitation for the gods to come as the most honored guests, to be entertained and pleased by what is also their favorite pastime, singing and dancing.

Such a ring will be located near a men’s clubhouse, with dwellings, the sphere of women and children, some distance away. The ground of the dance floor must also be pliant but firm and especially resonant to the stamping of feet. A good ring will echo for a mile or two away. The dance hosts invite guests from another village to come for the all-night affair. Then they prepare for it, women spending hundreds of hours making special feast dishes, the men getting ready for the dance itself.

Only strong, handsome young men will don the elaborate costumes that mark them out as leaders of the singing and dancing. Their hair and other parts of their body are whitened with lime or blackened with charcoal. Geometrical patterns of dots are painted on their faces. With tall, brilliant plumes in their hair, ornamental bands around their arms and legs, a large circular breast pendant hanging down from their necks, they are in this form so seductive that they are in danger of attracting female deities who might harm them. Some of their accoutrements are musical: their knee rattles and the bamboo tubes they carry. Many of them are family heirlooms, and thus display kinship and genealogical identities. Until recently much of the costume comprised the daily attire of every senior man. The ritual costume then serves initiatory functions, and is a celebration of adult male status. But the real makers of the costumes, and of the song and dance itself, are the gods. Each ritual object has (or had) a prototype somewhere on the island that is the original, received from gods, of which all others are copies. Accordingly, the costumed choir of men in the dance are impersonators of the deities themselves. With feathers in their hair, their heads are birds. The most important ornament, however, is the pearl shell nose pendant, *nelā*, which means pearl shell but also the wearers of the pendants, and sometimes used to name the entire songfest.

The *nelā* begins in late afternoon, and may go on for twenty-four or thirty-six hours, until the dancers are exhausted. A senior man leads out the costumed choir of young men from the men's house to the dance ring. The young men's choir will lead the dance's rhythmic stomp, in unison with occasional offbeats, followed by senior men, then women and children, the entire group moving round in a counter-clockwise

flow. In effect, the last of the women and children are just ahead of the leading men, as the beginning and end of the dance troupe is blurred into circularity.

Usually a senior man will introduce a song, and when recognized it is picked up by the rest of the choir. Most songs take a three-line form, and will be repeated over and over indefinitely, as long as interest in it holds out. This may be as little as four or five minutes or more than an hour. Half the young men's choir sings the first line, the other half responds with the next, and so on, other participants following the two sides. Since songs are three lines long, the two choir halves alternate in the lines they sing. As a song repeats, its end blurs into the beginning, like the circling dance itself, and song lyrics are artfully composed to work well in the round.

Slowly paddling at sea

Venus rises, eei!

I wait for the woman's canoe [Orion]

Slowly paddling at sea

Venus rises, eei!

I wait for the woman's canoe

Slowly paddling at sea...

Utter simplicity is complicated in performance: for the responding half of the choir the "second" line is really the first, the same line being the third one the other side sings, while the "first" line for the responding chorus is really second, and so on. As singing proceeds in this manner and excited tension grows, a syncopation may arise between the singing and the stomping rhythm; some participants throw in offbeats; a wave of climax is reached then recedes with shouts and enthusiastic yells.

Song selection for a dance is guided by a chosen theme. From the wide repertoire of song themes—fighting, sailing, shark or turtle fishing, rivers, birds, trading, young men and romance—a generic direction is indicated, like fighting, or rivers, but any given song may open conceptual pathways for other songs that touch but run in tangential directions. Frustrated love might lead to travel, to rivers, to shark catching near that river, and so on, this artful stringing of songs being an appreciated dimension of the songfest’s aesthetics. Indecision itself might even be thematized:

On the path to Tēmōtū Neo [village]

He stands not knowing which path to take

The young man’s feet miss the correct way

On the path to Tēmōtū Neo

He stands not knowing which path to take...

The small variety of tunes to which songs are sung are of three types. The main one is “prone,” a chant-like recitative only used at night; another is “upright,” which is more melodic and is used during the day; the third Davenport calls “lively,” since these have fast tempo, catchy melody, and are used as a relief or variation on the other two when the dance needs invigoration. Different themes and lyrics are thought of as suiting one or another of these types. Many themes can be sung in any type, while more “contemplative” themes like the stars, paddling, or rivers are only suited to the prone mode, whereas others, like the fragrant leaves the costumed men wear, may be fitted to prone or upright, but never to the lively mode. There is, in other words, a considerable, multi-leveled canon of artistic norms that govern the collective expression, composition, and performance of the songfest songs.

When a group has maintained a dance ring for many years, having accrued social prestige and a fund of reciprocity for future dances and host venues, and when it is felt that the initiating transgression has been redressed, the dance ring is formally closed. This is marked in a lavish final celebration. It is at these events when certain songs of the gods themselves, which were “overheard” from the gods’ own songfests when a human happened upon them in remote places of the islands, will be sung. These important divine songs are only heard at ring openings and closings. A ring closing is also a time for a large public ritual of compensation, focusing on the hosting women who labored to produce the surplus foodstuffs and to prepare dishes at the songfests over the years of the ring’s activity. In the past, women received coils of the cherished red-feather currency for their services as dance hostesses (the red-feather currency is said to be no longer made).¹⁰

Songs are of course also sung about the feather money itself:

Many women ask where it comes from, eiaa!

Money comes from the men’s house

My brother has strong magic

Many women ask where it comes from, eiaa!

Money comes from the men’s house...

¹⁰ But see volcanologist John Seach’s 1995 photo of a Reef Island chief proudly displaying his red-feather coil, rolled up like a long flat garden hose (<http://www.volcanolive.com/tinakula1995.html>, accessed 4/14/04). The Solomon Islands National Museum in Honiara, Guadalcanal, had had one such red-feather coil, but it was stolen during the violent coup d’etat of 2000. This theft is the least of problems in the Solomon Islands. For the last five years rival armed political groups (often composed of squads of children with guns) have clashed for power in Honiara (the capital and former U.S. military base), and on Guadalcanal and Malaita generally. Amnesty International has documented the crisis in which unknown numbers have been killed and tortured, thousands displaced and dispossessed (see report <http://web.amnesty.org/library/print/engasa430052000?open&of=eng-slb>). In July of 2003 an international intervention force, led by Australia, deployed on Guadalcanal. According to reporter Michael Field (“New Thin Red Line,” *Pacific Magazine* online, Sept. 2003, <http://www.pacificislands.cc/pm92003/pmdefault.php?urlarticleid=0003>), the Australian intervention coordinator Nick Warner “now holds the real power in the Solomons,” as he engages in peace and disarmament talks with Harold Keke, a “manic” “Guadalcanal warlord,” who recently revealed that members of an Anglican religious order, taken hostage in April, are dead.

But if money “comes from” the men’s house (as this song insists in response to the women’s initial question), nevertheless at a ring closing it goes to the women. Here at the men’s house dance ring, which the women have worked to support through many years of dances, each is called up by name to take her share of gifts and currency from the ring. In this way another cycle of a complex economy of the sexes, the gods, and the generational hierarchy, itself integrated into the wider ecology of survival, prestige-acquisition and symbolic display, comes to a harmonious close.

Davenport’s account of Nidu song ceremonies is of course an ethnographic representation—and a brief one at that, not much longer than my summary—which is hardly an unmediated window into real lives and meanings of the Nidu themselves. But this proviso, long standard since anthropology began to reflect on, and feel anxious about, its textual constructs of mediated representation, is hardly unique to anthropology. Indeed, the past too is another country, and any inquiry that seeks to “reconstruct” how others lived in other times and places, has entered into the methodologically bedeviled territory of “representation.” All translation, moreover, involves a hermeneutical exchange or dialectic of comparison. There is no such thing as a purely “emic” description, presented “from the other’s point of view” or—to subvert the dominant visualism in this notion and recover the linguistic root of the emic/etic concept—“as it strikes the other’s ear.” Though neither should this stop efforts to describe “thickly,” padding our prose with native words and their glosses,

gravitating toward vivid native images, seeking the strange, doggedly centering on difference. This is, after all, why we learn foreign languages, and travel, to experience the world's variety in its vastness, to taste of other times, other climes.

But apart from the ever-present tensions of representation, the real reason I have closed with the Nidu is twofold. First, their little watery corner of the world, embattled by colonial and postcolonial troubles, simply deserves recognition, here in the heart of the “First World.” Indeed, it is just one of the thousands of smaller, out of the way places which will be, and are even now coming to prominence in world affairs, unfortunately usually in tragic modes (see above note on the Solomon Islands civil war).

