

Chapter 5

Source Compilation on Head-Shaping Practices in Hispanic America, by Pilar Zabala

This chapter transcribes and comments on some 100 individual text citations on Hispanic America, an anthology that covers five centuries (fifteenth to twentieth) of directly witnessed head-shaping practices (Tiesler and Aguirre 2011; see also Chap. 10 of this book). This extensive body of written testimonies comes from the geographical sphere first controlled by the Viceroyalties of New Spain and Perú, including the Caribbean region, and provides primary source material for further research on head practices after European contact. We may divide this area roughly into four sections according to the European colonization powers, strategies and timing: the Antilles, Portuguese Brazil, Mesoamerica, and Perú (Fig. 5.1). While the colonization strategies of the last two jurisdictions are similarly characterized by a despotic claim to streamline culture and transform the social fabric to the needs of the Spanish crown (which included the forced assimilation of culture and, more so, religion), the impenetrable forested areas east of the Peruvian Highlands remained largely isolated and unexplored for decades and centuries to come. From the Atlantic side of the continent, Brazilian establishments were mainly restricted to economic exploitation and limited to the coastal areas. Deeper incursions into the Amazon Basin did not occur until the seventeenth and eighteenth centuries (Fournier 1999; Lucena 2005, p. 102). More complex is the Caribbean history, where indigenous traditions either faced extinction along with their human carriers, or persisted on the more isolated islands.

As for ancient head-shaping practices, the historical extracts to be presented in the following sections, give a voice to native body practitioners, Iberian eyewitnesses, government analysts, adventurers, and naturalist bystanders, and lastly, to modern anthropologists who describe waning head traditions still being applied in the Amazon Basin and parts of Mesoamerica during the twentieth century. Most colonial documents come from the *Archivo Histórico Nacional* in Madrid and the *Archivo General de las Indias* in Seville, while the majority of transcriptions on head shaping, dated to postcolonial times, derive from the admirably thorough recompilation of historical sources by T. Eric Dingwall (1931). Care was taken to examine each transcription critically within its particular historical context to avoid oversimplification and interpretational biases.



Fig. 5.1 The countries of Latin America (highlighted) staged cranial modification practices as described by early colonial references. (Drawing by V. Tiesler)

5.1 Cranial Modification in Colonial Sources

The custom of artificial cranial flattening constituted a cultural practice among the majority of native peoples that populated the American continent still at the time of European contact. Subsequently, as new civil and ecclesiastical powers were imposed by the colonizers from afar, head practices began to disappear. Especially, in

the Iberian colonies, the new laws imposed on the natives were intended to eradicate ancestral customs, including the modification of head shapes on their newborns. Notwithstanding the acculturation efforts, these were not always effective, as shown here by their continued practice and historical mentions. Some Ibero-American historical accounts witness a gradual abandonment of the custom whereas others noted a rapid change. It appears that the custom disappeared earlier in the territory that was dominated by the Viceroyalty of New Spain; at least, this can be argued from the little information that we were able to gather from this region. However, given the uniformity of the cephalic shapes practiced among Mesoamerican natives at that time, there is also a real possibility that the custom may have passed unnoticed by most incoming Europeans, who might have considered the shortened and broadened head forms as a natural aspect of native physiognomy (see Chap. 10). This contrasts with the diversity of forms and the longer survival of the custom of head shaping among the Caribbean and South American groups under both Spanish and Portuguese rule (Fig. 5.1).

5.1.1 The Caribbean Region

Mentions of cranial modification are not numerous; however, it can be deduced from the timespan of chronicles and travel accounts that the tradition was enacted among native islanders and survived for a long time after Conquest.

5.1.1.1 La Hispañola

The first mention of cranial transformation practice among the indigenous populations of La Hispañola is attributable to Christopher Columbus himself, who includes it in a description of the physiognomy of the natives he encounters during his first voyage. He describes the form in which the mothers performed this operation on their newborns, affirming nonchalantly that the natives practiced it because they liked the visible aspect.

Estos isleños aunque no muy altos eran de una estatura regular y proporcionada la cabeza aplanaada porque desde niños, sus madres, se la ponían muy apretada entre las manos ó entre dos planchas de madera como en una prensa, de donde provenía que doblado el cráneo y criándose más espeso con este artificio se volvía el casco tan duro que los españoles hicieron pedazos más de una vez sus espaldas, queriendo descargar el golpe de tajo sobre la cabeza de estos infelices. Esta mala inconformidad de la cabeza y frente los agradaba mucho, y si se junta a eso que tenían las narices muy abiertas (...) todo este conjunto de facciones contribuía mucho á este aire salvaje y feroz que se observaba en aquellos pueblos (Christopher Columbus in Vega 1826, p. 172).

Other references to the custom of head shaping come from Santo Domingo, also in La Hispañola. Eric Dingwall cites Thamara, whose work was published in the mid-sixteenth century, some 60 years after Columbus' earlier mention:

In S. Domingo, Thamara noted the practice of deforming the head in 1556. He states that certain of the population have their foreheads narrowed artificially by lateral compression, and like other authors he comments upon the fact that under the constriction the eyes protrude from the head (saltar los ojos) (Dingwall 1931, p. 158).

