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Stealers of Light, Traders in Brilliance: Amerindian Metaphysics in the Mirror of Conquest

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Stealers of light, traders in brilliance

Amerindian metaphysics in the mirror of conquest

NICHOLAS J. SAUNDERS

Of all the things that the Spanish showed him [Atahualpa], there was none he liked more than glass, and he said to Pizarro that he was very surprised that, having things of such beauty in Spain, he would travel to distant and foreign lands looking for metals as common as gold and silver.

Benzoni quoted in Mester 1990:208

The prism of meaning

Atahualpa's remark to Francisco Pizarro, conqueror of the Inka empire, reveals differing attitudes towards the constitution and meaning of wealth; more importantly, it articulates the wider incommensurability of indigenous Amerindian and western world views that, from A.D. 1492, confronted, overlapped, and meshed with each other in a rich and complex array of myth and history.

Three aspects of the contact experience have long been known and commented upon. Almost everywhere in the Americas, Europeans were initially regarded as powerful supernatural beings. They traded cheap, shiny goods variously for gold, silver, pearls, and pelts; and they brought crippling disease that devastated indigenous populations and traumatized their mythical realities. Hitherto, compartmentalized approaches to these issues have largely obscured their identification as integral parts of a larger, pan-Amerindian reality, whose framework supported a diversity of local and regional

world views, conditioned the way in which Europeans (and their material goods) were received, and interpreted the cataclysmic effects of disease.

In an attempt to restore a degree of conceptual integrity, I adopt a broad perspective by exploring indigenous conceptions of brilliant materials—part of a wider consideration of Amerindian attitudes toward light (Saunders n.d.a). This assessment of a large and complex set of issues clearly supports the view that it is insufficient to regard shiny objects from only a culture-specific technological perspective. Previously such approaches often have tended to unduly privilege metals on the basis of the western commercial value of gold and silver, the base-metal technological sophistication and nature of European civilization, and the facility with which modern science can analyse “primitive” metallurgical traditions. I will suggest that indigenous valuations of gold and silver derived from prior established ideas concerning brilliance that hitherto had been expressed solely by minerals and natural phenomena.

The physical association of diverse shiny materials in archaeological contexts, together with their semantic proximity in ethnohistoric and ethnographic sources, suggests that the variable qualities ascribed to shininess were equally as important as any qualitative differences between various media. This is not to deny the rich “cultural biographies” of individual objects (Kopytoff 1986), as described below, or to suggest that all shiny things possessed identical meanings. Nevertheless, the diversity of meanings attached to objects and the technological choices employed to produce or enhance shininess requires that they be assessed with regard to the holistic, integrated, and fundamentally shamanic world view within which they functioned. The analogical nature of shamanism, where explanatory and representational comparisons are drawn between “obviously different” western categories of things highlights the interpretational dangers of attempting to straitjacket indigenous concepts into a western framework. For Amerindians, like all human groups, social worlds and material worlds were endlessly recreated, exhibiting a creative hybridity in their

This paper has had disparate origins and inspirations over many years. Nevertheless, my greatest debt is to George Hamell whose published and unpublished material on the Iroquois brought into focus my own work in Central, South, and Caribbean America. I am particularly grateful to Dumbarton Oaks, Washington, D.C., for the award of a Summer Fellowship during 1996, the support of the Foundation for the Advancement of Mesoamerican Studies, Crystal River, Florida, and the Leverhulme Foundation, London. Jeffrey Quilter kindly made available his unpublished manuscript, Elizabeth Benson gave invaluable advice and encouragement, Donald Walker gave permission to reproduce his illustration of the lunar eclipse, and Chris Gravett of the Royal Armouries, Tower of London, gave expert advice on fifteenth- and sixteenth-century European armour. Finally, thanks are due to Archibald Chauharjasingh, Alex and Jennifer de Verteuil (Trinidad), John Carlson (Washington), Maggie McDonald, and Andrew Robinson (London). Final responsibility for what I have made of this generous help remains my own.

symbolic relationships. This produced ways of sensing, perceiving, and regulating the world that, in many instances, proved invisible to western sensibilities or were regarded as epiphenomenal (see for example Classen 1990, 1991; Seeger 1987).

Although, of necessity, I outline Amerindian ideas concerning shiny objects, my focus is the juncture at which indigenous and western categories and attitudes toward brilliance are most starkly contrasted and, therefore, particularly informative—the period of initial contact and conquest. Often represented as an undifferentiated whole, the contact experience was rather a mosaic of innumerable conquests involving disparate societies, each possessing its own historically contingent political form, mythological traditions, and material culture.

Despite this heterogeneity, there were powerful countervailing influences. Most, if not all, Amerindian societies shared a view of life whose principles of cause and effect and whose ways of making sense of the world were essentially shamanic. In this world view, telluric geography is inextricably entwined with sacred places, and physical distance often equated with spiritual geography and the power of “otherness.” An integral part of the shamanic definition of power was the possession of shiny objects by “strangers” who had procured them from distant realms. Before Europeans arrived, shamans, or rulers wielding shamanic powers, were the most commonly acknowledged strangers, who acquired supernatural knowledge and power during cosmic journeys to distant spirit realms (Helms 1988:69–72, 80–82; 1993:114). Thus constituted, shamanic “otherness” was a quality shared by Europeans, whose sudden unexpected appearance together with an abundance of shiny materials were understood by Amerindians to symbolise the same sacred and exchange-prestige values that they accorded their own glittering objects. This, despite Thomas’s (1991) point that the degree of “entanglement” between cultures and their socially and materially constituted worlds, admits a diversity of indigenous responses to contact and intrusion by outsiders (Thomas 1991).

I argue that the nature and course of European conquest was shaped in large part by the tensions that existed between Amerindian and European attitudes toward brilliance in the “common ritual terrain” (Pagden 1993:86) of contact and exchange—itsself defined by a superficially similar attraction to shiny objects by both participants. I further suggest that European contact

fragmented the Amerindian philosophy of light and quickly unravelled the cohesive integrity of indigenous cosmologies and structural meanings that they embodied.

In seeking to widen interpretative horizons, I seek to explain how, among Amerindians, the possession, display, and exchange of shiny objects conferred cosmic power and social prestige on their owners; how this in turn predisposed many indigenous societies to initially accept Europeans and their trade goods as possessing supernatural power; and how the (usually unintentional) transmission of disease was perceived according to indigenous categories of disaster and event.

Worlds of light

Throughout the Americas, Amerindians saw spirituality in many shiny things, not just the few regarded as precious by Europeans. Spiritual essence, manifested as brilliance, inhered in the celestial bodies, meteorological phenomena, fire, water, metals, minerals, shells, ceramics, feathers, bone, blood, and semen, amongst other things. Despite a multiplicity of individual significances, all revealed their inner sacredness by displaying light as surface glitter (see Lechtman 1993:269). While configurations of meaning—often manifested as “color codes”—differ (for example, Hamell 1986:9–20; 1995:47–48; Reichel-Dolmatoff 1978; and see Zajonc 1993:14–15), basal attitudes toward brilliance appear to have been remarkably consistent. The significance, for example, of greenstones in Mesoamerica, metals in the Andes, copper and mica in North America, polished wood and *guanín* (a copper-gold alloy, known also as *tumbaga*) in the Caribbean, and rock crystals in Amazonia, while not mutually exclusive, can be seen, in part, as regionally and culturally defined manifestations of a pan-Amerindian philosophy of light (Saunders n.d.a and see Hamell 1983:5). In this sense, they form what can be considered a meta-category of material culture objects.

Understanding the semantic dimensions of shiny objects requires contextualization. Indigenous conceptions of brilliance emerged from a broader, shamanic appreciation of light and were linked to notions of a mirror-image realm inhabited by bright spirit-beings conceived as incorporeal souls, were-beings, and immanent forces. As arbiters of a world view that infused nature with sentient spirituality, shamans move back and forth between the physical and supernatural realms in visions aglow with shimmering light. This



Figure 1. El Dorado, the “gilded man,” having shimmering gold dust blown on to his resin-covered body. Engraving from T. de Bry, *America*, Part IX, 1602, plate XV. Reproduced by permission of The British Library.

suggests the shamanic experience itself is brilliant; the processes by which certain shiny materials were obtained and fashioned is considered part of a potentially dangerous, but sacred body of transformative shamanic knowledge (see Viveiros de Castro 1992:220), fenced in by ritual activity—sometimes observed, though rarely understood, by Europeans (for example, Pagden 1993:85).