Secondly, the example of the Nidu songfest repeats many key themes of musical culture encountered numerous times in the foregoing study. Obvious are patterns like the feast as the social setting for musical festivities and, allied to this, the notion that the music of humans attracts and pleases the gods or spirits. The musical feast, where gods are present, pleased and placated, is a “total social phenomenon” (to use Marcel Mauss’ [1990] phrase) that articulates, even as it provides a time and space for contemplation of, the constituting elements and categories of social life. Among the Nidu, as in ancient Greek, Chinese, and Vedic cultures—so too with Egypt, Mesopotamia, Israel-Palestine, Pre-Columbian Mexico, South America, etc.—the sounds of song, music and dance serve to define a common center of attention and focused energy, even as they radiate outward with the message of prosperous vitality at that center. Music’s message re-echoes, self-reflexively, back at that center, for like other rituals, along with the myths that explain them or which they are supposed to

embody, music is primarily a “narrative” that a social group tells and performs for its own sake. Symbolic culture, more generally, and this especially so in the more dramatic and self-reflective stagings of cultural life, is directed inward, serving to define individual identities in terms of collective sets of values, sentiments, beliefs and practices (even if these values are not uncontested). What is called “music,” etically or by way of cross-cultural comparison, tends toward dynamic and performative synthesis of cultural parts, dramatizing the whole, putting it into rhythmic temporal motion, broadcasting it on the common bandwidth of sky: “this is who *we* are, what *we* do.” This is why, perhaps, in situations of cultural contact music tends to become a principal marker and maker of “ethnos,” those stereotyped images of “folk” culture, what makes groups of individuals into a “people.”

From a historical point of view, what has emerged most strongly from the above study, I hope, is the high degree to which musical practices contributed to shaping human cultures. This is of course true on a number of relatively minor or superficial levels. But it also runs much deeper, into the imaginative and performative construction of temporality itself. Constructing a timeframe is as crucial to the development of a cultural world as the opening and taming of a space for living. In the Paleolithic and even more so in the Neolithic, human groups experimented with the domestication of time. Even as they culled weeds in their gardens, or penned animals in corrals, privileging and selecting certain species and breeds while preventing or hindering others, to domesticate crops and herds, they also employed the growing artistic means at their disposal to cultivate in their own psyches narratives of temporality. Cosmic time just is. It has no meaning. Human time—domesticated

time—flows, returns, fights, dances, struggles, is born and dies, conquers, rises and descends, drives, wanders, waxes and wanes.

It may be argued that a very basic, root-level constituent of what it is to be human is to have a psychological grounding in time. That grounding is, and was at the first, forged through dramatic performances of seasonality. Sing as dawn breaks, mourn as moon wanes, dance when corn grows, or rain returns, or herds appear—these are all musical markings of the temporal terrain, signposts for memory, points around which the mind can turn, and return. Both philosophy and literary criticism in the twentieth century have focused heavily on how reflective consciousness roots itself in time. Temporality has been at the heart of phenomenological discourses about being, and of literary critical theories about language and narrativity.¹¹ An amplified attention to music, song, dance, and performance generally, as I have tried to demonstrate throughout this study, may continue to offer many clues into the relatively constant mysteries of experienced time, subjectivity, and the lived social-cognitive constructions of rhythm, periodicity, and memory.

The final word I leave to the Lakota holy man Lame Deer (1903-1976), whose myth about the origins of the sun dance is, in its own way, a recapitulation of the basic argument of this work: music is not only elemental to humanity but also to our animal being, we creatures of earthly rhythms, formed of sun, moon and wind, mind and voice, water and blood, love, care and time.

¹¹ E.g. Ricoeur 1984, 1985, 1988.

The sun dance is our oldest and most solemn ceremony, the “granddaddy of them all,” as my father used to say. It is so old that its beginnings are hidden as in a mist. It goes back to an age when our people had neither guns, horses nor steel—when there was just us and the animals, the earth, the grass and the sky.

Nowadays, clever people study sun spots through giant telescopes, and your man-made little stars zoom around the earth as if they were late on the job. You have even landed on the moon and left a few plastic bags of urine there and a few chewing-gum wrappers. But I think the Indians knew the sun and the moon much better in those long-forgotten days, were much closer to them.

Huddling in their poor shelters in the darkness of winter, freezing and hungry, hibernating almost like animals, how joyfully, thankfully they must have greeted the life-giving sun, let it warm their frozen bones as spring returned. I can imagine one of them on a sudden impulse getting up to dance for the sun, using his body like a prayer, and all the others joining him one by one.

So they made this dance, and slowly, generation after generation, added more meaning to it, added to its awesomeness. My father taught me, as he had been taught by his father, the learning and teaching going back to the beginning of time.

Lame Deer, *Lame Deer, Seeker of Visions* (1972: 209)

Abbreviations

NGDMM. Sadie and Tyrrell. 2001. *New Grove Dictionary of Music and Musicians*.

Bibliography

Abram, David. 1996. *The spell of the sensuous: perception and language in a more-than-human world*. New York: Pantheon Books.

Allan, Sarah. 1981. *The heir and the sage: dynastic legend in early China*. San Francisco: Chinese Materials Center.

—. 1991. *The shape of the turtle: myth, art, and cosmos in early China*. Albany, NY: State University of New York Press.

Allen, T. W., W. R. Halliday, and E. E. Sikes (eds.). 1936. *The Homeric hymns*. 2nd ed. Oxford: The Clarendon Press.

Bagley, Robert. 1999. "Shang archaeology." Pp. 124-231 in *The Cambridge history of ancient China. From the origins of civilization to 221 B.C.*, edited by Michael Loewe and Edward L. Shaughnessy. Cambridge: Cambridge University Press.

—. 2000. "Percussion." Pp. 35-64 in *Music in the age of Confucius*, edited by Jenny So. Washington D.C.: Freer Gallery of Art and Arthur M. Sackler Gallery.

Bakker, Egbert J. 1996. *Poetry in speech: orality and Homeric discourse*. Ithaca, NY: Cornell University Press.

Barker, Andrew. 1984. *Greek musical writings, volume I: the musician and his art*. Cambridge: Cambridge University Press.

—. 1989. *Greek musical writings, volume II: harmonic and acoustic theory*. Cambridge: Cambridge University Press.

Barnard, Noel. 1973. *The Ch'u silk manuscript: translation and commentary*. Canberra: Dept. of Far Eastern History, Australian National University.

Barton, John, and John Muddiman (eds.). 2001. *The Oxford Bible commentary*. Oxford: Oxford University Press.

- Basso, Ellen B. 1981. "A "musical view of the universe": Kalapalo myth and ritual as religious performance." *The Journal of American Folklore* 94: 273-91.
- . 1985. *A musical view of the universe: Kalapalo myth and ritual performances*. Philadelphia: University of Pennsylvania Press.
- Bateson, Gregory. 1979. *Mind and nature: a necessary unity*. New York: E. P. Dutton.
- Beck, Guy L. 1993. *Sonic theology: Hinduism and sacred sound*. Columbia, SC: University of South Carolina Press.
- Benveniste, Emile. 1973. *Indo-European language and society*. London: Faber.
- Bergaigne, Alan. 1969. *Vedic religion, according to the hymns of the Rgveda (3 vols.)*. Translated by V. G. Paranjpe. Poona: Veda-Vidya Mudranalaya.
- Besmer, Fremont E. 1983. *Horses, musicians, and gods: the Hausa cult of possession-trance*. Boston: Bergin and Garvey.
- Bhise, Usha R. 1989. "Vina in mythology." Pp. (book 2) 73-78 in *Music and mythology, a collection of essays*, edited by R. C. Mehta. Baroda, India: Indian Musicological Society.
- Bierhorst, John. 1974. *Four masterworks of American Indian literature: Quetzalcoat/The ritual of condolence/Cuceb/The night chant*. New York: Farrar Straus and Giroux.
- . 1985. *Cantares mexicanos = Songs of the Aztecs: translated from the Nahuatl, with an introduction and commentary*. Stanford: Stanford University Press.
- Birrell, Anne. 1993. *Chinese mythology: an introduction*. Baltimore: Johns Hopkins University Press.
- . 1997. "The Four Flood Myth Traditions of Classical China." *T'oung Pao* 83: 213-59.
- . 1999. *The classic of mountains and seas*. London/NY: Penguin Books.
- Bodewitz, H. W. 1990. *The Jyotistoma ritual: Jaiminiya Brahmana I, 66-364*. Leiden: E.J. Brill.
- Boesch, Cristophe, and Hedwige Boesch. 1982. "Optimization of nut-cracking with natural hammers by wild chimpanzees." *Behaviour* 3: 265-86.

- . 1989. "Hunting behavior of wild chimpanzees in the Tai National Park." *American Journal of Physical Anthropology* 78: 547-73.
- Bogucki, Peter. 1999. *The origins of human society*. Oxford: Blackwell.
- Bolinger, Dwight. 1978. "Intonation across languages." Pp. 471-524 in *Universals of human language. Volume 2: Phonology*, edited by Joseph H. Greenberg. Stanford: Stanford University Press.
- Boltz, William G. 1999. "Language and writing." Pp. 74-123 in *The Cambridge history of ancient China. From the origins of civilization to 221 B.C.*, edited by Michael Loewe and Edward L. Shaughnessy. Cambridge: Cambridge University Press.
- Braun, Joachim. 2002. *Music in ancient Israel/Palestine: archaeological, written, and comparative sources*. Grand Rapids, MI: William B. Eerdmans.
- Brinton, Daniel Garrison. 1884 [1969]. *The Lenâpé and their legends; with the complete text and symbols of the Walam olum, a new translation, and an inquiry into its authenticity*. New York: AMS Press.
- Broda, Johanna. 1970. "Tlacaxipeualiztli: a reconstruction of an Aztec calendar festival from 16th century sources." *Revista Española de Antropología Americana* 5: 197-273.
- Brosch, Franz J. 2002. *Ecocide: a short history of the mass extinction of species*. London: Pluto Press.
- Brown, Donald E. 1991. *Human universals*. New York: McGraw-Hill.
- Brown, Norman Oliver. 1947. *Hermes the thief: the evolution of a myth*. Madison: University of Wisconsin Press.
- Brown, Steven. 2000. "The "musilanguage" model of music evolution." Pp. 271-300 in *The origins of music*, edited by Nils Lennart Wallin, Björn Merker and Steven Brown. Cambridge, MA: MIT Press.
- Brundage, Burr Cartwright. 1985. *The jade steps: a ritual life of the Aztecs*. Salt Lake City: University of Utah Press.
- Bücher, Karl. 1899. *Arbeit und Rhythmus*. Leipzig: B.G. Teubner.