Likewise, we found mentions of the custom among the Carib “archers” of San Juan, around the Xaragua lake of Santo Domingo. In this description, Fernández de Oviedo focused exclusively on the physical description of the “Caribs” as he reports the artificial manipulation of their heads, but offers no interpretation of the ritual motifs of this practice.

Tornando a nuestro propósito digo que la color desta gente es lora: son de menor estatura que la gente de España comúnmente, pero son bien hechos e proporcionados, salvo que tiene las frentes anchas e las ventanas de las narices muy abiertas e lo blanco de los ojos algo turbio. Esta manera de frentes se hace artificialmente porque al tiempo que nacen los niños, les aprietan las cabezas de tal manera en la frente y en el colodrillo, que como son las criaturas tiernas, las hacen quedar de aquel talle, anchas las cabeças delante e detrás e quedan de mala gracia (Fernández de Oviedo 1945 [1557], p. 137).

5.1.1.2 Island of Martinique

A few centuries later, Father Labat, was still able to observe more carefully, the custom among the native groups living in the Lesser Antilles of the eastern Caribbean and relates on his trip to the Antilles during the eighteenth century:

todos eran bien hechos, bien proporcionados y de agradable fisonomía, aunque sus frentes parecían un tanto extraordinarias, debido a que se presentaban aplanadas y como hundidas. No nacen así, sino que obligan a las cabezas de sus niños a tomar esta figura, colocando sobre la frente de los recién nacidos una tablilla amarrada fuertemente por detrás de la cabeza, que dejan allí hasta que la expresa frente haya tomado consistencia, permaneciendo entonces aplastada, de modo que desde lo alto de la cabeza ven casi perpendicularmente por encima de ellos, pero la figura o la desproporción de la frente, hace que parezcan de tamaño regular (Montalvo 1884, pp. 17–18).

5.1.1.3 Guayana

We also found a mention from eighteenth century Guyana on this modification process among the children from the lands surrounding the Caribbean region. It was confirmed by a German soldier who participated in the revolt in Surinam and was published by Stedman:

Most of these people esteeming a flat forehead as a mark of beauty, they compress the heads of their children, it is said, immediately after their birth like the Chactaws of North America (Stedman 1729, p. 398).

5.1.2 Viceroyalty of New Spain

Data from documentary sources and chronicles on the Mesoamerican native practice of cranial modification, are relatively few in number and most of them are very

brief. Many are limited to a simple description of the technique used to transform the shape of the skull of newborns; others attempt a more culturally sensitive explanation. These interpretations differ according to author, as well as the ethnic groups to which they refer.

5.1.2.1 Mexica (Aztecs)

López de Gómara ([1987](#) [1552]) conceives to the practice among the Nahua populations of New Spain in a way similar to how Christopher Columbus mentions it in his physical description of Hispaniola natives, i.e., as an almost given part of their physiognomy. López de Gómara adds that the first phase of this practice was carried out on the newborn child by the midwife who attended the birth, after which the mother controlled the child's care until the head had acquired the desired shape. Gómara likewise made no observations of importance regarding the cranial modification process, simply declaring that it was a custom that was deemed desirable:

Crían largo el cabello, lo ponen negro con tierra por gentileza y para que los mate los piojos. Las casadas se lo rodean a la cabeza con un nudo a la frente, las vírgenes y por casar lo llevan suelto y echado y atrás y adelante. Se pelan y untan todas, para no tener pelo sino en la cabeza y cejas y así tienen por hermosura tener la frente pequeña y llena de cabello y no tener colodrillo (...). Las parteras hacen que las criaturas no tengan colodrillo, y las madres las tienen echadas en cunas de tal suerte que no les crezca, porque se precian sin él (López de Gómara [1987](#) [1552], p. 451).

In the same way as López de Gómara, Paso y Troncoso describes the physical characteristics of the Aztecs, interpreting infant cranial transformations as an adornment, deemed beautiful in the eyes of native Nahua:

Se caracterizan por su modesta presencia física, por el color pardo, por los grandes ojos, por la frente amplia, por la nariz, por la nuca plana aunque esta se debe a la acción de los padres (...) consideran de hecho que sea un indicador de belleza las frentes pequeñas y ricas de cabellos y la nuca prácticamente inexistente que viene comprimida por el obstetra por medio de la aplicación de un peso desde cuando ven la luz, cuando el cráneo es tierno y mantiene esa forma cuando el niño viene depositado supino en la cuna (Paso y Troncoso [1926](#), p. 25).

Some other references, although somewhat later in time, go beyond plain customary testimonies. Toward the close of the sixteenth century, indigenous chronicler Cristóbal del Castillo transcribes an assertion written in Nahuatl, which relates the practice to military hierarchy, deeming that cranial transformation was related to aspects of courage, and high military rank.

los guerreros, los varones, “los tehihuaque” (los que tienen cargo), los “quahiqueque” (los raspados de la cabeza) que se consideran altos grados en la jerarquía militar (Castillo [2001](#) [late sixteenth century], p. 99).