The association of light, vision, and shamanic knowledge is indicated by the ability required of shamans to see and understand more than ordinary people (Butt-Colson 1977:63; Hugh-Jones 1979:33, 283; Wilbert 1987:163). Shamanic perception is vision-seeing, variously achieved through abstinence, tobacco smoking, or the ingestion of hallucinogens (for example, Furst 1972; Harner [ed.] 1978; Wilbert 1987) and often facilitated by the use of mirrors (see Ford 1969:74–75; Saunders 1988:1–10). These visions are described as full of bright (often multicolored) light (for example, Kensinger 1995:221), in which luminous supernaturals appear (for example, Furst 1976:46, 131; Goldman 1979:210 quoted in Harner 1978:162; Taussig 1987:322–323).

Such identifications are explicit in a myth of the Caribbean Taíno (Arawak): *Hiauna*, father of the hero

figure *Guahayona*, is associated with tobacco shamanism and described as “He who was made brilliant” (Stevens-Arroyo 1988:157–187; and see Whitehead 1990:30–31). This recalls the Warao category of “light shamans,” who derive their powers from the supreme Tobacco Spirit (Wilbert 1987:160–161), and Araweté shamans, who smoke tobacco until they become translucent enough to experience visions (Viveiros de Castro 1992:219). In fact, light-giving tobacco makes the skin of Araweté shamanic initiates shine and give off shocks like the electric eel (*ibid.*, 220). This imagery is reminiscent of another shining figure, *El Dorado*, who, according to Oviedo (Gerbi 1986:363), went about “covered in fine gold dust, like powdered sunlight” (fig. 1; and see, Bray 1978; von Hagen 1974).

For the Iglulik Inuit, *angákoq* is a mysterious light that enables the shaman to see in the dark (Eliade 1974:60–61). This widespread notion appears linked to the “divinatory seeing” and hunting of game animals by human and animal predators that, in Central and South America, associates shamans with the brightly colored and mirror-eyed jaguar (*Panthera onca*), itself widely acknowledged in myth as the original possessor of fire (Lévi-Strauss 1969:66–67; Saunders 1988, 1998; and see Roe 1998).

More revealing, particularly for its linguistic dimension is the case of the Akawaio of Guyana, for whom the central concept of spirituality is *akwa* (light, brightness, life). According to an individual's relationship to *akwa*, one's supernatural condition can be either *akwalu* (a spirit; lit., "a kind of light") or *akwalupö* (a ghost; lit., "without light") (Sullivan 1988:423). Among the Mapuche of Chile, time is associated with various manifestations of light, each possessing social, mythical, religious, and moral correlates (Sullivan 1988:157). Cultural specificity is illustrated also by the Tukanoan tribes of Colombia, who recognize thirty hues of yellow associated variously with male potency, semen, fire, and the flash of a drug-induced vision (Reichel-Dolmatoff 1981:21).

Supernatural light seems to have articulated physical existence, linking earth, sky, sea, and atmospheric phenomena. Among the Mesoamerican Aztec, the forces of earthly life manifested themselves as light and heat, infiltrating all things as they diffused across the earth (López Austin 1988:204–205). In Inka mythology, Viracocha's creation of light brought structure and order to the world (Classen 1993:38). More recently, the Quechua-speaking Andean villagers of Misminay regarded the glittering Vilcanota (Urubamba) River as an earthly reflection of the Milky Way (*Mayu*) as it arched across the night sky; both are part of the metaphysical recycling of water (Urton 1981:64). Various evidence suggests that rainbows, rain, and clouds all glowed with spirit essence and were highly regarded (for example, Garcilaso de la Vega 1987 [1609]:183; Mester 1990:198; Seler 1993a:195; Stevens-Arroyo 1988:190–191). Capped with brilliant ice and snow, mountains and volcanoes are spirit-dwellings, producers of local weather (for example, Reinhard 1988:365–370; Townsend 1987:373). The Kogi conceive snow-covered peaks as gleaming white crystals, prisms of light entered by the dead (Reichel-Dolmatoff 1981:28), and for the Inka, blinding mountain-top snowfields were prime locations for human sacrifice to an array of sky and mountain gods (Reinhard 1992, 1996:62–81).

Positive cultural valuations of light endowed the natural world with beauty and fertility. Such qualities, and the language used to describe them, are seen to great effect in the ultimate form of symbolic landscapes—those that constituted indigenous conceptions of heaven. *Tlalocan*, the Aztec rain-god's paradise, was created through songs and described "as jewel mats, shot with jade and emerald sunray" (J.

Bierhorst quoted in Hosler 1994:242). *Tlalocan* was conceived as a glittering symbolic garden, which Burkhart (1992:89) describes as:

. . . a shimmering place filled with divine fire; the light of the sun reflects from the petals of flowers and the iridescent feathers of birds; human beings . . . are themselves flowers, birds, and shimmering gems.

The Inka appear to have held similar ideas, as the precious glitter of gold, silver, and crystals covered the *Coricancha*, the temple of the sun god *Inti* in the imperial capital of Cuzco (Garcilaso de la Vega 1987 [1609]:179–184), whose name itself may have connoted shininess or brilliance (Mester 1990:217–218). In the adjacent symbolic garden (perhaps one of many throughout the empire), people, animals, plants, and soil were modeled in gold and silver (Cieza de León 1976 [1554]:147; Garcilaso de la Vega 1987 [1609]:188, 318). These golden likenesses of nature might be considered primary representations of pure-light forms, spiritual prototypes under the divine protection of the emperor, himself the "Son of the Sun"; they certainly represented a world of brilliance made physical, by which Inka nobility was considered inherently "golden" in essence and quality (Helms 1981:219–220).

The semantic dimensions of light are evident also in a terminology of radiance embedded in the idioms and metaphors of language and moral philosophy. For the Aztec, a person's soul or *tonalli*, derived from the noun *tona*, meaning to "irradiate," was conceived as hot and luminous (López Austin 1988:204–206, 216), bestowing an individual's health and vigor, determining destiny, and linking him to the universe (ibid., 204). When a child was sick, his reflection in water was observed—if the image was bright, his *tonalli* was intact, if dark, it had escaped (ibid., 216; Ruiz de Alarcon 1984:162). An unborn Aztec child was *ce cozcatl*, *in quetzalli*, or "the necklace, the quetzal feather" (Sahagún 1950–1978: Book 6:137, 144); a newly installed ruler, "precious turquoise" (ibid., 57). Semen was conceived as rain and imagined as a flock of brilliant blue cotingas (Gingerich 1977:140). The Aztec judged the proper way to live one's life was by the ethic of *chiphuacanemiliztli*, or "righteousness"; this transformed the human psyche into a glistening precious turquoise, an iridescent quetzal feather (ibid., 324). "Lighting the way," setting a moral example, was a metaphorical expression of the ethical significance of light in Aztec ideology (Burkhart 1988:238).

The importance of light in religion is clear also, though too extensive to be dealt with in detail here (see Saunders n.d.a). Light's significance to the Inka was manifest in Viracochas's creation of the sun and moon (Classen 1993:37). At *Coya Raymi*, the Inka festival of the queen, the moon was celebrated, and the qualities of darkness (that is, sickness and disease) were banished by warriors wielding slings of fire (Quilter n.d.) (fig. 2). Among the Aztec, the New Fire ceremony was an equally pivotal event, which, every 52 years, saw the extinguishing of all "old" light and the sparking of a new fire in the chest of a sacrificial victim (Townsend 1993:130–132). This "new" light was then taken to rekindle the fires of Tenochtitlan, signifying the start of a new 52-year period and arguably, I suggest, the continuation of orderly existence symbolized by the rejuvenation of light.

Cosmic brilliance engendered and symbolized strength and was a potent weapon. The Inka emperor entered battle hurling slingstones of fine gold at his enemies (Guaman Poma quoted in Mester 1990:209), and his warriors wore shiny metal plates (*pura-pura*) on their chests (Guaman Poma quoted in González 1992:215). During the civil war between Atahualpa and Huascar, the latter was defeated when Atahualpa's troops, adorned with polished metal plates, positioned themselves against the sun and blinded their opponents (Murúa quoted in Mester 1990:227; and see Duque Gómez 1981:8). Similar metal plaques were worn by Chief Outina and his warriors in Florida (Jacques de Moyne quoted in Lorant 1946:63) (fig. 3). In Mesoamerica, warriors fought dressed in elaborate costumes of iridescent plumage, golden ear and lip ornaments, and large gem-encrusted mirrors (Czitrom 1994:193,196; Hosler 1994:29; Seler 1993b:212). The invigorating qualities of light are evident also in North American Lacrosse—the symbolic "little brother of war"—where Choctaw shamans stood on the sidelines and wielded mirrors to reflect sunlight onto their players and so increase their strength (Vennum 1994:36). Interestingly, this association of light with the ballgame is visible among the Inuit: when the dead play the game in heaven, it appears to those on earth as the aurora borealis (Zajonc 1993:241).