- Bundy, Elroy L. 1962. *Studia Pindarica*. Berkeley: University of California Press.
- Burkert, Walter. 1983. *Homo necans: the anthropology of ancient Greek sacrificial ritual and myth*. Berkeley: University of California Press.
- . 1984. "Sacrificio-sacrilegio. Il trickster fondatore." *Studi storici* 25: 835-45.
- . 1985. *Greek religion: archaic and classical*. Oxford: Blackwell.
- Burkhart, Lourise M. 1992. "Flowery heaven: the aesthetic of paradise in Nahuatl devotional literature." *Res* 21: 88-109.
- Buxton, Richard. 1992. "Imaginary Greek mountains." *The Journal of Hellenic Studies* 112: 1-15.
- Calame, Claude. 1997. *Choruses of young women in ancient Greece: their morphology, religious role, and social function*. Translated by Derek Collins and Janice Orion. Lanham: Rowman & Littlefield.
- Càssola, Filippo (ed.). 1975. *Inni Omerici*. [Milano]: Fondazione Lorenzo Valla.
- Castellino, G. R. 1972. *Two Sulgi hymns (B, C)*. Studi Semitici 42. Roma: Istituto di studi del vicino oriente, Università di Roma.
- Chamberlain, Alexander F. 1907. "Thomas Jefferson's ethnological opinions and activities." *American Anthropologist* (n.s.) 9: 499-509.
- Chang, Kwang-chih. 1983. *Art, myth, and ritual: the path to political authority in ancient China*. Cambridge, MA: Harvard University Press.
- . 1986. *The archaeology of ancient China*. New Haven: Yale University Press.
- . 1999. "China on the eve of the historical period." Pp. 37-73 in *Cambridge history of ancient China. From the origins of civilization to 221 B.C.*, edited by Michael Loewe and Edward L. Shaughnessy. Cambridge: Cambridge University Press.
- Chang, Kwang-chih, Pingfang Xu, and Sarah Allan. 2002. *The formation of Chinese civilization: an archaeological perspective*. New Haven: Yale University Press.
- Chen, Cheng-Yih, Wei-ssu Tan, and Chih-mei Shu (eds.). 1994. *Two-tone set-bells of Marquis Yi*. Singapore/River Edge, NJ: World Scientific.

- Chittenden, Jacqueline. 1948. "Diaktoros Argeiphontes." *American Journal of Archaeology* 52: 24-33.
- Classen, Constance. 1990. "Sweet colors, fragrant songs: sensory models of the Andes and the Amazon." *American Ethnologist* 17: 722-35.
- Clay, Jenny Strauss. 1989. *The politics of Olympus: form and meaning in the major Homeric hymns*. Princeton, NJ: Princeton University Press.
- Clendinnen, Inga. 1991. *Aztecs: an interpretation*. Cambridge: Cambridge University Press.
- Cohen, Alvin P. 1978. "Coercing the rain deities in ancient China." *History of Religions* 17: 244-65.
- Cohen, H. Floris. 1984. *Quantifying music: the science of music at the first stage of the Scientific Revolution, 1580-1650*. Dordrecht: D. Reidel.
- Comotti, Giovanni. 1989. *Music in Greek and Roman culture*. Baltimore: Johns Hopkins University Press.
- Cook, Constance A., and John S. Major (eds.). 1999. *Defining Chu, image and reality in ancient China*. Honolulu: University of Hawai'i Press.
- Cook, James. 1821. *The three voyages of Captain Cook around the world*. London: Longman, Hurst, Rees, Orme, and Brown.
- . 1846. *The voyages of Captain James Cook*. London: William Smith.
- Coomaraswamy, Ananda K. 1937. "The parts of a Vina." *Journal of the American Oriental Society* 57: 101-03.
- Copenhaver, Brian P. 1992. *Hermetica: the Greek Corpus Hermeticum and the Latin Asclepius in a new English translation, with notes and introduction*. Cambridge: Cambridge University Press.
- Courbin, Paul. 1980. "Les lyres d'Argos." *Bulletin de correspondance Hellénique, Études Argiennes* Supplément 6: 93-114.
- Croizier, Ralph. 1990. "Qu Yuan and the artists: ancient symbols and modern politics in the post-Mao era." *The Australian Journal of Chinese Affairs* No. 24: 25-50.

- Cross, Ian. 1999. "Is music the most important thing we ever did? Music, development and evolution." Pp. 10-39 = <http://www.mus.cam.ac.uk/~ic108/MMS/> in *Music, mind and science*, edited by Suk Won Yi. Seoul: Seoul National University Press.
- . 2001. "Music, cognition, culture, and evolution." Pp. 28-42 in *The biological foundations of music*, edited by Robert J. Zatorre and Isabelle Peretz. New York: New York Academy of Sciences.
- . 2003. "Music and biocultural evolution." Pp. 19-30 in *The cultural study of music: a critical introduction*, edited by Martin Clayton, Trevor Herbert and Richard Middleton. New York; London: Routledge.
- Cross, Ian, Ezra Zubrow, and Frank Cowan. 2002. "Musical behaviours and the archaeological record: a preliminary study." Pp. 25-34 in *Experimental archaeology: replicating past objects, behaviors, and processes*, edited by James R. Mathieu. Oxford: Archaeopress.
- Dams, L. 1985. "Paleolithic lithophones: descriptions and comparisons." *Oxford Journal of Archaeology* 4: 31-46.
- Darling, David J. 1989. *Deep time*. New York, N.Y.: Delacorte Press.
- Darwin, Charles. 1859. *On the origin of species by means of natural selection, or, The preservation of favoured races in the struggle for life*. London: J. Murray.
- . 1963 [1859]. *On the origin of species by means of natural selection or the preservation of favoured races in the struggle for life*. New York: Washington Square Press.
- Davenport, William. 1962. "Red-feather money." *Scientific American* 206: 94-104.
- . 1964. "Social structure of Santa Cruz Island." Pp. 57-93 in *Explorations in cultural anthropology*, edited by Ward H. Goodenough. New York: McGraw-Hill.
- . 1975. "Lyric verses and ritual in the Santa Cruz Islands." *Expedition* 18: 39-47.
- . 1989. "*Taemfaet*: experiences and reactions of Santa Cruz Islanders during the battle of Guadalcanal." Pp. 257-78 in *The Pacific theater: island representations of World War II*, edited by Geoffrey M. White and Lamont Lindstrom. Honolulu: University of Hawaii Press.

- David, Rosalie. 1986. *The pyramid builders of ancient Egypt*. London: Routledge & Kegan Paul.
- Davies, E. Harold. 1927. "Aboriginal songs." *Transactions and proceedings of the Royal Society of South Australia* 51: 81-92.
- Dawkins, R. M. (ed.). 1929. *The sanctuary of Artemis Orthia at Sparta, excavated and described by members of the British School at Athens 1906-1910*. London: Council of the Society for the promotion of Hellenic Studies/Macmillan and Co.
- Dawkins, Richard. 1976. *The selfish gene*. Oxford: Oxford University Press.
- Dennett, Daniel Clement. 1995. *Darwin's dangerous idea: evolution and the meanings of life*. New York: Simon & Schuster.
- Derow, Peter Sidney. 1989. "Rome, the fall of Macedon and the sack of Corinth." Pp. 290-323 in *The Cambridge ancient history, 2nd ed. Vol. 8: Rome and the Mediterranean to 133 B.C.*, edited by Alan E. Astin, F. W. Walbank, M. W. Frederiksen and R. W. Ogilvie. Cambridge: Cambridge University Press.
- d'Errico, Francesco, Christopher Henshilwood, Graeme Lawson, Marian Vanhaeren, Anne-Marie Tillier, Marie Soressi, Frédérique Bresson, Bruno Maureille, April Nowell, Joseba Lakarra, Lucinda Blackwell, and Michèle Julien. 2003. "Archaeological evidence for the emergence of language, symbolism, and music--an alternative multidisciplinary perspective." *Journal of World Prehistory* 17: 1-70.
- d'Errico, Francesco, Paola Villa, Ana C. Pinto Llona, and Rosa Ruiz Idarraga. 1998. "A Middle Paleolithic origin of music? Using cave-bear bone accumulations to assess the Divje Babe I bone 'flute'." *Antiquity* 72: 65-79.
- Detienne, Marcel. 2002. *The writing of Orpheus: Greek myth in cultural contact*. Baltimore: Johns Hopkins University Press.
- DeWoskin, Kenneth J. 1988. "The Chinese *xun*: globular flutes from the Neolithic to the Bronze Age, 6000-1000 B.C." Pp. 249-64 in *The archaeology of early music cultures; third international meeting of the ICTM study group on music*

archaeology, edited by Ellen Hickmann and David W. Hughes. Bonn: Verlag fur systematische Musikwissenschaft GmbH.