5.1.2.2 Purepecha/Chichimec

From the vast stretches of New Spain's western provinces comes the *Relación de Michoacán* ([1977](#) [1541]). It provides a compilation of several accounts by natives

living in the Michoacán province. Franciscan Friar Jerónimo de Alcalá probably transcribed these from the Purepecha language just 20 years after the Spanish Conquest. These first and third person testimonies relate dramatic conflicts and massive migrations in the territories around Lake Patzcuaro. There, the Tarascan settlers at that time participated in broader population movements between the Great Chichimeca to the north (whose populations did not have the habit of modifying the head) and local Purepecha stock (Pereira 1999, pp. 167–168). Also, artificially shortened heads are mentioned in these contexts and referred to as desirable attributes of bravery and gallantry of the local aristocracy (“los señores”). A man from the Patzcuaro area, called Hirípan, sadly exclaims in his monologue that he is ashamed of his rounded head and small stature:

¡Oh Hirípan: aunque soy de tal estatura y tan pequeño, y aunque tengo la cabeza redonda, que no es de valientes hombres, nunca me tengo que olvidar de aquella injuria de Hiuacha! (Relación de Michoacán 1977 [1541], p. 145).

Some sentences further down, the story’s protagonist is described again:

de pequeña estatura, y tenía la cabeza redonda. Que los que tenían de tal manera, no los tenían por valientes hombres, y por eso a los señores les allanaban las cabezas, y se las asentaban y hacían como tortas (Relación de Michoacán 1977 [1541], p. 145).

5.1.2.3 Totonac and Huastec

An additional reference is offered by Francisco Hernández for the eastern mountains of New Spain, toward the Gulf Coast of present-day Tamaulipas and Veracruz. He states that the Indians of the Panuco area thought that the head practice enabled them to carry greater weights and to transport larger loads during their workday. This assertion is clearly related to tumpline (*mecapal*) use, observed still among today’s native population. It consists in a broad band that passes over the head is fastened to the load on their backs:

Crean que es cosa bella tener las frentes pequeñas y cubiertas con los cabellos y casi ninguna nuca, la cual, para que puedan llevar carga, se le aplanan por las parteras en cuanto ven la primera luz, porque entonces la calavera es muy tierna y esa figura se conserva por los recién nacidos acostado en sus cunas (Hernández 2001 [1576], p. 111).

Another sixteenth century chronicler, Friar Bernardino de Sahagún, characterizes the artificial head form among natives from northern Veracruz, who “call themselves Huastec,” as shortened, without mentioning whether these shapes stem from artificial modeling. This sketchy appraisal stands in surprising contrast to with the minute detail in which his chronicle, *Historia General de las cosas de la Nueva España* narrates other ethnically specific adornments, like hairstyles and headdresses.

Estos “totoniques” están poblados a la parte del norte, y estos se dicen ser “guastecas”. Tienen la cara larga y las cabezas chatas; y en su tierra hace grandísimos calores (Sahagún 2005 [sixteenth century], Vol. 3, p. 201).

We find a more nuanced explanation in the work of Walter Krickeberg, who attempts to explain the differences in head shapes between both groups, by translating the native terminologies used in mentioning this practice:

Los totonacas ejecutaban el aplanamiento de la cabeza y en eso imitaban a los huaxteca. La expresión “Quavacaltic” (de uacalli, una canasta que se echa a la espalda) se usa aquí, como en el párrafo de Sahagún que trata de los huaxteca, para describir la deformación de la cabeza, . . . A las cabezas de los huaxteca se les llama anchas y aplanadas (patlachtic), aquí se acentúa lo largo de la cara. Molina traduce “melatic” como “cosa derecha y luenga” (de Melaua, “enderezar alguna cosa tuerta”), y “mimiltic”, o “cosa rolliza, como rolliza, como pilar” (Krickeberg 1933, p. 47; see also Yépez 2001).

Krickeberg concludes that:

Eso solamente puede significar que los totonaca ejecutaban otra forma de deformación de la cabeza que los huaxteca, y se tiene la tentación de emplear la antigua distinción de “long-heads” (cabezas largas anulares) “flatheads” con esas dos tribus (Krickeberg 1933, p. 47).

5.1.2.4 Maya

Friar Diego de Landa counts among the few early historiographers to go into detail when recounting cranial modification practices among the Yucatecan Maya of the sixteenth century. Expressing himself in a clearly reproachful attitude, he contemplates the pain that the head compression must have caused the infant and the danger it could have caused to its life.

The women brought up their little children with all the roughness and nakedness in the world, since four or five days after the infant was born, they placed it stretched out upon a little bed, made of sticks of osier and reeds; and there with the face [down], they put its head between two small boards one on the back of the head and the other on the forehead, between which they compressed it tightly, and here they kept it suffering until at the end of several days, the head remained flat and molded, as was the custom of all of them. There was so great inconvenience and danger to the poor children that some were in danger, and the author of this book saw the head of one perforated behind the ears, and this must have happened to a great number (Landa [sixteenth century], in Tozzer 1941, p. 125; see also Landa 1982, pp. 54–58).