The coherent logic of a world view where bright light symbolized life-giving and health-promoting qualities can be gauged critically by indigenous reactions to its absence, most notably during eclipses. Like many Amerindian groups, the modern Maya of Chan Kom see



Figure 2. Inkas throwing slings of fire during *Coya Raymi* to banish darkness (sickness and disease) from the world. Drawing from *Nueva Corónica y Buen Gobierno*, Felipe Guaman Poma de Ayala, edition of Institut d'Ethnologie 1936, 2nd impression 1989. Reproduced courtesy of Institut d'Ethnologie, Musée de l'Homme, Paris.

eclipses as times of great danger to humankind (Redfield and Villa Rojas 1962:206–207; see also Muñoz Camargo 1892:132). In Aztec mythology, the power of the Fifth Sun kept the *tzitzimime* demons from destroying the world. At night, starlight kept them at bay, but during a solar eclipse they could escape to invert the worldly order (see Quilter n.d.) and destroy all living things (López Austin 1988:245–246). By understanding the qualities of light we can perhaps appreciate the deep psychological terrors associated with solar eclipses, which, as "darkness in daylight," appear to have embodied the negation of light's positive connotations. Closs (1989:390–394) lists many examples of indigenous reactions to eclipses—all associated with disease, death, catastrophe, and impending world destruction (and see Sullivan 1988:203).

In many Amerindian societies, the power of shamans, priests, and semidivine rulers was characterized in part by omniscience. This power could be undermined by failing to foresee the future—an indication of the social and political investment in being seen to control events, particularly in the celestial sphere (Ruggles and



Figure 3. Florida chieftain Outina and army going to war. Outina is flanked possibly by a lesser commander and his shaman. All three wear bright metal discs, though Outina outshines them all. Engraving from T. de Bry, *America*, Part II, 1591, plate XIV. Reproduced by permission of the Syndics of Cambridge University Library.

Saunders 1993:12). Apart from eclipses (which could at least be calculated by some societies), dangers included the appearance of “unnatural” (that is, unexpected and, with only naked-eye observations, totally unpredictable) light, such as that caused by a comet, which the Aztec believed could kill rulers, start wars, and cause starvation (Carrasco 1989:51; Köhler 1989:289–290; López Austin 1988:351). The Kogi similarly regard unusual lights in the sky, such as meteors and comets, as mirroring dissonances on earth (Reichel-Dolmatoff 1981:25).

There is then a wealth of evidence to suggest that indigenous Amerindian conceptions of light were imbued with sacred, mythic, moral, and social values, which penetrated to the heart of culturally variable world views. There is a strong indication that bright light possessed positive connotations, while its absence, darkness, was associated with negative qualities. The nature of the evidence is such that it is often difficult to separate out conceptions of light from their material expression as brilliant objects. This quality of inextricability accords with a holistic world view, a shamanic, transformational universe wherein brilliant objects are conceived as earthbound, material

manifestations of light and the social relationships and spiritual qualities that it embodied.

Shimmering surfaces

Although of dominant interest to Europeans, metals were only one (chronologically the most recent and technologically the most reflective) of many kinds of enlightened materials to Amerindians, for whom they had a distinctly nonwestern significance. The Amazonian Desana believe the true importance of metal adornments lies in the symbolic associations of their color, shape, and odor, rather than any commercial value (Reichel-Dolmatoff 1981:22–23). This widespread view underscores the association of metals with shamanism, where metal adornments are regarded as sensorial stimulants whose brilliance, colors, and jingling sounds produce specific states of mind and that modify colorful hallucinogenic visions (*ibid.*; and see Hosler 1994:235, 241–243).¹ Alberto Rex González

1. As the only metal that is liquid at normal temperatures, mercury elicited admiration for its light and movement among the Inka (Garcilaso de la Vega 1987 [1609]:537) and has been found, in

(1992) regards the extraordinary range of shiny metal discs from the Andes similarly (*ibid.*, 202–203, 259); in one instance he reports a circular copper disc found in a shaman's "kit" alongside a snuffing tablet (*ibid.*, 39, pls. 5, 116, 116a). Some of these objects may have been shamans' mirrors, used to access the reflected spirit world in trance (Saunders 1988:1–10; and see Boone 1996:181–186).

Similarly nonwestern is the Desana association of copper ear-pendants with male virility, their odor relating them to sex and thus fertility (Reichel-Dolmatoff 1981:22). The preference for copper and copper-gold alloys over pure gold is widely attested (for example, Moorehead 1922:107–108; Alva and Donnan 1993; Vega 1987)—an attitude rooted firmly in prehistory, as with the so-called "Old Copper Culture" in North America between circa 3000–1000 B.C. (Mason 1981:181–199; and see, Hamilton et al. 1974). Heather Lechtman (1993:269) observes that, apart from practical considerations, *tumbaga's* remarkable popularity among pre-Columbian metalsmiths was probably due to the indigenous preference for its color over that of pure gold. Precisely this reason was given by Amerindians at Narragansett Bay in North America in A.D. 1523 to explain their preference for copper (Sauer 1971:60; see also Ribaut 1927 [1563]:66–91, 96), a view that accords with widely held attitudes toward copper as a repository of extraordinary properties (Mason 1981:180). In a famous episode, the Taíno of Santo Domingo offered Columbus a piece of metal, 18 parts gold, 6 parts silver and 8 parts copper—this *guanín* was recognized by its smell and highly valued, though to Columbus it was merely low-quality gold (Stevens-Arroyo 1988:67–69; and see below).

The characteristically shamanic relationship between shiny objects and the celestial sphere is seen in examples where the inner, spiritual essence of metals was recharged with cosmic energy by exposure to light. The Kogi expose their gold and gilded copper ornaments to the rays of the sun, the resulting power is then transmitted to priests and participants in subsequent rituals (Reichel-Dolmatoff 1981:26). Five hundred years before, Aztec *pochteca* merchants spread their elite and glittering merchandise out beneath the sun to be filled with energy (López Austin 1988:228).

association with jade, shells, and pearls, in elite burial contexts in Mesoamerica (see Austin 1994:31, 610–613). Mercury's possible identification as a "liquid mirror" and shamanic associations with water and fertility is suggested by the author (Saunders 1988:20).

Metals, however, are a comparatively recent (and culturally restricted) medium for conveying brilliance. Shiny minerals are older, more numerous, and geographically more widespread agents of light. Indicative of the shamanic conception of minerals is Eliade's (1974:137, 508) observation that among Australian Aborigines, rock crystals are not only of celestial origin, but are considered "solidified light." In Lowland South America, the Makiritare believe that when different kinds of light unite, heaven and earth will merge, and material substance will glow from within like the crystal that is the creator himself (Sullivan 1988:562).

Sahagún (for example, Book 11:223, 229–230) makes constant reference to the translucence, preciousness, iridescent colors, and light-giving qualities of minerals, many of which appear also as items of elite tribute in the Aztec *Codex Mendoza* (Berdan 1992:310–312; see also Serra Puche 1994).² Modern Nahuatl Indians regard the sky as a gigantic living mirror (crystal) filled with brilliance and the sparkle of the sun and stars (Sandstrom 1991:238). In the Andes, crystals adorned Inka temples (for example, Mester 1990:206, 216) and were associated conceptually with pearls and rain. Among the North American Chippewa-Ojibwa and Seneca Iroquois, quartz crystals were associated with shamanic curing, divination, and the human soul (Hamell 1983:13–14), and also with glossy fish scales, brass, and copper (Hamell 1998). In Navajo Athapaskan mythology, crystals symbolize "clear seeing" and "consciousness" (Witherspoon quoted in Hamell 1986:58).

Rock crystals are still highly regarded for their curative properties throughout the Americas (for example, Dow 1986:108–110; Sharon 1978) and are the Amazonian shaman's most important power objects (for example, Hugh-Jones 1979:121). For the Desana, a crystal's hexagonal shape is an image of cosmic order, related to concepts of energy, transformation, and fertility, with the crystal regarded as concentrated semen (Reichel-Dolmatoff 1971:102; 1981:23). The sun—as the ultimate source of light—is conceived as a huge rock crystal, and every earthly crystal is a miniature sun (*ibid.*).

2. An astonishing example of the value set on shininess is that when Aztec artisans heard that in the provinces of Tototepec and Quetzaltepec was to be found good abrasive sand with which to polish and shine precious stones, Moctezuma, having failed in negotiations, ultimately took the region by force of arms (Berdan 1992:303).

Throughout lowland Amazonia (for example, Boomert 1987; Oliver 1989:216–217), the Andes, and Mesoamerica, shiny greenstones were especially valued and widely traded. In Muisca/Chibcha myth, a maiden became pregnant after exposing her body to the light of the dawn sun, subsequently giving birth to a huge emerald that contained a future great chief (Reichel-Dolmatoff 1981:29). Among the Aztec, greenstones connoted fertility and glistening preciousness, signalling their presence at dawn by emitting smoke, and imparting greenness to the flora in their vicinity (Sahagún 1950–1978:Book 11:221–222). This life-giving quality was signified by placing an “emerald” (*chalchihuitl*) in the mouth of a deceased emperor (López Austin 1988:326–327). The complexities of this imagery are evident in the Aztec hieroglyphic combination of *chalchihuitl* (green jewel) in a stream of water (*atl*), which signifies “precious water,” another name for sacrificial human blood (Seler 1993c:277).