- Díaz, Bernal. 1963. *The conquest of New Spain*. Translated with an introduction by J.M. Cohen. Harmondsworth: Penguin.
- Díaz del Castillo, Bernal. 1996 [1956]. *The discovery and conquest of Mexico*. New York: Da Capo Press.
- Dillon, Matthew. 1997. *Pilgrims and pilgrimage in ancient Greece*. London/New York: Routledge.
- Dissanayake, Ellen. 2000. "Antecedents of the temporal arts in early mother-infant interaction." Pp. 389-410 in *The origins of music*, edited by Nils Lennart Wallin, Björn Merker and Steven Brown. Cambridge, MA: MIT Press.
- Dobkin de Rios, Marlene, and Fred Katz. 1975. "Some relationships between music and hallucinogenic ritual: the "jungle gym" in consciousness." *Ethos* 3: 64-76.
- Doniger, Wendy. 1975. *Hindu myths: a sourcebook*. Harmondsworth; Baltimore: Penguin.
- . 1976. *The origins of evil in Hindu mythology*. Berkeley: University of California Press.
- . 1981. *The Rig Veda, an anthology: one hundred and eight hymns, selected, translated and annotated*. Harmondsworth, Middlesex, England; New York, N.Y.: Penguin Books.
- Doty, William G. 1993. "A lifetime of trouble-making: Hermes as trickster." Pp. 46-65 in *Mythical trickster figures: contours, contexts, and criticisms*, edited by William J. Hynes and William G. Doty. Tuscaloosa: The University of Alabama Press.
- Dumézil, Georges. 1986. *The plight of a sorcerer*. Berkeley: University of California Press.
- Dunbar, Robin I. M. 2003. "The social brain: mind, language and society in evolutionary perspective." *Annual Review of Anthropology* 32: 163-81.

- Dundes, Alan. 1962. "Earth-Diver: creation of the mythopoeic male." *American Anthropologist* N.S. 64: 1032-51.
- . 1965. "African tales among the North American Indians." *Southern Folklore Quarterly* 29: 207-19.
- Dunkel, George. 1979. "Fighting words: Alcman *Partheneion* 63 *makhontai*." *Journal of Indo-European Studies* 7: 249-72.
- Durán, Diego. 1971. *Book of the gods and rites, and the ancient calendar*. Trans. and ed. by Fernando Horcasitas and Doris Heyden. Norman, OK: University of Oklahoma Press.
- . 1994. *The history of the Indies of New Spain*. Translated and annotated by Doris Heyden. Norman, OK: University of Oklahoma Press.
- Ellis, Alfred Burdon. 1894. *The Yoruba-speaking peoples of the Slave Coast of West Africa*. London: Chapman & Hall, Ltd.
- Eno, Robert. 1996. "Deities and ancestors in early oracle inscriptions." Pp. 41-51 in *Religions of China in practice*, edited by Jr. Donald S. Lopez. Princeton, N.J.: Princeton University Press.
- Falk, Harry. 1989. "Soma I and II." *Bulletin of the School of Oriental and African Studies, University of London* 52: 77-90.
- Falkenhausen, Lothar von. 1993. *Suspended music: chime bells in the culture of Bronze Age China*. Berkeley: University of California Press.
- . 1996. "The concept of *wen* in the ancient Chinese ancestral cult." *Chinese Literature: Essays, Articles, Reviews (CLEAR)* 18: 1-22.
- . 1999. "The waning of the Bronze Age: material culture and social developments, 770-481 B.C." Pp. 450-544 in *The Cambridge history of ancient China. From the origins of civilization to 221 B.C.*, edited by Michael Loewe and Edward L. Shaughnessy. Cambridge: Cambridge University Press.
- Faulkes, Anthony (trans.). 1987. *Edda / Snorri Sturluson*. London: Dent (Everyman Classics).

- Feeney, Denis. 1998. *Literature and religion at Rome: cultures, contexts, and beliefs*. New York: Cambridge University Press.
- Firth, Raymond, and with Mervyn McLean. 1990. *Tikopia songs: Poetic and musical art of a Polynesian people of the Solomon Islands*. Cambridge: Cambridge University Press.
- Flaherty, Gloria. 1992. *Shamanism and the eighteenth century*. Princeton: Princeton University Press.
- Fletcher, Peter. 2001. *World musics in context, a comprehensive survey of the world's major musical cultures*. Oxford: Oxford University Press.
- Flora, Reis. 1988. "Music archaeological data from the Indus Valley civilization, ca. 2400-1700 B.C." Pp. 207-21 in *The archaeology of early music cultures; third international meeting of the ICTM study group on music archaeology*, edited by Ellen Hickmann and David W. Hughes. Bonn: Verlag für systematische Musikwissenschaft GmbH.
- Foltz, Richard. 1999. *Religions of the Silk Road: overland trade and cultural exchange from antiquity to the fifteenth century*. New York: St. Martin's Press.
- Fontenrose, Joseph. 1988. "The cult of Apollo and the games at Delphi." Pp. 121-40 in *The archaeology of the Olympics: the Olympic and other festivals in antiquity*, edited by Wendy J. Raschke. Madison, WI: University of Wisconsin Press.
- Ford, Andrew Laughlin. 2002. *The origins of criticism: literary culture and poetic theory in classical Greece*. Princeton: Princeton University Press.
- Foster, John L. 2001. *Ancient Egyptian literature, an anthology*. Austin, TX: University of Texas Press.
- Frame, Douglas. 1978. *The myth of return in early Greek epic*. New Haven: Yale University Press.
- Freeman, Walter. 2000. "A neurobiological role of music in social bonding." Pp. 411-24 in *The origins of music*, edited by Nils Lennart Wallin, Björn Merker and Steven Brown. Cambridge, MA: MIT Press.
- Friedson, Steven M. 1996. *Dancing prophets: musical experience in Tumbuka healing*. Chicago: University of Chicago Press.

- Galilei, Vincenzo. 2003. *Dialogue on ancient and modern music*. Translated with intro. and notes by Claude V. Palisca. New Haven, CT: Yale University Press.
- Garfinkel, Yosef. 2003. *Dancing at the dawn of agriculture*. Austin, TX: University of Texas Press.
- Gaster, Theodor H. 1961 [1950]. *Thespis: ritual, myth, and drama in the ancient Near East*. New York: W.W. Norton & Company.
- Geisler, C. Daniel. 1998. *From sound to synapse: physiology of the mammalian ear*. New York: Oxford University Press.
- Glaser, Lynn, and Israel Manasseh ben. 1973. *Indians or Jews? An introduction to a reprint of Manasseh ben Israel's The hope of Israel*. Gilroy, CA: R. V. Boswell.
- Gnoli, Raniero (ed. and trans.). 1968 [1956]. *The aesthetic experience according to Abhinavagupta. Revised edition*. Roma: Is. M.E.O.
- Goldin, Paul Rakita. 1999. "Imagery of copulation in early Chinese poetry." *Chinese Literature: Essays, Articles, Reviews (CLEAR)* 21: 35-66.
- Gonda, Jan. 1950. *Notes on brahman*. Utrecht: J. L. Beyers.
- . 1963. *The vision of the Vedic poets*. The Hague: Mouton.
- . 1975. *Vedic literature: (Samhitas and Brahmanas)*. Wiesbaden: Harrassowitz.
- . 1985. *Pusan and Sarasvati*. Amsterdam: North-Holland Publishing Co.
- . 1989a. *The Indra hymns of the Rgveda*. Leiden / NY: Brill.
- . 1989b. *Prajapati's relations with Brahman, Brhaspati and Brahma*. Amsterdam, New York: North-Holland Pub. Co.
- . 1991. *The functions and significance of gold in the Veda*. Leiden / NY: E.J. Brill.
- Goodenough, Erwin R. 1988. *Jewish symbols in the Greco-Roman period. Abridged edition*. Princeton: Princeton University Press.
- Gouk, Penelope. 1999. *Music, science and natural magic in seventeenth-century England*. New Haven: Yale University Press.
- Gozza, Paolo (ed.). 2000. *Number to sound: the musical way to the scientific revolution*. Dordrecht: Kluwer Academic Publishers.
- Graefe, G. 1973. "Der homerische Hymnus auf Hermes." *Gymnasium* 70: 515-26.