Historian Molina-Solís echoes Landa's view when talking about this custom in Yucatán. He recounts the sources dating to the European contact with the Maya during the years of the conquest of Yucatán. The author recounts that the natives attributed great importance to changing their physical appearance for social and religious reasons. He likewise notes that cranial modifications were present in those people since infancy, emphasizing the role of mothers in the early physical adaptation of the body.

Pero si era una raza bien dotada por la naturaleza, adolecía de vicios de conformación en un gran número de individuos, que acarreaban las necesidades de la crianza, con las preocupaciones más banales sociales y religiosas. A menudo se encontraban sujetos estavados, bizcos, con la cabeza aplastada, horadadas las orejas y arpada la ternilla de las narices. Todos eran defectos artificiales o adquiridos, ora porque las madres, en la edad de la lactancia, llevaban a sus hijos de un lugar a otro ahorcados sobre sus caderas, ya también porque gustaban de usar zarcillos, o bien se imprimían crueles arpaduras para consagrarse con sus divinidades (Molina-Solís 1943, p. 218).

Similar to the statement by Cristóbal del Castillo on the Mexica, is the characterization of the custom that Bartolomé de las Casas provides for Guatimaltecan. The chronicler, expert in the native ways in New Spain and Peru, states that they flattened their heads in order to appear more ferocious in combat.

Cuanto a la costumbre de querer parecer fieros en las guerras, ordenaron a los principios hacerse las caras y cabezas, por industria de las parteras o de las mismas madres cuando las criaturas son tiernas y chequitas, empinadas y hacer las frentes anchas (Casas 1967 [sixteenth century], p. 177).

5.1.2.5 Nicaragua

Further east and down the land bridge between North and South America, we find one other invaluable testimony from the cultural fringes of Mesoamerica. Among Nahua-speaking folk of Nicaragua, Friar Francisco de Bobadilla notes different connotations for their head-shaping practices in his description of native customs and beliefs. He emphasizes the notion of “beauty” that this body modification holds for locals and cites other, possibly more practical considerations, such as promoting a docile nature from early age on and to prepare the children to lift heavier burdens later in their working life. Using the recourse of dialogue, Bobadilla recites:

F. ¿cómo no tenéis vosotros la cabeza de la hechura que los cristianos?
 Y. Cuando los niños nacen, tienen las cabezas tiernas, y hácenselas como veis que las tenemos con dos tolondrones a los lados dividiendo, y queda por medio de la cabeza un gran hoyo de parte a parte; porque nuestros dioses dijeron a nuestros pasados que así quedamos hermosos y gentiles hombres, y las cabezas quedan más recias para las cargas que se llevan en ellas
 (Dialogue by Fray Francisco de Bobadilla [sixteenth century], in D'Olwer 1963 p. 352).

5.1.3 Viceroyalty of Perú

The limited amount of information available on New Spain contrasts with the wealth of detail that characterizes many references collected from the records of the Viceroyalty of Peru. Here the native head practices clearly inspired more numerous and explicit writings.

5.1.3.1 Inca, Perú

As an example of eloquence, we mention Bartolomé de las Casas and Juan de Torquemada. Both bring the cultural practice up only briefly among the natives of New Spain, but describe and justify it at length in the case of the Viceroyalty of Perú. In addition to purely technical aspects, the friars provide various interpretations for this custom among the Inca and the Andean peoples dominated by the Viceroyalty. They regard the enactment of cranial transformation as an exclusive right of the members of the social hierarchies, i.e., the only individuals who held the privilege of practicing and

of conferring this right onto others. On a more general note, diverse models of the cranial modification are ascribed to Peruvian natives as a visible body attribute used to identify place, tribe or lineage.

Dije algunos de los del Perú, porque por la mayor parte, cuasi en cada provincia tenían propia costumbre y diversa de las otras, de formar con industrias las cabezas. Y es cosa de maravilla ver la diligencia e industria que tienen para entallar las cabezas mayormente de los señores; éstas de tal manera las atan y aprietan con lías o vendas de algodón o de lana, por dos y tres años a las criaturas, desde que nacen, que la empinan un palmo grande, las cuales quedan de la hechura y forma de una coroza o de un mortero de barro muy empinado (...). Por privilegio grande concedían los del Perú a algunos señores, y que ellos querían favorecer, que formasen las cabezas de sus hijos de la forma que los reyes y los de su linaje las. No había provincia en toda la tierra, con ser innumerables, que los vecinos de cada una no trujesen su señal en la cabeza, que entrando en la plaza de la ciudad de Cuzco, en la cual entraban por cuatro partes, como en cruz, y viéndolos de lejos, no cognosciesen de qué provincia eran, sin que más del traje viesen; y esto hasta hoy dura.

A aquesta diligencia destas señales para conocerse las personas de qué provincias eran, parece poderse ayuntar la costumbre antigua, que también tenía cada provincia, de formar las mismas cabezas, porque fuesen cognoscidos los vecinos de cada una dellas, Y así, cuando infantes que acababan de nacer y de allí adelante, mientras tenían las cabezas muy tiernas, les ataban ciertas vendas o paños con que se las amoldaban según la forma que querían que tuviesen las cabezas; así, unos las formaban anchas de frente y angostas de colodrillo; otros, anchas de colodrillo y angostas de frente; otros, altas y anchas, y otros de otras maneras; finalmente, que en la forma de las cabezas tenían muchas invenciones, y ninguna provincia, al menos de las principales, había que no tuviese forma diferente de las otras, de cabezas. Los señores tomaron para sí e para todo su linaje, que se llamaba ingas, tres diferencias de cabezas, puesto que después algunas dellas comunicaron a otros señores de algunas provincias, sin que fuesen del linaje de los ingas, por especial privilegio (Casas 1967 [sixteenth century], p. 594).