For the Aztec, mica (*metzcujatl*) was excreted by the moon, symbolized cosmic forces, and possessed a soft, buoyant light (Sahagún 1950–1978:Book 11:235). At Hopewell in North America, Moorehead (1922:91–92) estimated 3,000 sheets of mica and 200 pounds of bright galena came from a single mound. Elsewhere, pulverized mica was applied to balls of clay, imitating the form and lustre of natural pearls, alongside which they were found (Kunz and Stevenson 1993 [1908]:498, 504). At the central Mexican metropolis of Teotihuacan, Armillas (1944:123–124) discovered two layers of mica plates beneath a floor and mica debris above; he speculated that the structure originally may have been a glittering mica-plated building (and see Taube 1986:61). Together with shell, jade, and magnetite, mica signified high status in the early ranked society at San José Mogote in Mexico’s Oaxaca valley around 1150 B.C. (Marcus and Flannery 1996:93, 101–103). Similar ideas may have informed the Inka social system, where higher ranks were associated with white shiny things and lower ranks with dark colors and black (R. T. Zuidema quoted in Mester 1990:213).

The fertility associations of the sea and rivers found material expression in the translucence of shells and pearls. Shell use had a long prehistory due to shells’ generalized white shiny qualities as well as the specific subsistence, economic, ritual, and prestige value of individual species (for example, Kolb 1987; Paulsen 1974; Novella 1995; Suárez Díez 1989). Reichel-Dolmatoff (quoted in Ford 1969:74) considered that

highly polished plates of conch shell from Momíl in Colombia could have been (shamans’?) mirrors (and see Saunders 1988:15). From Mexico’s Pacific coast, the Aztecs received tribute of *tapachtli* (possibly *Spondylus princeps*), a translucent shell that resembled a crystal and was made into a shaman’s divinatory bowl (Berdan and Anawalt 1997:84). For the Chimú of Peru’s North Coast, Cordy-Collins (1990:394–396) has documented the royal associations of *Spondylus* through the duty of an official who scattered glistening seashell dust in his lord’s path (and see Pillsbury 1996). Emanating from the sea as “mother of fertility,” shells were a common offering in the Andes, particularly around water sources (for example, Murra 1975:257).

In A.D. 1542, Francisco de Orellana gave Amazonian Amerindians *chaquira* (bracelets of shell, often mother-of-pearl, beads) in order to buy their friendship, observing they wore these in lieu of jewels (Medina 1934:411–412; and see Quilter n.d.; Whitehead 1988:54–55). In North America, shells were made into shiny beads from the earliest times. Robert Hall (1976) regards them as linked symbolically to saliva and semen, and Ceci (1988) notes that shell could hold the soul and ease the passage to the spirit world (both quoted in Claasen 1996:137). Such symbolic imagery, where shells signified light, life, and social and spiritual well-being, is embodied in North American *wampum*, cylindrical shell beads (Ceci 1988; Hall 1976; Hamell 1986; 1995).

Allied symbolically to shells were the pearls some species contained. In A.D. 1540, Hernando de Soto collected large quantities of freshwater pearls from Creek Indian burials near Augusta, Georgia (Sauer 1971:167), and in Virginia, they were highly esteemed and placed together with white sand, copper, and shell beads within and around the bodies of deceased chiefs (Strachey quoted in Kunz and Stevenson 1993 [1908]:488). The antiquity of this practice is evident from the approximately 100,000 pearls discovered in the Hopewell mounds (Moorehead 1922:145). In Inka ideology, pearls were a feminine symbol, associated with fertilising rain, rainbows, and lightning (Mester 1990:198).

Many other materials and natural phenomena served as conveyors of sacred brilliance, such as featherwork, textiles, animal pelts, polished wood, and human and animal bone. Gaspar de Carvajal’s account of Spanish *entradas* into the Amazon recounts how the pottery at one village was “. . . glazed and embellished with all



Figure 4. The template of contact. Idealised depiction of Christopher Columbus being greeted by Caribbean Amerindians in A.D. 1492. Each side displays their own brilliant objects. Engraving from T. de Bry, *America*, Part IV, 1594, plate IX. Reproduced by permission of the British Library.

colors, and so bright that they astonish . . ." (Medina 1934:201). Prehistoric Ocós ceramics from coastal Guatemala (Coe 1960) were given their unusual iridescent slip in a technologically sophisticated process known only from the contemporary Chorrera culture of Ecuador. If these were maritime trade objects (ibid.; Quilter n.d.), *part* of their attraction and value may have resided in their shiny appearance. In ceramic production, the choice of clays and temper in some instances may have depended on the brilliance of their inclusions (Arnold 1993:113; Lunt 1988:493). In terms of the symbolism of light, the heating, carving, and polishing of black wood by the Taíno (see Helms 1986; Saunders and Gray 1996:810) may be analogous to the firing, shaping, and burnishing of pottery—both essentially shamanic acts of transformative creation (and see Helms 1993:13–27; Pagden 1993:85).

This brief and selective review identifies a wealth of data indicating that Amerindians inhabited a universe shimmering with spiritual essence, articulated by the cosmic, health-promoting, and political power

embodied in a vast range of brilliant materials, natural phenomena, and sacred knowledge. Cutting across culture-specific manifestations of brilliance was the underlying structural ascription of sacred meaning and value on the basis of reflective and chromatic qualities.

The conquest of brilliance

Columbus stumbled into this world of bright mythical realities unexpectedly in A.D. 1492. From the first encounters, relationships were conceived in terms of brilliance. While ostensibly sharing an aesthetic appreciation of bright shiny things, Amerindians and Europeans possessed distinct and *ultimately* unreconcilable interpretations of their value and meaning.

It was perhaps the greatest irony of contact that Europeans opened the dialogue by expressing an interest in gold, which, embedded in a different symbolic framework, was often one focus of exchange between indigenous elites, albeit in alloyed form (fig. 4). In the

Caribbean, Columbus admired the shiny *guanín* ornaments worn by Taíno *caciques*. He exchanged shiny glass beads and base metal artefacts for those ornaments setting a virtually continent-wide precedent (see also Sauer 1969:131). At the possible site of Columbus's first landing—a Lucayan Taíno village at Long Bay, on San Salvador island—a Spanish coin, glass beads, and miscellaneous brass artefacts have been found (Keegan 1992:187; 1996:268), a serendipitous miscellany of expedient trade items.³

For the Taíno, such numinous shiny objects were signs that the strangers were or, perhaps more accurately, were akin to gods or spirits who “came from the sky” (that is, distant realms), the ultimate source of bright cosmic power (Chanca 1932:64; and see Helms 1988:265). This view was widespread and persistent. At one point during his A.D. 1534–1536 sojourn in Texas and Mexico, Cabeza de Vaca was greeted with sacred gourds full of “curing stones” (crystals?)—powerful objects restricted to shamans; the indigenous view associated the Spanish with these magical stones, both of which were believed to have “come from the sky” (Adorno 1993:62).

Such attitudes were often reinforced by the accommodation of the circumstances of contact to indigenous world views. Europeans came out of the sun, sheathed in glittering armor, wielding gleaming metal swords, and firing burnished metal arquebus and cannon to the accompaniment of fire, smoke, and thunderous noise (fig. 5). There was even a parallel luminosity between indigenous and European elites, inasmuch as Amerindian *caciques* wore more bright shiny objects than their subjects, just as Spanish commanders wore more armour than the common soldier (for example, Bray 1978:108; Sauer 1969:271).⁴ In addition, elites on both sides had more shiny objects to trade than those of nonelite status. In this sense at least, the Spanish interest in gold appeared to fit into preexisting indigenous frameworks. When the Delaware

Amerindians first entertained the Dutch, John Heckewelder (quoted in Axtell 1988:132) reported that the ship's captain “‘shone superior’ in his red velvet suit glittering with gold lace.”

The strangers also brought with them fearful creatures—horses and dogs—adorned with shiny metal (Varner and Varner 1983:frontispiece, 33 figs.; Wise 1980:6–7). Columbus's A.D. 1494 *entrada* into the interior of Hispaniola looking for gold illustrates the general point. Intending to make an impression, Columbus marched his soldiers behind armoured cavalry, having them fire guns and give trumpet fanfares whenever they encountered the local inhabitants (Wilson 1986:156).