- Habicht, Christian. 1989. "The Seleucids and their rivals." Pp. 324-87 in *The Cambridge ancient history, 2nd ed. Vol. 8: Rome and the Mediterranean to 133 B.C.*, edited by Alan E. Astin, F. W. Walbank, M. W. Frederiksen and R. W. Ogilvie. Cambridge: Cambridge University Press.
- Hadzsits, George D. 1935. *Lucretius and his influence*. New York: Longmans, Green & Co.
- Hammond, Nicholas G. L. 1982. "The Peloponnese." Pp. 321-59 in *The Cambridge ancient history, 2nd ed. Vol. 3, Pt. 3: the expansion of the Greek world, eighth to sixth centuries B.C.*, edited by John Boardman and N. G. L. Hammond. Cambridge: Cambridge University Press.
- Han-Yi, Feng, and J. K. Shryock. 1933. "Chinese mythology and Dr. Ferguson." *Journal of the American Oriental Society* 53: 53-65.
- Harris, Joel Chandler. 1955. *The complete tales of Uncle Remus*. Compiled by Richard Chase. New edition of works published 1880-1948. Boston: Houghton Mifflin Co.
- Hartshorne, Charles. 1973. *Born to sing: an interpretation and world survey of bird song*. Bloomington: Indiana University Press.
- Hassig, Ross. 1992. *War and society in ancient Mesoamerica*. Berkeley: University of California Press.
- Haug, Martin. 1974 [1922]. *The Aitareya Brahmanam of the Rigveda, containing the earliest speculations of the Brahmans on the meaning of the sacrificial prayers, and on the origin, performance and sense of the rites of the Vedic religion*. Reprint of 1922 edition of 1863 translation. New York: AMS Press.
- Havelock, Eric A. 1963. *Preface to Plato*. Cambridge: Belknap Press.
- . 1982. *The literate revolution in Greece and its cultural consequences*. Princeton: Princeton University Press.
- Hawkes, David. 1985. *The songs of the south: an ancient Chinese anthology of poems by Qu Yuan and other poets*. Harmondsworth, England; New York: Penguin Books.

- Hays-Gilpin, Kelley, and Jane H. Hill. 1999. "The flower world in material culture: an iconographic complex in the Southwest and Mesoamerica." *Journal of Anthropological Research* 55: 1-38.
- Hellenbrand, Harold. 1985. "Not "to destroy but to fulfill": Jefferson, Indians, and republican dispensation." *Eighteenth-Century Studies* 18: 523-49.
- Henan Sheng wen wu kao gu yan jiu suo. 1999. *Wuyang Jiahu*. Beijing: Ke xue chu ban she.
- Hickmann, Ellen, and David W. Hughes (eds.). 1988. *The archaeology of early music cultures; third international meeting of the ICTM study group on music archaeology*. Bonn: Verlag fur systematische Musikwissenschaft GmbH.
- Hill, Jane H. 1992. "The flower world of Old Uto-Aztec." *Journal of Anthropological Research* 48: 117-44.
- Hosler, Dorothy. 1988. "Ancient West Mexican metallurgy: South and Central American origins and West Mexican transformations." *American Anthropologist* (n.s.) 90: 832-55.
- . 1994. *The sounds and colors of power: the sacred metallurgical technology of ancient West Mexico*. Cambridge: MIT Press.
- Hsü, Kenneth Jinghwa. 1983. *The Mediterranean was a desert: a voyage of the Glomar Challenger*. Princeton: Princeton University Press.
- Hume, Robert Ernest. 1971. *The thirteen principal Upanishads*. London, New York,: Oxford University Press.
- Hunt, Gavin R., and Russel D. Gray. 2003. "Diversification and cumulative evolution in New Caledonian crow tool manufacture." *Proceedings of the Royal Society of London: Biological Sciences* 270: 867-74.
- Hyde, Lewis. 1998. *Trickster makes this world: mischief, myth, and art*. New York: Farrar Straus and Giroux.
- Ihde, Don. 1976. *Listening and voice: a phenomenology of sound*. Athens: Ohio University Press.

- Ito, Michiharu, and Ken-ichi Takashima. 1996. *Studies in early Chinese civilization: religion, society, language, and palaeography*. 2 vols. Edited by Gary F. Arbuckle. Hirakata, Osaka, Japan: Kansai Gaidai University.
- Jamison, Stephanie, and Michael Witzel. 1992. "Vedic Hinduism." in *Online publication of forthcoming book chapter*. PDF/html formats. Access: <http://www.people.fas.harvard.edu/~witzel/mwpage.htm>.
- Janko, Richard. 1981. "The structure of the Homeric hymns: a study in genre." *Hermes* 109: 9-24.
- . 1982. *Homer, Hesiod, and the Hymns: diachronic development in epic diction*. Cambridge: Cambridge University Press.
- Jefferson, Thomas. 1955 [1787]. *Notes on the State of Virginia*. Ed. with intro. and notes by William Peden. Chapel Hill: University of North Carolina Press.
- Jerison, Harry J. 1986. "The perceptual world of dolphins." Pp. 141-66 in *Dolphin cognition and behavior: a comparative approach*, edited by Ronald J. Schusterman, Jeanette A. Thomas and Forrest G. Wood. Hillsdale, NJ: L. Erlbaum Associates.
- Johnson, Willard L. 1980. *Poetry and speculation of the Rg Veda*. Berkeley: University of California Press.
- Kaimio, Maarit. 1974. "Music in the Homeric hymn to Hermes." *Arctos* 8: 29-42.
- Karlgren, Bernhard. 1950. *The book of odes*. Stockholm: Museum of Far Eastern Antiquities.
- Kaufmann, Walter. 1976. *Musical references in the Chinese classics*. Detroit: Information Coordinators.
- Keightley, David N. 1978a. "The religious commitment: Shang theology and the genesis of Chinese political culture." *History of Religions* 17: 211-25.
- . 1978b. *Sources of Shang history: the oracle-bone inscriptions of bronze age China*. Berkeley: University of California Press.
- . 1999. "The Shang: China's first historical dynasty." Pp. 232-91 in *The Cambridge history of ancient China. From the origins of civilization to 221 B.C.*, edited by

- Michael Loewe and Edward L. Shaughnessy. Cambridge: Cambridge University Press.
- . 2000. *The ancestral landscape: time, space, and community in late Shang China, ca. 1200-1045 B.C.* Berkeley: University of California Berkeley, Center for Chinese Studies.
- Keith, Arthur Berriedale. 1914. *The Veda of the black Yajus school, entitled Taittiriya samhita.* Cambridge: Harvard University Press.
- Kern, Martin. 2000. "Shi Jing songs as performance texts: a case study of "chu ci" (thorny caltrop)." *Early China* 25: 49-111.
- . 2001. "Ritual, text, and the formation of the canon: historical transitions of *wen* in early China." *T'oung Pao* 87: 43-91.
- Kilmer, Anne Draffkorn. 1965. "The strings of musical instruments: their names, numbers, and significance." Pp. 261-68 in *Studies in honor of Benno Landsberger on his seventy-fifth birthday*, edited by Hans G. Guterbock and Thornkild Jacobsen. Chicago: University of Chicago Press.
- . 1995. "Music and dance in ancient western Asia." Pp. 2601-2613 in *Civilizations of the ancient Near East*, edited by Jack M. Sasson. New York: Charles Scribner's Sons.
- Kinsley, David. 1986. *Hindu goddesses: visions of the divine feminine in the Hindu religious tradition.* Berkeley: University of California Press.
- Kochhar, Rajesh. 2000. *The Vedic people: their history and geography.* Hyderabad: Orient Longman.
- Kongas, Elli Kaija. 1960. "The Earth-Diver (Th. A 812)." *Ethnohistory* 7: 151-80.
- Kraay, Colin M. 1976. *Archaic and classical Greek coins.* Berkeley: University of California Press.
- Kramer, Samuel Noah, and John R. Maier. 1989. *Myths of Enki, the crafty god.* New York: Oxford University Press.
- Kroll, Paul W. 1996. "On 'Far Roaming'." *Journal of the American Oriental Society* 116: 653-69.

- Kugel, James L. (ed.). 1990. *Poetry and prophecy: the beginnings of a literary tradition*. Ithaca: Cornell University Press.
- Kummer, Hans. 1995. *In quest of the sacred baboon: a scientist's journey*. Princeton, NJ: Princeton University Press.
- Kunej, Drago, and Ivan Turk. 2000. "New perspectives on the beginnings of music: archaeological and musicological analysis of a Middle Paleolithic bone "flute"." Pp. 235-68 in *The origins of music*, edited by Nils Lennart Wallin, Björn Merker and Steven Brown. Cambridge, MA: MIT Press.
- Kurke, Leslie. 1989. "Pouring prayers: a formula of IE sacral poetry?" *Journal of Indo-European Studies* 17: 113-25.
- Lahiri, Ajoy Kumar. 1984. *Vedic Vrtra*. Delhi: Motilal Banarsidass.
- Lame Deer, John (Fire), and Richard Erdoes. 1972. *Lame Deer, Seeker of Visions*. New York: Pocket Books.
- Landels, John G. 1999. *Music in ancient Greece and Rome*. London/NY: Routledge.
- Larson, Jennifer. 1996. "The Corycian Nymphs and the Bee Maidens of the *Homeric hymn to Hermes*." *Greek, Roman and Byzantine Studies* 36: 341-57.
- Lau, D.C. 1970. *Mencius*. Harmondsworth, England: Penguin Books.
- . 1984. *Mencius. 2 vols.* Hong Kong: Chinese University Press.
- Leakey, Richard, and Roger Lewin. 1995. *The sixth extinction: biodiversity and its survival*. London: Weidenfeld and Nicolson.
- Lee, Hugh M. 1988. "The "first" Olympic Games of 776 B.C." Pp. 110-18 in *The archaeology of the Olympics: the Olympic and other festivals in antiquity*, edited by Wendy J. Raschke. Madison, WI: University of Wisconsin Press.
- Legge, James. 1879. *The sacred books of China: the texts of Confucianism. Pt. 1, The Shü king. The religious portions of the Shih king. The Hsiäo king*. Oxford: Clarendon Press.
- . 1893-95. *The Chinese Classics*. Taipei.