In Chap. 15 of Book 14 of the *Monarquía Indiana*, Friar Juan de Torquemada speaks about the physical description of different ethnic groups in the Indies, including the “manners that they had of forming their heads.” It is noteworthy that native Mexican head shapes are described here omitting that their head shapes were most likely the result of artificial modification, a connotation, which Torquemada does point out for Peruvian head practices.¹ For the latter, he reports different modification techniques and a diversity of forms. He mentions particular head shapes that were a privilege granted only to certain lords, who in turn granted this right to others as a favor so that their heads could take the shape of the “kings”.

Diximos algunos de los del Pirú, porque por la maior parte, casi en cada Provincia, tenían propia costumbre, y diversa de las otras, de formar con industria las cabeças, y era cosa de maravilla verla diligencia, que tenían para entallar, y formar las cabeças, maiormente de los Señores; estas de tal manera las ataban (...) y apretaban con lias, o vendas de algodón u de lana, por tiempo de dos, o tres años, desde que nacian, que las empinaban mas de vna quarta,

¹ Note that Friar Juan de Torquemada writes his *Monarquía Indiana*, written in the early 1600s. It was published in 1615 while the author still lived. His work based on writings left by previous chroniclers such as Hernán Cortés, López de Gómara, Bartolomé de las Casas, Motolinia, Mendieta and other Franciscans as well as the Jesuit Acosta or the royal chronicler Antonio de Herrera. Here, we find again the works by the authors mentioned, but we believe it is important to include the complete text on head shaping offered by Torquemada in this chapter.

las quales quedaban de la hechura, y forma de vna coroça, u de vn mortero de barro, mui empinado, y alto, y en esto ponían mucha diligencia, y por privilegio grande concedían los del Pirú a algunos Señores a quienes querían favorecer, que formase las cabeças de sus hijos, de la manera, que los Reies, y todos los otros de su linaje (Torquemada 1969 [1615], Vol. 2, p. 583).

An account of Santa Cruz Pachacuti, written many years after the Conquest, recalls that the head shapes of the underprivileged and marginalized were also controlled by the Inca. He states that the Inca, Manco Capac, ordered the heads of his people molded so that they would be obedient:

el Inca Manco Cápac había ordenado el uso del modelamiento en sus provincias conquistadas para que sean simples y sin ánimo, porque los indios de gran cabeza y redonda suelen ser atrevidos para cualquier cosa: mayormente, son desobedientes (Santa Cruz Pachacuti 1995 [1613], p. 23).

The same information is also voiced in later years of Inca occupation and attributed to the third Inca, Lloque Yupanqui.

Lloque Yupanqui tercer Inca, también había mandado que todas las naciones a él sujetas los atasen las cabezas de las criaturas para que sean largas y quebrantadas de frente, para que fuesen obedientes (Santa Cruz Pachacuti 1995 [1613], p. 130).

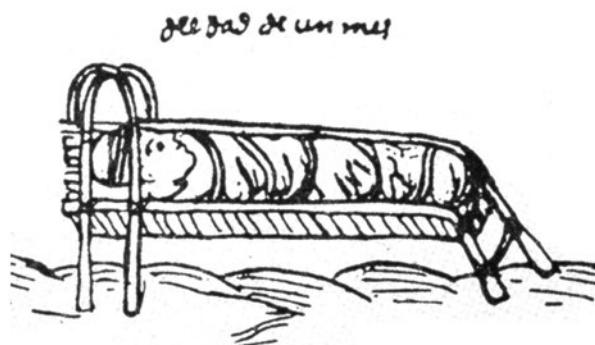
There are no uniform criteria among the different authors regarding the underlying purpose or intention of the cultural practice of cranial modeling; different interpretations are advanced by chroniclers of the first colonial years and later writers, as Dingwall already makes clear, when he states:

The fact that, generally speaking, the practice seems to have been a privilege of a class suggests, as Wiener has pointed out, that some advantage was supposed to accrue from it, although he is wrong in stating that the heads of men only were deformed. The reasons given by Sacamayua cannot, I think be considered seriously in their literal interpretation; and similarly Angrand's idea that the custom had taken root in the belief of a serpent ancestor cannot be admitted (Dingwall 1931, p. 219).

Other, more recent scholarship has equally attempted to confer deeper meanings for this Peruvian custom from the colonial references. Purizaga analyzes birthrights among the Incas, reporting on the importance of the child's placement in the compression crib and the custom of cranial modification carried out in these areas (Fig. 5.2). Purizaga specifically analyzes the term *ayuscay*. While considered by some authors as referring to the birth, Purizaga argues that the interpretation made by chronicler Cristóbal de Molina in his *Fábulas y ritos de los indios*, tentatively dated 1574, should be correct. Cristóbal de Molina believed that the term *ayuscay* referred to the modification practice.