Given the commonality of indigenous beliefs about light, it is not surprising to find that initial reactions to Europeans and their shiny goods were often remarkably consistent, despite differences in specific sociocultural circumstances. For example, the various Eastern Woodland groups in North America shared enough “mental habits and conceptual modes” to give their responses “a striking degree of similarity” (Axtell 1988:127). Much has been made of the astonishing wealth of the Americas (for example, Peterson 1975:31–51) but, in fact, both participants appear to have regarded the other as possessing an abundance, if not excess, of brilliance; for Europeans, the commercial wealth of Amerindian gold, silver, and gems, and for Amerindians, light-bearing European objects of cosmological power.

Both parties were astonished at what they perceived as the other's commonplace use of valuable “power/wealth objects,” and the comparative cheapness with which they could be acquired (for example, Fisher and Bray 1987:20). Amerindians commented on the Europeans' seemingly limitless supply and everyday use of shiny materials in the form of glass beads, glazed pottery, ironwork, steel implements, copper bells and kettles, brass, and trade mirrors (and see Helms 1988:207). Europeans, even allowing for exaggeration, never tired of noting the apparent diffidence of Amerindians to their huge quantities of pearls and gold, especially when confronted with European glass beads (for example, Axtell 1988:160; Daniel Coxe quoted in Kunz and Stevenson 1993 [1908]:258). Yet, while Amerindians knew their own minds in regarding anything shiny as “valuable,” Europeans often fooled themselves, mistaking crystals and pyrites for diamonds and gold (for example, Sale 1991:233–234).

3. The Spanish government, at least, was soon to formalize such exchanges, by advising their explorers to take metal, glass, and mirrors to exchange with Amerindians (Newson 1976:97).

4. In late Medieval Europe, a full suit of armor was both status symbol and protective device and was equivalent to a top of the range sports car today. Great effort was taken to produce and maintain the mirror-like sheen (Chris Gravett, pers. comm., 1997). The association of wealth, status, and power with shiny appearance is paradoxically a shamanic concept, albeit here in a European context.



Figure 5. Armour for man and horse, late fifteenth century. This German fluted style gives an impression of the startling psychological effect that mounted Europeans must have had on Amerindians. Reproduced courtesy of The Board of Trustees of the Armouries, Royal Armouries, Leeds. Acquisition number II.3.

From an Amerindian perspective, where the possession of shiny objects symbolized power and prestige, Europeans were perceived as immeasurably powerful (Romero Frizzi 1994:234–235). To the European eye, Amerindians were immeasurably rich, yet almost totally ignorant of the fact. This widespread view was articulated by the dismissive attitude of Europeans towards the childlike foolishness and gullibility of Amerindians incapable of appreciating true worth. The notion of relative economic value, where a glass bead, a steel knife, or a copper bell was a precious rarity, was alien to most Europeans, who, for whatever reason, usually did not probe too deeply into the indigenous vulnerability to the allure of bright surfaces (Greenblatt 1992:110).

First transactions seemed advantageous to both sides. Amerindians quickly realized that for the diversity of European brilliance they were expected to exchange only a limited number of their own shiny materials—gold, silver, and occasionally pearls or emeralds. The newcomers showed little or no interest in crystals, greenstones, copper, shell, mica, or iridescent bird feathers—still less in the bright esoteric knowledge and visions of shamans and priests who were characterized as pagan idolaters.

Europeans benefited by trading cheap and mass-produced baubles—even broken porcelain (see Bray 1978:104) and iron nails (see Adorno 1993:68–69; Axtell 1988:168)—often for hitherto unimaginable quantities of gold (for example, Saville 1920b:33, 38). On the island of Cubagua, during Columbus's third voyage in A.D. 1498, one sailor smashed a dish of glazed Malaga ware, exchanging the shiny fragments for strings of pearls (López de Gómara quoted in Kunz and Stevenson 1993 [1908]:226). One hundred years apart, both Columbus (1969:55) in the Caribbean and Robert Dudley and (separately) Sir Walter Raleigh in Guiana (Bordes 1982 [1876]:1:161; Nicholl 1996:347) commented on the Amerindians' willingness to accept glistening "trifles" in exchange for gold and silver (and see Boomert 1984:147). In A.D. 1604, Captain Leigh, reporting on his dealings with Amerindians from Cayenne, noted that for a single metal axe the natives would have accompanied them for two or three months (Leigh 1906; and see Hamell 1992:459). Juan de Grijalva's A.D. 1518 encounter with a Maya trading canoe off the coast of Yucatan had seen the Spanish exchanging old clothes and sewing needles for native

earrings, necklaces, and idols of gold; yet what the Maya had appreciated most were four glass plaques, six satinwood mirrors, and two thousand green glass beads (Saville 1920b:19).⁵

Such encounters were a pan-American phenomenon. Martin Frobisher's experience of the Inuit (A.D. 1576–1578) is instructive. While the Inuit believed Europeans were cannibals, they overcame their fear in order to obtain metal bells and looking glasses, for which they traded seal and bear pelts (George Best quoted in Greenblatt 1992:110–111). In A.D. 1523, Verrazzano recorded the disinterest of Narragansett Bay Amerindians in silk, steel, or iron goods, but their fascination with small copper bells and blue crystal glass (Sauer 1971:60). Ten years later, Antonio Sedeño, Governor of Trinidad, established a smithy on the island "with the express purpose of making metal goods for trade with the Indians" (Newson 1976:94). In A.D. 1515, in the Gulf of Panama, Gaspar de Morales noted how local Amerindians were keen to exchange 880 ounces of pearls for some mirrors, scissors, and axes (López de Gómara quoted in Kunz and Stevenson 1993 [1908]:236). The numinous power of such objects was such that in A.D. 1567, Dominique de Gourges sealed a Franco-Amerindian alliance against the Spanish by distributing mirrors, bells, and rosaries of glass beads to the Florida chieftain Saturiba (Bennett 1968:202–227).

The significance of such objects can be gauged also by the extent to which they were received, reworked, and integrated into indigenous categories of thought and action. Lyon (1989:162) observes that when Spanish ships sank off the Florida coasts they were salvaged by native groups whose artisans fashioned objects according to their own styles from the recovered metals. By no means an isolated example is Goulaine de Laudonnière's A.D. 1586 report (quoted in Sauer 1971:204–206) that large quantities of salvaged gold and silver were being traded amongst the Amerindians

5. The Amerindian fascination, variously, with European porcelain, glass beads, mirrors, and metal objects was tenacious. It may be no coincidence that such materials are common in Spanish Mission sites on the mainland (and see Deagan 1987:157) and Caribbean islands such as Trinidad (see Chauharjasingh 1994; Saunders n.d.c). During the 1920s, Warao Amerindians still travelled from Venezuela to southern Trinidad to trade for mirrors at the estate houses of cocoa plantations (Jennifer de Verteuil, pers. comm., 1997). Even more recently, Reichel-Dolmatoff (1981:27) reports that Kogi women wear treasured bead necklaces composed of precious archaeological specimens alongside modern glass beads, safety pins, and plastic shirt buttons.

north of Cape Canaveral in Florida. On the northeast coast of the Gulf of Mexico, Amerindian burials have yielded metal artefacts, glass beads, and silver disc beads whose purity suggests their origin as salvage (Mitchem 1989:101, 107 illus.). Also retrieved was a cast gold figurine, apparently in the Quimbaya style from Colombia (*ibid.*, 102).

Shiny European goods also entered Amerindian societies as a result of Spanish *entradas*. Accounts of De Soto's Florida expedition mention glass beads and iron implements as gifts exchanged with the local inhabitants, and archaeological evidence suggests that other European metal objects were being scavenged (Smith 1989:138). The account of Narváez's earlier A.D. 1527 expedition mentions a gift of copper or brass to a Florida Indian chief (Mitchem 1989:101); from several mounds in west-central Florida have come silver beads probably reworked from salvaged silver bullion (*ibid.*, 103). In South America, similarly, the presence of European trade goods alongside pre-Hispanic style goldwork in tombs (Bray 1978:40, 43; Fisher and Bray 1987:25), indicates not only contemporaneity, but also a shared symbolic value between the two kinds of materials. The enduring spiritual-mortuary associations of European materials amongst Amerindians is illustrated for the Upper Great Lakes in North America between A.D. 1760 and 1820, where men were buried with a loaded flintlock gun, silver armbands, and a glass bottle, and women with brass kettles, blue and white porcelain, and hand mirrors (Quimby 1960:156–157).

Indigenous peoples were much impressed also with European armour; fragments of brass chain mail were found alongside glass and silver beads at the Ruth Smith Mound, Florida (Mitchem 1989:104). Nearby Tatham Mound yielded silver, glass and iron, and a plate of Spanish armour held in the hands of an elderly female; another piece of armour was rolled into a tube and worn as a bead around the woman's neck (Mitchem 1989:105). On such occasions European glass beads, brass, and iron, and native Amerindian metals from Spain's American colonies were all recycled, reentering a culturally distinct but symbolically analogous systemic existence.