- Legge, James, Ch'u Chai, and Winberg Chai. 1967 [1885]. *Li chi: book of rites. An encyclopedia of ancient ceremonial usages, religious creeds, and social institutions*. New Hyde Park, NY: University Books.
- Legge, James, and Clae Waltham. 1971. *Shu ching: book of history. A modernized edition of the translations of James Legge*. Chicago: H. Regnery Co.
- León-Portilla, Miguel. 1980. *Native Mesoamerican spirituality: ancient myths, discourses, stories, doctrines, hymns, poems from the Aztec, Yucatec, Quiche-Maya and other sacred traditions*. New York: Paulist Press.
- . 1992a. *The broken spears: the Aztec account of the conquest of Mexico*. Boston: Beacon Press.
- . 1992b. *Fifteen poets of the Aztec world*. Norman, OK: University of Oklahoma Press.
- . 2002. *Bernardino de Sahagún: first anthropologist*. Norman, OK: University of Oklahoma Press.
- León-Portilla, Miguel, and José Jorge Klor de Alva. 1992. *The Aztec image of self and society: an introduction to Nahua culture*. Salt Lake City: University of Utah Press.
- León-Portilla, Miguel, Earl Shorris, and Sylvia Shorris. 2001. *In the language of kings: an anthology of Mesoamerican literature--pre-Columbian to the present*. New York: Norton.
- Lesko, Leonard H. (ed.). 1994. *Pharaoh's workers: the villagers of Deir el Medina*. Ithaca, NY: Cornell University Press.
- Levinson, David (ed.). 1991. *Encyclopedia of world cultures*. 10 volumes. Boston: G.K. Hall.
- Levi-Strauss, Claude. 1963. *Structural anthropology*. New York: Basic Books.
- . 1969. *The raw and the cooked*. New York: Harper & Row.
- . 1973. *From honey to ashes*. London: Cape.
- Lewis, Mark Edward. 1990. *Sanctioned violence in early China*. Albany, NY: SUNY Press.

- Lewis, Meriwether, William Clark, and Frank Bergon (ed.). 1995. *The journals of Lewis and Clark*. New York: Penguin Books.
- Li, Xueqin, Garman Harbottle, Juzhong Zhang, and Changsui Wang. 2003. "The earliest writing? Sign use in the seventh millenium BC at Jiahu, Henan Province, China." *Antiquity* 77: 31-44.
- Lieberman, Philip. 1977. *Speech physiology and acoustic phonetics, an introduction*. New York: Macmillan.
- Lieberman, Philip, and Sheila E. Blumstein. 1988. *Speech physiology, speech perception, and acoustic phonetics*. Cambridge: Cambridge University Press.
- Lincoln, Bruce. 1976. "The Indo-European cattle-raiding myth." *History of Religions* 16: 42-65.
- . 1999. *Theorizing myth: narrative, ideology, and scholarship*. Chicago: University of Chicago Press.
- Litzinger, Ralph A. 2000. *Other Chinas: the Yao and the politics of national belonging*. Durham & London: Duke University Press.
- Liu Shi-yue. 1988. "Neolithic bone flutes from Hemdu, China." Pp. 51-53 in *The archaeology of early music cultures; third international meeting of the ICTM study group on music archaeology*, edited by David W. Hughes. Bonn: Verlag fur systematische Musikwissenschaft GmbH.
- Liu-Shi-yue. 1988. "Neolithic bone flutes from Hemdu, China." Pp. 51-53 in *The archaeology of early music cultures; third international meeting of the ICTM study group on music archaeology*, edited by Ellen Hickmann and David W. Hughes. Bonn: Verlag fur systematische Musikwissenschaft GmbH.
- Lockhart, James. 1991. *Nahuas and Spaniards: postconquest Central Mexican history and philology*. Stanford: Stanford University Press.
- Loewe, Michael, and Edward L. Shaughnessy (eds.). 1999. *The Cambridge history of ancient China. From the origins of civilization to 221 B.C.* Cambridge: Cambridge University Press.
- Lonsdale, Steven. 1993. *Dance and ritual play in Greek religion*. Baltimore: Johns Hopkins University Press.

- Lord, Albert Bates. 1991. *Epic singers and oral tradition*. Ithaca: Cornell University Press.
- Lorenz, Konrad. 1996. *The natural science of the human species, an introduction to comparative behavioral research*. Cambridge, MA: The MIT Press.
- Maas, Martha, and Jane McIntosh Snyder. 1989. *Stringed instruments of ancient Greece*. New Haven: Yale University Press.
- Mahony, William K. 1998. *The artful universe: an introduction to the Vedic religious imagination*. Albany, NY: SUNY Press.
- Mair, Victor H., and Tsu-Lin Mei. 1991. "The Sanskrit origins of recent style prosody." *Harvard Journal of Asiatic Studies* 51: 375-470.
- Major, John S. 1993. *Heaven and earth in early Han thought*. Albany, NY: SUNY Press.
- Mallwitz, Alfred. 1988. "Cult and competition locations at Olympia." Pp. 79-109 in *The archaeology of the Olympics: the Olympic and other festivals in antiquity*, edited by Wendy J. Raschke. Madison, WI: University of Wisconsin Press.
- Manniche, Lise. 1988. "The erotic oboe in ancient Egypt." Pp. 189-98 in *The archaeology of early music cultures; third international meeting of the ICTM study group on music archaeology*, edited by Ellen Hickmann and David W. Hughes. Bonn: Verlag für systematische Musikwissenschaft GmbH.
- . 1991. *Music and musicians in ancient Egypt*. London: British Museum Press.
- Margulis, Lynn. 1998. *Symbiotic planet: a new look at evolution*. New York: Basic Books.
- Martin, Richard P. 1989. *The language of heroes: speech and performance in the Iliad*. Ithaca: Cornell University Press.
- . 2003. "The pipes are brawling: conceptualizing musical performance in Athens." Pp. 153-80 in *The cultures within ancient Greek culture: contact, conflict, collaboration*, edited by Carol Dougherty and Leslie Kurke. Cambridge: Cambridge University Press.

- Masson, J. Moussaieff, and M. V. Patwardhan. 1969. *Santarasa and Abhinavagupta's philosophy of aesthetics*. Poona: Bhandarkar Oriental Research Institute.
- . 1970. *Aesthetic rapture: the Rasâdhyaya of the Natyasastra*. Poona.
- Mather, Richard B. 1992. "Chinese and Indian perceptions of each other between the first and seventh centuries." *Journal of the American Oriental Society* 112: 1-8.
- Mathiesen, Thomas J. 1999. *Apollo's lyre; Greek music and music theory in antiquity and the Middle Ages*. Lincoln, NE: University of Nebraska Press.
- Mauss, Marcel. 1990. *The gift: the form and reason for exchange in archaic societies*. Translated by W.D. Halls. New York: W.W. Norton.
- Maxwell, Kevin Burns. 1983. *Bemba myth and ritual: the impact of literacy on an oral culture*. New York: Peter Lang.
- McDaniel, Lorna. 1998. *The Big Drum ritual of Carriacou: praisesongs in rememory of flight*. Gainesville: University Press of Florida.
- McGrew, William C. 1992. *Chimpanzee material culture*. Cambridge: Cambridge University Press.
- McLoughlin, John C. 1980. *Synapsida: a new look into the origins of mammals*. New York: Viking Press.
- McNamee, Gregory, and Luis Alberto Urrea (eds.). 1997. *A world of turtles: a literary celebration*. Boulder, CO: Johnson Printing.
- Merker, Björn. 2000. "Synchronous chorusing and human origins." Pp. 315-27 in *The origins of music*, edited by Nils Lennart Wallin, Björn Merker and Steven Brown. Cambridge, MA: MIT Press.
- Merriam, Alan P. 1964. *The anthropology of music*. Evanston, Ill.: Northwestern University Press.
- Miller, Geoffrey. 2000. "Evolution of human music through sexual selection." Pp. 329-60 in *The origins of music*, edited by Nils Lennart Wallin, Björn Merker and Steven Brown. Cambridge, MA: MIT Press.
- Mooney, James. 1995 [1900]. *Myths of the Cherokee*. Reprint ed. New York: Dover Publications.