Cristóbal de Molina el cusqueño, manifiesta que la palabra "Ayuscay" está más bien relacionada con una ceremonia especial que forma parte del ritual del nacimiento. En efecto, el cronista dice, "El ayuscay, era que cuando paría la mujer, el cuarto día ponían las criaturas en las cuna que llama quirao". Es decir, que ayuscay se refiere al hecho de colocar a la criatura en la cuna. La tradición andina establece que se realiza al cuarto dfa. Esto no admite dudas (Purizaga 1991, p. 6).

Fig. 5.2 Inca cradle (*k'irawpi kaq*), holding a month-old baby. (Guaman Poma de Ayala 1944 [1615], p. 212; Fig. 79)



After reviewing the various interpretations that different authors propose, Purizaga finds only one of them unsatisfactory: In the 1930s, Frenchman Louis Baudin considered that cranial modification was for political purposes and uses the statements by Bernabé Cobo on los Collas, Manco Capac and other, more recent authors:

Hasta es posible que Amautas de una inteligencia superior pretendiendo ir más lejos por este camino, hayan probado por dicho medio –la deformación- comprimir ciertas circunvalaciones cerebrales, a fin de crear individuos de mentalidades determinadas. Un cronista indio pretende que el inca utilizó ese procedimiento para hacer a sus súbditos obedientes. Allí estaría el término lógico de una política de racionalización: la fábrica de esclavos (Purizaga 1991, pp. 56–57).

Nevertheless, Purizaga rejects this interpretation, finding that Baudin's argument clearly manipulates the primary information at hand:

Además, no está demostrado que la deformación craneana lleve consigo ninguna alteración ni mental ni emocional. Lo cierto es que tal costumbre está más bien vinculada con distintivos tribales, totémicos, tal vez sociales y raspados con fines profilácticos de ciertas enfermedades. Este “raspado bautismal” -dice un autor- evitaría males en el adulto y una consiguiente intervención curativa penosa, mediante la trepanación del cráneo (Purizaga 1991, p. 58).

Finally, Dingwall transcribes the technique used for this practice among the tribes of Perú, by citing the report by Cachot, dated 1923:

The board, as placed in position over the occiput, is much larger than the back of the head. By means of bands, one going round the head and the other over the head in the direction of the sagittal suture, the board is fixed to the head (Dingwall 1931, p. 218).

5.1.3.2 Manta, Ecuador

The Inca, Garcilaso de la Vega, also relates the practice of cranial modification in his writings on northern Andean folk, stating that the custom of cranial-vault modification was performed on both boys and girls in the “Manta” territories, which then occupied the northwestern shores of the Inca Empire. He describes the techniques employed and the motives (in order to appear fiercer). Interestingly, Garcilaso de la Vega's description reflects some of the earlier interpretations in New Spain, where the practice is related to a more ferocious or monstrous physical appearance.

Hombres y mujeres se labraban las caras con puntas de pedernal, deformaban las cabezas a los niños en naciendo ponianles una tablilla en la frente y otra en el colodrillo, y se las apretaban de día en día hasta que eran de cuatro a cinco años, para que la cabeza quedase ancha de un lado al otro y angosta de la frente al colodrillo y no contentos de darles la anchura que habían podido trasquilaban el cabello que hay en la mollera, corona y colodrillo y dejaban los de los lados (...) rizándolos y encrespándolos para su aspecto monstruoso (Vega 1982 [1609], p. 333).

5.1.3.3 Colla and Chauco, Perú

Returning to the Andean highlands, not all chroniclers offer such extensive explanations on the head custom as Bartolomé de las Casas or Torquemada. Pedro Cieza de León simply mentions it among the Colla Indians.

En las cabezas traen puestos unos bonetes a manera de morteros, hechos de su lana, que nombraban chucos; y tiénenlas todos muy largas y sin colodrillo, porque desde niños se las quebrantan y ponen como quieren, según tengo escrito (Cieza de León 1984 [sixteenth century] in D'Olwer 1963, p. 484).

Among the native settlers around the Colca River watershed (Arequipa), cranial modification was known to identify two different natives: Collagua and Cabanas. Corregidor Juan Ulloa-Mogollón testifies on the infant practice in 1586:

Estos Collaguas antes de la visita general que se hizo por mandamiento del excelentísimo virey don Francisco de Toledo, traían en la cabeza unos que llamaban en su lengua Chucos, á manera de sombreros muy altos sin falda ninguna, y para que se pudiesen tener en la cabeza, se la apretaban á los niños recién nacidos tan reciamente, que se la ahusaban y adelgazaban alta y prolongada lo más que podían, para memoria que habían las cabezas de tener la forma alta del volcán de donde salieron. Esto les está ya prohibido por ordenanza (...) Estos [los Cavanas] son muy diferentes en la cabeza á los Collaguas, porque recién nacidos los niños é niñas, se la atan y la hacen chata y ancha, muy fea y desproporcionada; la cual se atan con unas cuerdas blancas á manera de mechas, y dando muchas vueltas alrededor, quedan las cabezas ensanchadas (...) Conócense bien en la hechura de las cabezas el ques natural de Cavana y el ques Collagua, que, como está dicho, los Collaguas se ahusan la cabeza larga y estos Cavanas ancha y chata (Ulloa-Mogollón 1885 [1586], p. 40).