A particularly intriguing indication of indigenous attitudes in this respect is the account (and depiction by de Bry [fig. 6]) of the Florida chieftain Outina, who, having persuaded French soldiers to accompany him to war, then consults his shaman (Lorant 1946:56). The sorcerer asks the French commander for his gleaming

metal shield upon which he then kneels and goes into a dramatic trance; it is tempting to see the shield as a shaman's mirror, made more powerful by its size, its high polish, and the fact that it belongs to the highest ranking white man present.

In Mexico, the first meetings between the Spanish and the Aztec were marked by an exchange of bright shiny gifts. When Moctezuma's emissaries met Cortés on Mexico's Gulf coast in A.D. 1519, they offered presents embodying Aztec conceptions of spiritual and elite value (Berdan 1992:310–312; Sahagún 1950–1978:Book 12:11–12), including eight elaborate mirrors adorned with gems (Saville 1920b:67). As Clendinnen (1993:17) observes, Cortés did not understand the significance of this act—still less could he have perceived the symbolic qualities of the gifts themselves.⁶

On boarding his caravel, the emissaries literally cloaked Cortés in shimmering light—a turquoise mosaic mask, a quetzal feather head fan decorated with greenstone ear-plugs, a greenstone necklace with a golden disk, and a brilliant mirror that they attached to his back (Sahagún 1950–1978:Book 12:15–16) (fig. 7). Depending on one's point of view, Cortés's response was either an ungrateful act of intimidation or a fortuitously subtle riposte—the emissaries were shackled with irons around their necks and ankles, then scared witless by the firing of a lombard gun (*ibid.*).

When Cortés, the "ultimate stranger," finally met Moctezuma at the gates of Tenochtitlan—a meeting full of mythic imagery for the Aztecs (see Gillespie 1989:226–230)—he received golden collars in exchange for glass beads and pearls (Saville 1920b:40). Such famous episodes were repeated countless times in less-well-documented or anonymous encounters. When the Spanish established control over the local chiefdoms of Oaxaca in central southern Mexico, they did so by a mutual exchange of prestige goods. The indigenous nobles gave gold and jewels in return for glass beads and steel knives (Romero Frizzi 1994:232). Arguably the ultimate examples of such transactions were the ransoms of huge quantities of bright shiny things that the Spanish

6. A similar incomprehension was displayed by Hernando Pizarro during the conquest of Peru. Pushing into the holy shrine of Pachacamac, Pizarro observed gold and silver offerings and a door decorated with coral, turquoise, and crystal; such riches led him to believe that the sanctuary itself would be a treasure trove. When he found the "holy of holies" was a simple carved wooden pole he couldn't believe that such a worthless thing was regarded as a cosmically vital deity. (MacCormack 1993:109).

demanded both for Moctezuma in Mexico and Atahualpa in Peru. The equation of massed sacred brilliance for divine emperors would, presumably, have made sense to the Aztec and Inka.

Sometimes, exchanges based on surface glitter revealed the stark incommensurability of the two valuations of brilliance. On Mexico's Gulf Coast, Spanish soldiers bartered glass beads for 600 gold axes that, on closer inspection, turned out to be copper (Saville 1920b:12–13, and see von Hagen 1974:161). On this and many other occasions, Europeans were aggrieved by what they saw as native deception. Yet, from an indigenous perspective, where all shiny objects were potentially sacred and copper was held in higher regard than pure gold, such exchanges may have seemed equitable and the angry Spanish reaction incomprehensible. If Europeans were often disappointed in this respect, so ultimately were Amerindians, for European brilliance proved to have no supernaturally protective or health-promoting qualities—in fact quite the opposite (see below).

Indicative of the semantic and analogizing confusion that characterized these early contacts (on

both sides) was the Taíno belief that everything the Spanish brought was *turey*, or “coming from the sky,” and charged with supernatural power (Bartolomé de Las Casas quoted in Wilson 1990:79, 85; and see Helms 1988:187). In Taíno thought, Spanish brass was especially precious inasmuch as, like the copper component of *guanín*, it had a distinctive odour (Stevens-Arroyo 1988:69; Whitehead 1990:20). The tricking of the Taíno *cacique* Caonabo by the conquistador Alonso de Hojeda—to put on highly polished manacles in the belief they were powerful *turey* objects and thereby be successfully abducted—shows, as Wilson (1986:169–170) observes, a (rare) sensitivity on Hojeda's behalf of how the Taíno conceived of shiny bright objects as symbols of a *cacique's* power relationship with cosmic forces.

Although deserving of more detailed analysis, these examples illustrate two important points: first, whatever their original European purpose or value, disparate shiny items entered the Amerindians' social and symbolic realms on a broadly equal basis—as expressions of sacred light, cosmic power, and (shamanically defined) elite status. As Axtell (1988:131) notes, Amerindians



Figure 6. Florida chieftain Outina consults his shaman who, snapping his bones out of place in trance, kneels on the polished metal shield of the French Lieutenant D'Ottigny. Engraving from T. de Bry, *America*, Part II, 1591, plate XXXIII. Reproduced by permission of the Syndics of Cambridge University Library.

regarded Europeans' ability to make so many incredible objects less a display of mechanical aptitude than spiritual power. Second, the shared symbolic values of indigenous and European brilliance are apparent throughout the Americas in contact-period archaeological contexts. Even where functionality can be argued, the superiority of a steel axe or knife over their flint, obsidian, or copper predecessors would have been ascribed to their greater spiritual power as a product of (European) "mystical" technologies beyond comprehension.

The wider significance of such magical processes of production, occasionally learned from Europeans (for example, Rogers 1990:75), may have contributed to the retention of some indigenous metalworking traditions beyond the conquest (for example, Whitehead 1990:22–23), and perhaps also to the explosion of syncretically baroque European/Amerindian religious art (see Fisher and Bray 1987:25–26)—especially in silver—during the colonial period.

The clash of world views represented by contact—the dialectic of exchange—had a deeply ironic cast. Europeans and Amerindians had a mutual fascination for bright, shiny things. At least initially, both were understandably keen to trade—each believing they had exchanged objects of a lesser value for greater (for example, Axtell 1988:160–161; and see Hamell 1992:464, n. 6)—each, according to their own convention—trading in light, with brilliance as the medium of exchange.

Bringers of darkness

Largely obscured behind European accounts of contact and conquest, indigenous conceptions and associations about light resonated throughout Amerindian mythical realities. Cortés's conquest of the Aztec empire is one well-documented example of conflict between Europeans and Amerindians conceived by the latter in such terms.

According to Sahagún, there were eight omens that were seen, at least in retrospect, as foretelling the arrival of the Spanish in Aztec Mexico (1950–1978:Book 12). No less than five of these involved unusual and dramatic manifestations of light; from a sparking tongue of flame that appeared in the midnight sky (fig. 8), to the mysterious unquenchable fire that destroyed Huitzilopochtli's temple and, most famously, the discovery of a strange bird with a circular mirror on its



Figure 7. Moctezuma's emissaries presenting Hernan Cortés with bright elite gifts. Reprinted, by permission, from *The Florentine Codex: General History of the Things of New Spain* by Fray Bernardino de Sahagun. Book 12: The Conquest of Mexico. Illustration 12. Translated by Arthur J. O. Anderson and Charles E. Dibble. Copyright 1953 by the School of American Research, Santa Fe.



Figure 8. The First Omen, which the Aztecs believed foretold the coming of the Spanish. It shows a tongue of fire that appeared in the night sky. Reprinted, by permission, from *The Florentine Codex: General History of the Things of New Spain* by Fray Bernardino de Sahagun. Book 12: The Conquest of Mexico. Illustration 4. Translated by Arthur J. O. Anderson and Charles E. Dibble. Copyright 1953 by the School of American Research, Santa Fe.



Figure 9. The Seventh Omen, which the Aztecs believed foretold the coming of the Spanish. It shows an ashen bird with a mirror on its head. Reprinted, by permission, from *The Florentine Codex: General History of the Things of New Spain* by Fray Bernardino de Sahagún. Book 12: The Conquest of Mexico. Illustration 9. Translated by Arthur J. O. Anderson and Charles E. Dibble. Copyright 1953 by the School of American Research, Santa Fe.

head in whose reflection Moctezuma saw the starry heavens (*ibid.*, 2–3) (fig. 9).

Moctezuma's emissaries had previously reported back on the fire, sparks, and noise that the Spaniards' gleaming metal cannon made and how it had (magically?) destroyed things far away from it. Their descriptions dwelt on the shining iron and steel with which the Spanish covered themselves and how their swords, shields, helmets, crossbows, and lances also were of iron (*ibid.*, 19). What little could be seen of the Spaniards' bodies also made an impression—chalky white faces and gleaming yellow hair (*ibid.*); such glittering imagery made the Spanish veritable gods from heaven according to Sahagún's informants (*ibid.*, 21) or the strangest of strangers in Gillespie's view (1989:226).