- Morgan, Catherine. 1990. *Athletes and oracles: the transformation of Olympia and Delphi in the eighth century BC*. Cambridge: Cambridge University Press.
- Mushindo, Paul B. 1976. *A short history of the Bemba: as narrated by a Bemba*. Lusaka: NEZCAM.
- Nagy, Gregory. 1990a. "Ancient Greek poetry, prophecy, and concepts of theory." Pp. 56-64 in *Poetry and prophecy*, edited by James L. Kugel. Ithaca, NY: Cornell University Press.
- . 1990b. *Greek mythology and poetics*. Ithaca: Cornell University Press.
- . 1990c. *Pindar's Homer: the lyric possession of an epic past*. Baltimore: Johns Hopkins University Press.
- . 1996. *Homeric questions*. Austin: University of Texas Press.
- . 1999. *The best of the Achaeans: concepts of the hero in Archaic Greek poetry*. Revised edition. Baltimore: Johns Hopkins University Press.
- Negev, Avraham, and Shimon Gibson (eds.). 2001. *Archaeological encyclopedia of the Holy Land*. New York: Continuum.
- Nettl, Bruno. 1956. *Music in primitive culture*. Cambridge: Harvard University Press.
- . 1985. *The Western impact on world music*. New York: Schirmer Books.
- . 2000. "An ethnomusicologist contemplates universals in musical sound and musical culture." Pp. 463-72 in *The origins of music*, edited by Nils Lennart Wallin, Björn Merker and Steven Brown. Cambridge, MA: MIT Press.
- Nienhauser, William H., Jr. (ed.). 1994. *The grand scribe's records. Ssu-ma Ch'ien (Shih chi)*. Vol. 1. Bloomington: Indiana University Press.
- Nylan, Michael. 2001. *The five "Confucian" classics*. New Haven, CT: Yale University Press.
- O'Bryan, Aileen. 1956. *The Dîné: origin myths of the Navaho Indians*. Washington, D.C.: U.S. Govt. Printing Office.
- Olivelle, Patrick. 1998. *The early Upanisads: annotated text and translation*. New York: Oxford University Press.

- Olivier, Guilhem. 2002. "The hidden king and the broken flutes: mythical and royal dimensions of the feast of Tezcatlipoca in Toxcatl." Pp. 107-142 in *Representing Aztec ritual: performance, text, and image in the Work of Sahagún*, edited by Eloise Quinones Keber. Boulder: University Press of Colorado.
- Olsen, Dale A. 1996. *Music of the Warao of Venezuela: song people of the rain forest*. Gainesville: University Press of Florida.
- Owomoyela, Oyekan. 1997. *Yoruba trickster tales*. Lincoln, NE: University of Nebraska Press.
- Padoux, Andre. 1990. *Vac, the Concept of the Word in Selected Hindu Tantras*. Albany, NY: SUNY Press.
- Paper, Jordan. 1995. *The spirits are drunk: comparative approaches to Chinese religion*. Albany, NY: SUNY Press.
- Perrin, Michel. 1987. *The way of the dead Indians: Guajiro myths and symbols*. Austin: University of Texas Press.
- Phaklares, Panagiotis. 1977. "Chelus." *Archaiologikon Deltion* 32: 218-33.
- Pickett, J. M. 1980. *The sounds of speech communication: a primer of acoustic phonetics and speech perception*. Baltimore: University Park Press.
- Pinker, Steven. 1994. *The language instinct*. New York: William Morrow & Co.
- . 1997. *How the mind works*. New York: Norton.
- Plomp, Reinier. 2002. *The intelligent ear; on the nature of sound perception*. Mahwah, NJ: Lawrence Erlbaum Associates.
- Pokorny, Julius. 1989. *Indogermanisches etymologisches Wörterbuch*. Bern: Francke Verlag.
- Poole, Fitz John Porter. 1982. "The ritual forging of identity: aspects of person and self in Bimin-Kuskusmin male initiation." Pp. 99-154 in *Rituals of manhood: male initiation in Papua New Guinea*, edited by Gilbert H. Herdt and Roger M. Keesing. Berkeley: University of California Press.

- Popper, Arthur N., and Richard R. Fay (eds.). 1980. *Comparative studies of hearing in vertebrates*. New York/Heidelberg: Springer-Verlag.
- Puett, Michael. 2001. *The ambivalence of creation: debates concerning innovation and artifice in early China*. Stanford: Stanford University Press.
- Rajak, Tessa. 1994. "The Jews under Hasmonean rule." Pp. 274-309 in *The Cambridge ancient history, 2nd ed. Vol. 9: The last age of the Roman Republic, 146-43 B.C.*, edited by John A. Crook, Andrew Lintott and Elizabeth Rawson. Cambridge: Cambridge University Press.
- Ralston, William Ralston Shedden. 1872. *The songs of the Russian people, as illustrative of Slavonic mythology and Russian social life*. London: Ellis & Green.
- Rashid, Subhi Anwar. 1988. "A new interpretation of musical representations on three Babylonian objects." Pp. 199-205 in *The archaeology of early music cultures; third international meeting of the ICTM study group on music archaeology*, edited by Ellen Hickmann and David W. Hughes. Bonn: Verlag für systematische Musikwissenschaft GmbH.
- Rault, Lucie. 2000. *Musical instruments: craftsmanship and traditions from prehistory to the present*. New York: Harry N. Abrams Publishers.
- Rawson, Jessica (ed.). 1996. *Mysteries of ancient China: new discoveries from the early dynasties*. London: British Museum Press.
- . 1999. "Western Zhou archaeology." Pp. 352-449 in *The Cambridge history of ancient China. From the origins of civilization to 221 B.C.*, edited by Michael Loewe and Edward L. Shaughnessy. Cambridge: Cambridge University Press.
- Ricci, Institut. 2001. *Grand dictionnaire Ricci de la langue chinoise = Li shi Han Fa ci dian*. Paris: Institut Ricci.
- Richman, Bruce. 2000. "How music fixed "nonsense" into significant formulas: on rhythm, repetition, and meaning." Pp. 301-14 in *The origins of music*, edited by Nils Lennart Wallin, Björn Merker and Steven Brown. Cambridge, MA: MIT Press.
- Ricoeur, Paul. 1984. *Time and Narrative, Vol. 1*. Chicago: Univ. of Chicago Press.

- . 1985. *Time and Narrative, Vol. 2*. Chicago: Univ. of Chicago Press.
- . 1988. *Time and Narrative, Vol. 3*. Chicago: Univ. of Chicago Press.
- Robb, Kevin. 1994. *Literacy and paideia in ancient Greece*. Oxford/NY: Oxford University Press.
- Roberts, Helen. 1981. "Reconstructing the Greek tortoise-shell lyre." *World Archaeology* 12: 303-12.
- Robinson, Kim Stanley. 1993. *Red Mars*. New York: Bantam Books.
- . 1994. *Green Mars*. New York: Bantam Books.
- . 1996. *Blue Mars*. New York: Bantam Books.
- Rue, Loyal. 1994. *By the grace of guile: the role of deception in natural history and human affairs*. New York: Oxford University Press.
- Rutherford, Ian. 2001. *Pindar's Paeans, a reading of the fragments with a survey of the genre*. Oxford: Oxford University Press.
- Rydving, Håkan. 1993. *The end of drum-time: religious change among the Lule Saami, 1670s-1740s*. Uppsala, Sweden: Almqvist & Wiksell International.
- Sachs, Curt. 1940. *The history of musical instruments*. New York: W. W. Norton & Co.
- Sadie, Stanley, and John Tyrrell (eds.). 2001. *The new Grove dictionary of music and musicians*. New York: Grove.
- Sansone, David. 1975. "The third stasimon of the Oedipus Tyrannos." *Classical Philology* 70: 110-17.
- Schaefer, Ronald P., and Francis O. Egbokhare (eds.). 1999. *Oral tradition narratives of the Emai people*. Münster: Lit Verlag.
- Schafer, Edward H. 1963. *The golden peaches of Samarkand; a study of Tang exotics*. Berkeley: University of California Press.
- Scheinberg, Susan. 1979. "The Bee Maidens of the Homeric hymn to Hermes." *Harvard Studies in Classical Philology* 83: 1-28.
- Schmid, Wilhelm, Otto Stählin, and Wilhelm von Christ. 1929. *Geschichte der griechischen Literatur*. 5 Vol. München: Beck.