In the following, Corregidor Juan Ulloa-Mogollón offers still additional information on these peoples and their specific head shapes:

Los Collaguas usaban una especie de sombrero alto sin falda en forma de cono truncado, imitando la del volcán y para que la cabeza se conformase a ese tocado recibía la correspondiente deformación. Los de la Provincia de Cauana creían proceder de otro cerro nevado que se llama Ualca ualca, del cual salieron sus antepasados, venciendo a los naturales y echándolos fuera de la tierra. Así poblaron Cauana Colla en la sierra alta y Cauana Conde al otro lado. Estos Cauanas se deforman también la cabeza pero no alargada como los Collaguas, sino chata, cubriendola con unas cuerdas blancas con que se dan varias vueltas. Así quedaban bien diferenciados unos de otros (Ulloa-Mogollón 1885 [1586] in Yépez and Romano 2008, p. 56).

Although mentions of artificial head forms became fewer with the passage of time, they apparently became more detailed, as the authors attempted to understand not just the manner in which the infant skull was altered, but wanted to comprehend more fully the underlying motives of the different peoples who practiced the custom.

Bernabé Cobo in the second half of the seventeenth century describes the peoples of the Andean region, mentioning the “Collas” and “Chaucos” and referring to the array of shapes that differentiated one group from the other, along with their modeling techniques. Cobo associates its purpose with the maintenance of health and to foster productivity. However, I think that this explanation is slightly contradictory, when he asserts that the natives adapted the shape of their heads to the form of certain headdresses (a type of hat) they wore and not the opposite:

Usaban algunas naciones (andinas) en naciendo la criatura, formarle la cabeza en diferentes figuras con muchas supersticiones y tanto rigor, que algunos niños morían del dolor que padecían, y a no pocos hacían saltar los sesos o quedar siempre enfermos y lisiados. Desproporcionaban de esta suerte la hechura del hombre y no contentos con las cabezas que Dios les dio, querían enmendar la naturaleza humana y dar a sus cabezas el talle que más les agradaba y cuanto con mayor desproporción y disformidad quedaban, tanto lo juzgaban por más gala y gentileza. Unas naciones las lucían anchas de frente apretándolas para darles esta forma con unas tablillas fuertemente liadas. Los collas formaban la cabeza larga y puntiaguda, con tanto extremo que pone admiración ver los viejos que yo alcance con aquel uso de su gentilidad y esto lo hacían porque usaban ellos de unos bonetes de lana llamados chucos a manera de moriscos o de sombreros, sus faldas muy altas y puntiagudas y porque mejor cayesen y ajustasen formaban la cabeza al molde del tocado y no el tocado a proporción de la cabeza y para dar esta figura a las cabezas de los niños, las liaban y apretaban con vendas y las traían así hasta la edad de cuatro o cinco años que ya quedaban endurecidos y amoldados a su tocado, largas escusadas y sin colodrillo. Decían ellos que ponían deste talle las cabezas porque fuesen más sanos y para más trabajo y haciéndoles el primer bonete con muchas ceremonias y supersticiones (Cobo 1893 [1653], pp. 175–176).

Cieza de Leon mentions the practice among the Chauco near Cali. His description of the natives’ physical appearance states vaguely that the head shapes were the readily visible result of an intentional manipulation.

Los chaucos (...) tan grandes que parecen pequeños gigantes espaldudos, robustos, de grandes fuerzas, los rostros muy largos, tienen cabezas anchas, porque en esta provincia y en la de Quimbaya, y en otras partes destas Indias cuando la criatura nasce le ponen la cabeza del arte que ellos quieren que la tenga; y así, mas quedan sin colodrillo, y otros la frente sumida, y otros hacen que la tenga muy larga, lo cual hacen, cuando son recién nacidos con unas tablitas, y después con sus ligaduras (Cieza de León 1984 [sixteenth century], p. 145).

5.1.3.4 Carangue, Perú

An even more extensive interpretation is provided by Pedro Cieza de León on the Carangue. In addition to the variety of head shapes acquired through the modification process, Cieza de León also advances some interpretations that allude to different physical qualities, such as improving health or increasing strength for work.

Los carangues y sus comarcanos es otro linaje de gente y no son labrados y eran de menos saber que sus vecinos porque eran behetrías; por causas muy livianas se daban guerras unos a otros. En naciendo la criatura la abajaban la cabeza, y después la ponía entre dos tablas, liadas de tal manera que cuando era de cuatro o cinco años le quedaba ancha o larga y sin colodrillo; y estos muchos lo hacen y no contentándose con las cabezas que Dios les da, quieren ellos darles el talle que más les agrada y así unos la hacen ancha y otros larga. Decían ellos que ponían de estos talles las cabezas por serían más sanos y para más trabajo (Cieza de León 1984 [sixteenth century], p. 227).