The Spaniards' progress from Mexico's eastern coast up into the central highlands caused fear and consternation, not least because of their gleaming appearance and flashing weapons. After taking the city of Cholula, they moved on Tenochtitlan:

They came raising dust. Their iron lances, their halberds seemed to glisten, and their iron swords were wavy, like a water [course]. Their cuirasses, their helmets seemed to resound. And some came all in iron; they came turned into

iron; they came gleaming. Hence they went causing great astonishment; hence they went causing great fear; hence they were dreaded.

Sahagún 1950–1978:Book 12:30

Apart from their plate armour and helmets, the Spanish and their strange mounts appeared covered in shining metal, from war saddles, steel spurs, polished stirrups, to their chain-mail gloves and arquebuses (Wise 1980:6–7); even their ferocious dogs wore shiny spiked collars and body armour (Varner and Varner 1983:frontispiece, 33 figs.). The Aztec word for iron was *tepuztli*, which can also signify copper or bronze (Simeón 1988:506), and the term for gleaming stems from *pepetlaca*, or “to shimmer, to reflect light” (Karttunen 1983:191). Bearing in mind the symbolic associations of metals and shininess for the Aztecs described above, the Spanish came dressed in shimmering light—an indicator of their supernatural status and power.

The final Aztec capitulation was described in terms of brightness dimmed, of brilliance become soiled and dark. When the rulers of the Triple Alliance submitted to Cortés, the three native rulers all wore shiny maguey capes—yet in each case Sahagún's Aztec informants made a point of adding that the capes were “dirty, very dirty” (1950–1978:Book 12:123); the sacred brilliance of rulership had been dulled. By contrast, the Spanish came glittering in full battle array, with iron cuirasses and helmets (*ibid.*, 122).

Archaeology also illustrates the devastating effects of contact. In Florida, several human bones from Tatham Mound show evidence of sword cuts, but at least 74 other individuals appear to have died and been buried in a short time, probably from European disease (Mitchem 1989:108). The efforts made by Florida Amerindians to acquire European metals may be related as much to their desire to stave off unexplained illness and death as to obtain such materials as status-enforcing objects. The spiritually protective dimension of shiny European goods is, at least in part, suggested by their mortuary contexts (*ibid.*, 101).

Smith (1989:148) regards these European items as substitutes for native materials, with glass replacing shell for beads and gorgets, though this may be an oversimplification. Not only were European goods more shiny and more abundant, but also they seemed to represent the superior spiritual and cosmological power of the strangers who introduced them. Native materials remained at hand, but their spiritual essence may have

appeared powerless to uphold indigenous social and mythical realities in the face of disease and death, which appeared with Europeans, yet to which Europeans themselves seemed largely immune (for example, Adorno 1993:76). Given the positive, life-enhancing qualities widely ascribed to shininess, European immunity may have been attributed to the greater quantity and reflectivity of their light-bearing materials and the vigorous cosmic power they embodied. It certainly reinforced indigenous views of the dangerously shamanic, spiritual nature of Europeans (Axtell 1988:133–134; Rogers 1990:55). In a symbolically complex, but typically indigenous scenario, Amerindian women offered sex to Europeans in exchange for glass beads. Not only did the women (and their husbands) gain supernaturally protective European power if they fell pregnant, but also “received” semen and glass beads—two categories of shiny white/translucent substances long equated in indigenous thought with fertility and power (Rogers 1990:56–57).

The Amerindian attraction to these new shiny objects could have been based partly on the perception that they offered a more powerful alternative, rather than a simple substitute for local materials, in situations characterized by inexplicable and sometimes cataclysmic demographic collapse.

The disease and death that followed European contact has been the topic of considerable research (for example, Cook and Lovell 1992; Crosby 1972; Roberts 1989). There has been little investigation, however, of its effects on Amerindian societies from the point of view of brilliance as a concept embodying cosmic order, health and life. The opposite of bright, life-enhancing light was the darkness of chaos, disease, and death—everything that accompanied Europeans, despite their abundance of shiny goods. As Stevens-Arroyo (1988:69) observes for the Caribbean Taíno, mass-produced European brass flooded native Amerindian worlds, and while initially welcomed as power-enhancing objects, proliferation through uncontrolled trade eventually diluted the religious significance of *guanín*. Hamell (1986:6) notes the revaluation of *wampum* in seventeenth-century North America where it became equated with European money, serving a cross-cultural economic function.

There is evidence that, following initial contacts, Amerindians saw the effects of the European conquest as the ultimate manifestation of the absence of light or, in

the Aztec case, the presence of “dark light,” and its personification, Tezcatlipoca—Lord of the Smoking Obsidian Mirror (Saunders 1990, n.d.b). Inka legends saw the Spanish execution of Atahualpa as signifying the world become dark, the conquest itself a *pachacuti*, or “cosmic cataclysm” (Sullivan 1988:72, 588). This was a natural consequence of a mythic view of origins whose first “creation”—plagued by evil beings, warfare, chaos, and darkness—had only been banished in the second “creation,” when Viracocha had created light and order (Classen 1993:37–38). The first great disease outbreak among the Maya of highland Guatemala, in 1519–1520, is recorded in *The Annals of the Cakchiquels* (Recinos and Goertz, quoted in Lovell 1992:435):

. . . during the twenty-fifth year the plague began. . . . It was truly terrible, the number of dead there were in that period. Little by little heavy shadows and black night enveloped our fathers and grandfathers and us also. . . . Great was the stench of the dead.

In Mesoamerica, the cataclysm of world destruction had been rehearsed in myth possibly for millenia, partly through the concept of cyclical time. The physical effects of European conquest mirror those associated with solar eclipses among the Maya, where the causative “mechanism” was perceived as ravaging predators, like jaguars, consuming the sun’s light (Redfield and Villa Rojas 1962:207). Among the Aztec, the “Legend of the Suns” describes the second age or “Sun” as ending when the sun’s light disappeared at midday and jaguars consumed the people (Damrosch 1993:155).

The qualities of jaguars as consumers of light during eclipses are widespread in the ethnographic record (for example, Sullivan 1988:70, 72; and see Saunders 1998), providing a model for the contact experience; in Colombia, Pineda Camacho (1987:99) explicitly likens the Spanish conquistadors to jaguars. Here we see plainly the indigenous accommodation of the conquest into native categories of disaster and event, in this case by identifying Europeans as predatory agents of darkness, who steal or consume the light of the world.

In one sense, we have come full circle. During his fourth voyage of A.D. 1502–1504, Columbus had greatly impressed the Jamaican Taíno by predicting a lunar eclipse—his “supernatural” control over such remote and untouchable celestial phenomena—the forces of light and dark—persuading the Taíno to bring food to the stranded Spanish expedition (fig. 10).

The light in Plato's eye

In fifteenth- and sixteenth-century Europe, material manifestations of light had been spiritually disenfranchised to a considerable degree—many brilliant objects ceasing to have any deeper philosophical dimension. This was part of a trend that would see Descartes and Newton stripping light of its metaphysical qualities, objectifying and measuring it, and thereby effecting a profound transformation in the West's way of perceiving (Zajonc 1993:94–95). Technology, industry, and trade had demystified and desanctified—enabling anyone to possess as much glass, porcelain, brass, copper, and iron as they could afford to buy. For European explorers, trade goods seemed “trifling” partly because they forgot the complex operations that produced them—they “handled only the final product of a long skein of economic transactions . . .” (Axtell 1988:173). True value in the materials of brilliance now inhered mainly in precious gems, pearls, gold, and silver—and measured almost exclusively in commercial rather than spiritual terms.

This is not, however, to deny the subtleties of Medieval European symbolism in terms of arcane beliefs in the color-coded spiritual and astrological import of both precious and semiprecious stones (for example, Kunz 1971:256–274 *passim*, 338–366 *passim*, respectively), the “life-giving” properties of gold, or its “magical” transformation from base metals in the



Figure 10. Christopher Columbus impressing the Jamaican Taíno by predicting a lunar eclipse on 29 February 1504. (Reproduced courtesy of Donald J. R. Walker).

crucibles of alchemy (for example, Nicholl 1996:323–324). Still less is it a denial of the equally rarified Christian significance of God's holy light, which shaped and energized the world (in ways that, borrowed from pre-Christian beliefs, recall shamanic Amerindian views). Christ himself was “Light Incarnate” according to John the Baptist, and the “light of the world” in the Gospel of St. John. Such intricacies aside, by A.D. 1492, nonprecious metals, porcelain, and glass were not viewed by Europeans with religious awe—their common currency was secular.