- Schneider, Laurence A. 1980. *A madman of Chu: the Chinese myth of loyalty and dissent*. Berkeley: University of California Press.
- Scott, Walter. 1924-36. *Hermetica, the ancient Greek and Latin writings which contain religious or philosophic teachings ascribed to Hermes Trismegistus, edited with English translation and notes*. 4 vols. Oxford: The Clarendon Press.
- Seaford, Richard. 1984. *Euripides. Cyclops*. Oxford: Clarendon Press.
- Segal, Charles. 1994. *Singers, heroes, and gods in the Odyssey*. Ithaca, NY: Cornell University Press.
- Sekoni, Ropo. 1994. *Folk poetics: a sociosemiotic study of Yoruba trickster tales*. Westport, CT: Greenwood Press.
- Sendrey, Alfred. 1974. *Music in the social and religious life of antiquity*. Rutherford, NJ: Fairleigh Dickinson University Press.
- Shaughnessy, Edward L. 1995. "From liturgy to literature: the ritual contexts of the earliest poems in the *Book of Poetry*." *Hanxue Yanjiu (Chinese Studies)* 13: 133-50.
- . 1999. "Western Zhou history." Pp. 292-351 in *The Cambridge history of ancient China. From the origins of civilization to 221 B.C.*, edited by Michael Loewe and Edward L. Shaughnessy. Cambridge: Cambridge University Press.
- Shelmerdine, Susan C. 1984. "Hermes and the tortoise: a prelude to cult." *Greek, Roman and Byzantine Studies* 25: 201-7.
- Smith, R. Morton. 1979. "Unhumorous puns in ancient India." *Journal of Indo-European Studies* 7: 105-12.
- So, Jenny (ed.). 2000. *Music in the age of Confucius*. Washington, D.C.: Freer Gallery of Art and Arthur M. Sackler Gallery.
- Solomon, Jon (ed.). 1994. *Apollo: origins and influences*. Tucson: University of Arizona Press.
- Sowa, Cora Angier. 1984. *Traditional themes and the Homeric hymns*. Chicago: Bolchazy-Carducci Publishers.

- Stanford, Craig B. 2001. *Significant others: the ape-human continuum and the quest for human nature*. New York: BasicBooks.
- Stebbins, William C. 1980. "The evolution of hearing in the mammals." Pp. 421-36 in *Comparative studies of hearing in vertebrates*, edited by Arthur N. Popper and Richard R. Fay. New York/Heidelberg: Springer-Verlag.
- . 1983. *The acoustic sense of animals*. Cambridge, MA: Harvard University Press.
- Sterelny, Kim, and Paul E. Griffiths. 1999. *Sex and death: an introduction to philosophy of biology*. Chicago: University of Chicago Press.
- Sukhu, Gopal. 1999. "Monkeys, shamans, emperors, and poets: the *Chuci* and images of Chu during the Han dynasty." Pp. 145-65 in *Defining Chu: image and reality in ancient China*, edited by Constance A. Cook and John S. Major. Honolulu: University of Hawaii Press.
- Sullivan, Lawrence E. 1988. *Icanchu's drum: an orientation to meaning in South American religions*. New York: Macmillan.
- Tarn, W. W. 1984. *The Greeks in Bactria & India*. 3rd revised edition [1938/1951]. Chicago: Ares Publishers.
- Teiser, Stephen F. 1988. *The ghost festival in medieval China*. Princeton, NJ: Princeton University Press.
- Thite, G. U. 1989. "Gandharvas and Apsarasas in the Veda." Pp. 52-63 (book 2) in *Music and mythology, a collection of essays*, edited by R. C. Mehta. Baroda, India: Indian Musicological Society.
- Thompson, George. 2003. "Soma and ecstasy in the Rg Veda." *Electronic Journal of Vedic Studies (EJVS)* 9: article 5.
- Thorp, Jim. 1991. "Aristoxenus and the ethnoethical modes." Pp. 54-66 in *Harmonia mundi*, edited by Robert W. Wallace and Bonnie MacLachlan. Rome: Edizioni dell'Ateneo.
- Tong, Kin-woon. 1983. "Shang musical instruments." Unpublished doctoral dissertation. Wesleyan University.

- Turner, Frederick. 1985. *Natural classicism: essays on literature and science*. New York: Paragon House Publishers.
- . 1991. *Beauty: the value of values*. Charlottesville: University Press of Virginia.
- . 1995. *The culture of hope: a new birth of the classical spirit*. New York: Free Press.
- Turner, Victor Witter. 1974. *Dramas, fields, and metaphors; symbolic action in human society*. Ithaca, NY: Cornell University Press.
- Van Nortwick, Thomas. 1974. "The Homeric "hymn to Hermes": a study in early Greek hexameter style." Ph.D. dissertation. Stanford University.
- Vaneechoutte, Mario, and John R. Skoyles. 1998. "The memetic origin of language: modern humans as musical primates." *Journal of Memetics-Evolutionary Models of Information Transmission (JoM-EMIT) 2*: <http://jom-emit.cfpm.org/1998/vol2/>.
- Vassiliades, Demetrios. 2000. *The Greeks in India: a survey in philosophical understanding*. New Delhi: Munshiram Manoharlal Publishers.
- Vidal-Naquet, Pierre. 1986. *The black hunter: forms of thought and forms of society in the Greek world*. Baltimore: Johns Hopkins University Press.
- Vogt, Evon Z. (ed.). 1969. *Handbook of Middle American Indians, vols. 7-8, Ethnology Parts One and Two*. Austin: University of Texas Press.
- Vyas, R. T. 1989. "Sarasvati: a study in symbolism, with special reference to the motif of Vina." Pp. (book 2) 64-72 in *Music and mythology, a collection of essays*, edited by R. C. Mehta. Baroda, India: Indian Musicological Society.
- Wade-Gery, Henry Theodore. 1949. "A note on the origin of the Spartan Gymnopaedia." *Classical Quarterly* 43: 79-81.
- Waley, Arthur. 1987 [1937]. *The Book of Songs*. New foreword by Stephen Owen. New York: Grove Press.
- Wallin, Nils Lennart. 1991. *Biomusicology: neurophysiological, neuropsychological, and evolutionary perspectives on the origins and purposes of music*. Stuyvesant, NY: Pendragon Press.

- Wallin, Nils Lennart, Björn Merker, and Steven Brown (eds.). 2000. *The origins of music*. Cambridge, MA: MIT Press.
- Wang, C. H. 1974. *The bell and the drum: Shih ching as formulaic poetry in an oral tradition*. Berkeley: University of California Press.
- . 1988. *From ritual to allegory: seven essays in early Chinese poetry*. Hong Kong: Chinese University Press.
- Watkins, Calvert. 1995. *How to kill a dragon: aspects of Indo-European poetics*. New York: Oxford University Press.
- (ed.). 2000. *The American heritage dictionary of Indo-European roots*. Boston: Houghton Mifflin.
- Watson, Lawrence C. 1970. *Self and ideal in a Guajiro life history*. Vienna: Institut für Völkerkunde der Universität Wien.
- Wauchope, Robert. 1964. *Handbook of Middle American Indians*. Austin: University of Texas Press.
- Wennerstrom, Ann K. 2001. *The music of everyday speech: prosody and discourse analysis*. Oxford: Oxford University Press.
- Werner, Alice. 1968 [1933]. *Myths and legends of the Bantu*. London: Cass.
- Werner, E. T. C. 1984 [1922]. *Myths and Legends of China*. London: Sinclair Browne.
- West, M. L. (ed.). 1978. *Hesiod. Works and Days*. Oxford: Clarendon Press.
- . 1992. *Ancient Greek music*. Oxford: Oxford University Press.
- Wilbert, Johannes. 1970. *Folk literature of the Warao Indians; narrative material and motif content*. Los Angeles: Latin American Center Publications.
- Wilbert, Johannes, and Karin Simoneau (eds.). 1978. *Folk literature of the Gê Indians, 2 vols.* Los Angeles: UCLA Latin American Center Publications.
- (eds.). 1986. *Folk literature of the Guajiro Indians, 2 vols.* Los Angeles: UCLA Latin American Center Publications.
- (eds.). 1989. *Folk literature of the Ayoreo Indians*. Los Angeles: UCLA Latin American Center Publications.

- (eds.). 1991. *Folk literature of the Cuiva Indians*. Los Angeles: UCLA Latin American Center Publications.
- Winkler, John J. 1990a. *The constraints of desire: the anthropology of sex and gender in ancient Greece*. New York: Routledge.
- . 1990b. "The ephebes' song: Tragoidia and Polis." Pp. 20-62 in *Nothing to do with Dionysos? Athenian drama in its social context*, edited by John J. Winkler and Froma I. Zeitlin. Princeton, NJ: Princeton University Press.
- Winkler, John J., and Froma I. Zeitlin. 1990. *Nothing to do with Dionysos? Athenian drama in its social context*. Princeton, N.J.: Princeton University Press.
- Wistrand, Lila M. 1969. "Music and song texts of Amazonian Indians." *Ethnomusicology* 13: 469-88.
- Wright, Arthur F. 1959. *Buddhism in Chinese History*. New York: Athenaeum.
- Yu, Pauline. 1990. "Poems in their place: collections and canons in early Chinese literature." *Harvard Journal of Asiatic Studies* 50: 163-96.
- Zanoncelli, Luisa. 1990. *La manualistica musicale greca*. Milano: Guerini Studio.
- Zatorre, Robert J., and Isabelle Peretz (eds.). 2001. *The biological foundations of music*. New York: New York Academy of Sciences.
- Zerubavel, Eviatar. 1981. *Hidden rhythms: schedules and calendars in social life*. Chicago: University of Chicago Press.
- . 2003. *Time maps: collective memory and the social shape of the past*. Chicago: University of Chicago Press.