The kaleidoscopic relativity and hybridity of aesthetics in this matter is not just an issue of historically contingent cultural forms—it relates fundamentally also to the universal human reaction to light and brilliant light-reflecting objects. Human evolution has created distinctive responses to sunlight, starting the body's clock at dawn as light hits the retina, activating a neural pathway to the brain, stimulating the visual cortex, and affecting thought and perception (Perkowitz 1996:31–35 [on occasion, the shimmering of sunlight through trees at dusk is enough to produce seizures in some individuals]). The world presents itself, but we must represent it to ourselves through individual and collective memories and world views—the multifocal lenses of culture. As Zajonc (1993:37) notes, the act of interpretation equates to “the light of Plato's eye,” which in Classical thought joined with sunlight to forge a link between objects and the soul. Beauty resides in the eye of the beholder, but the eye itself is a “strange crossroads” where objective processes become subjective responses (1993:33).

This subjectivity led, in part, to startling contrasts between Amerindian and European views of brilliance. Where Amerindians displayed no uncertainty about light and the materials that embodied it, Europeans possessed a complex ambivalence toward the wealth represented by gold, silver, and precious stones. The desire for these drove the exploration, conquest, and colonization of the Americas (for example, Duque Gómez 1981:8; Oliver 1989:216–217; Sale 1991:232–235, 259–263), despite the fact that the lust for gold was recognized by Christians as the root of all evil. Christians were caught between competing pressures for earthly enrichment and heavenly salvation, personal greed and spiritual enlightenment. For Amerindians, a separation of the physical and spiritual along such lines was inconceivable.

Where Europeans saw the possession of wealth as a real (or potential) moral contradiction, Amerindians saw

glittering objects as endowing life, physical health, vitality, and spiritual well-being—their fluorescence unifying physical and spiritual realities. Amerindians regarded gold and other shiny substances as defining the essence of an ordered, meaningful, and balanced life, but for Europeans, the lust for possession could produce damnation and ruin.⁷ In 1514 Gonzalo Fernández de Oviedo, speaking with the authority of a royal inspector of gold foundries, remarked how Amerindian gold had two related characteristics, the capacity for awakening envy and an uncontrollable transiency (Gerbi 1986:376), and how for one man to become rich, maybe a hundred must die (*ibid.*, 367)—he is speaking here only of Europeans. The Aztec, Taíno, or Inka would surely have managed a wry smile at Oviedo's remark on the number of Spaniards who found that hitherto solid gold had become impalpable and “slipped through their fingers, like the dew or a shadow” (*ibid.*, 377).

An excess of gold, silver, pearls, or emeralds could make Europeans greedy, cruel, arrogant, and liable to forget their basic humanity. The Aztec commentators of the *Florentine Codex* noted how the Spanish seized on gold as if they were monkeys, how they stuffed themselves with it, and lusted for it like pigs (Sahagún 1950–1978:Book 12:31). There is both irony and metaphor in the drawing by Benzoni that shows an Amerindian pouring liquid gold down the throat of a Spanish conquistador (fig. 11). On some occasions, it seemed as if Europeans were literally devouring the spiritual essence of America.

What Europeans encountered in the New World was a more or less consistent attitude toward light and its material manifestations. What they often did not see, or chose to ignore, was the underlying system of values that endowed these attributes with sacred meaning. In a strange postconquest conjunction of circumstances, it was the Catholic church that, perhaps unwittingly, found itself the inheritor of an impoverished and syncretic realignment of meaning concerning the indigenous symbolism of light. *Wampum* served as rosary beads in seventeenth-century Catholic missions in North America and was given as gifts to the Society of Jesus (Hamell



Figure 11. Panamanian Amerindians pouring molten gold down the throat of a Spaniard. From woodcut by Benzoni. Reproduced by permission of the Syndics of Cambridge University Library.

1995:50). More dramatically, in post-Inka Peru, in a hymn by Cristóbal de Molina reproduced in Guaman Poma we find:

The relucient gold, brilliant and light-giving. . . . There is someone named Jesus, like the sun and the moon, who glitters and burns. . . . Do you believe in the power of the Trinity, brilliant, burning and resplendent?

quoted in Mester 1990:221

In remoter areas, such as Amazonia, similarly syncretic accounts often retained more-obvious shamanic imagery. Taussig recorded an old man's *yagé*-induced vision in which, at first, angels placed crystals onto his forehead to divine illness, then brilliant *yagé* people appeared dressed in feathers and mirrors, and finally an army batallion sheathed in gold (1987:322–323).

Conclusions

I have argued here for a wide perspective—one that yields potentially valuable insights and allows for the consideration of ideas and connections whose existence may be perceived more readily and more heuristically in such broad focus. Culture-, technology-, and material-

7. Reporting what he considers an apocryphal remark by Cortés to Moctezuma's emissaries in William Prescott's *History of the Conquest of Mexico*, Kirkpatrick Sale (1991:233) states that Cortés said to the Aztec emperor that the Spanish suffered from a strange disease for which the only known remedy was gold. True or not in this instance, such a remark would have been an ironic metaphor to Europeans, but have possessed a certain resonance amongst the Aztecs.

specific investigations provide invaluable fine-grained assessments of the depth of semantic and technological variability in material culture, yet usually have not addressed the nature of deeper, panregional symbolic values. Shiny objects, in particular, did not exist in inert, compartmentalized isolation, but within actively transformational and overlapping spheres of symbolic and ritual activity, *throughout the Americas*.

I have sought to explore (and make conceptual sense of) three issues, hitherto treated largely in isolation from each other: the widespread reception of Europeans as supernatural beings; the commonplace view of shiny European trade goods as "power objects"; and the cataclysmic effects of European disease on indigenous populations. All are associated with, though not dependent on, the proposed existence of a pan-Amerindian metaphysics of light. I have attempted to show how these can be seen as meaningful parts of a whole, each acting reflexively on the other. Throughout the Americas and across a diversity of cultures, the nature, course, and consequences of European contact were repeated in remarkably similar ways. This single and much-commented-upon fact invites a formalization of diverse strands of evidence into a unified approach. The evidence presented above can be seen as a first tentative step. I summarize the main conclusions thus.

Positive conceptions of light lay at the heart of a metaphysical framework upon which, over at least ten millennia, Amerindians had constructed explanations of their social and symbolic universes. In these shamanic, transformative worlds, shiny objects were fundamentally materializations of light—sensuous, variably colored embodiments of bright cosmic energy, whose possession, display, and exchange articulated intersecting physical, spiritual, and mythical realities. As such, they were definitive statements of prestige, centrally located in the symbolic representation of political power and elite status (for example, Blanton et al. 1993:220–222) as indicated by their contextual associations in the archaeological and ethnohistoric records. Indissolubly linked to other manifestations of brilliance—from natural phenomena to esoteric knowledge—this indigenous, holistic philosophy of light contrasts markedly with that of Europeans, for whom the worth of brilliance lay in assays of gold content and the flawlessness of gems, wherein their western value lay as mediums of commercial exchange.

The pan-American significance of brilliance had critical implications for indigenous Amerindian societies

from the moment of Columbus's arrival in the New World. Amerindians and Europeans each saw "their America" as a land infused with glittering brilliance, yet the underlying, historically contingent interpretations of that brilliance were the point of fissure between two diametrically opposed world views. As Romero Frizzi (1994:227, 229, 232) points out for the conquest of the Valley of Oaxaca in southern Mexico, indigenous conceptions of power favoured the Spanish at least in part because the latter's shiny goods were perceived as symbolic manifestations of esoteric knowledge and cosmic power. Conspicuous consumption by native elites centered on these goods—a surfeit of which established the Spanish as a superior sacred power (*ibid.*, 235). This acute observation can be extended across the western hemisphere.

Initially Europeans were seen as supernatural possessors of, and traders in, sacred brilliance, but they ended, paradoxically, as common thieves, all too human stealers of a light whose qualities sustained the Amerindian cosmos. The prismatic effect of the conquest on indigenous conceptions of light fragmented the integrated complexities of structure and meaning upon which the integrity of Amerindian world views depended. For many Amerindians, as Gruzinski (1993:15) notes for central Mexico, this loss of coherence, the erosion of meaning, led to "the ancestral patrimony being nothing more than . . . a 'net full of holes,'" a "darkening" marked by dispossession, slavery, disease, and death. For those who survived initial contact and contagion, the psychological darkness was often so keenly felt that many chose suicide (for example, Hodge quoted in Adorno 1993:70; and see Wilson 1990:96–97).

From the evidence presented here, it is reasonable to suggest that, when accommodated to indigenous configurations of meaning, the European conquest brought about a mirror image of precontact reality, an inversion of a previously ordered, meaningful, and "healthy" existence—in short, a world turned upside down, a universe from which light in all its varied forms had been extinguished.

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