5.1.3.5 Chucuito, Perú

A similar interpretation is provided by Garcí Diez de San Miguel, when he discusses the custom of cranial modification practices on newborns during his visit to the Highland Province of Chucuito:

En toda la dicha provincia generalmente tienen por costumbre las indias cuando paren, apretar con las manos las cabezas de los niños para hacerlas largas y delgadas y se las traen liadas y apretadas más de un año con unas trenzas de lana para que vayan creciendo y adelgazando solo a fin de que cuando sean hombres se les encajen en las cabezas unas caperuzas largas y angostas que entre ellos usan que llaman *chucos* de manera que en lugar de hacer las caperuzas conforme a las cabezas hacen las cabezas al talle de las caperuzas en lo cual ha habido y hay tan gran exceso que ordinariamente vienen a morir de ello muchos niños y los que quedan por la mayor parte se crían enfermos y traen los ojos malos y quedan sordos como lo he visto y entendido en la dicha visita y aún ha acaecido salírsele a alguno los sesos por las orejas y para evitar los dichos daños provei un auto que Vuestra Señoría vera conviene se ejecute (Diez de San Miguel 1964 [1567], p. 224).

5.1.3.6 Uros (Lake Titicaca), Perú and Bolivia

Father Antonio de la Calancha briefly reports the existence of cranial transformation among the Uru natives who during colonial times, settled the shores and islands of Lake Titicaca although he does not offer any deep cultural interpretation:

Traen en las cabezas como turbantes moros (...) crían a sus hijos atormentándolos, porque traen la cuna en las espaldas, parada la criatura y fajada por toda la cuna, i desde el punto que nacen le van apretando la cabeza para que sea prolongada y no redonda (Calancha 1974 [1638], p. 1467).

We also find other mentions of these folk. Bandelier, in his 1910 work, transcribes information on the old ways of Titicaca islanders, some still based on chroniclers and travelers of the sixteenth and seventeenth century.

While the women on the Island are usually of the low stature of other female Indians, there among them some middle height and more slender than, for instance, the Pueblo Indian women of New Mexico. Among the men there are some tall and well formed figures, with pleasant faces; many are of low stature and have sinister countenances. It is not unusual to meet an Indian with remarkably low forehead and abnormally elongated skull. It is known that flattening of the forehead was carried on for at least half a century after the Spanish authorities had peremptorily forbidden the practice (Bandelier 1910, p. 67).

5.1.3.7 Amazon Natives of Eastern Perú and Brazil

The Omagua-speaking native inhabitants of the eastern Amazon Valley were once a populous, highly organized native society (Fig. 5.3). Like most of the indigenous populations, they suffered a steep decline during the early years of Iberian colonization. Some early references to their indigenous head practices are reported by Cristóbal de Acuña, although he only describes the techniques used in the practice without offering any kind of cultural explanation:

Fig. 5.3 Engraved portrait of Cambeba native with miter-shaped head and necklace from Brazil's Amazon Valley. (Riou 1867)



OMAGUA INDIAN (UMAÚÁ) WITH A MITRE-SHAPED HEAD.

Son todos cabezas chatas, que causa fealdad en los varones, si bien las mujeres mejor lo esconden con el mucho cabello; y está en ellos tan entablado el uso de tener las cabezas aplastadas, que desde que nacen las criaturas se las meten en prensa, cogiéndoles por la frente con una tabla pequeña y por la parte del cerebro con otra grande que sirviendo de cuna recibe todo el cuerpo del recién nacido; el cual puesto de espaldas sobre ésta y apretado fuertemente con la otra, queda con el cerebro y la frente tan llanos como la palma de la mano y como estas apreturas no dan lugar a que la cabeza crezca más que por los lados, viene a desproporcionarse. De manera que más parece mitra de obispo mal formada que cabeza de persona (Cristóbal de Acuña [1641] in D'Olwer 1963, p. 677).

Another reference to these people is provided by Friar Laureano de la Cruz, who in 1653 described the form in which mothers performed the head maneuvers on their children.

Las mujeres se envuelven en unas mantillas de algodón tan cortas y angostas que les honestan muy poco. El modo que tienen en apastarse las cabezas es el siguiente: Toman la criatura de pocos días de nacida y ciñenle la cabeza por la parte del cerebro con una faja de algodón ancha, y por la frente con una planchuela que hacen de cañas bravas, que les coje desde los ojos hasta el cabello muy bien apretada, y de esta manera lo que la cabeza había de crecer en redonda, crece para arriba y queda larga, chata y muy desproporcionada (Cruz 1900 [1653], p. 99).

Later references to the Omagua appear published in the mid-eighteenth century in a work by La Condamine, as transcribed by Veigl (Fig. 5.3). He states that the Omagua wanted to resemble the full moon by transforming their heads.

Condamine reached on the 27th the mission station of the Omaguas, formerly a powerful nation, whose dwelling extended along the banks of the Amazon for a distance of 200 leagues below the Napo. Originally strangers in the land, they are supposed to have come down some river rising in Granada, and to have fled from the Spanish yoke. The word Omagua means flat-head in Peruvian, and these people have the singular custom of squeezing the foreheads of new-born babies between two flat pieces of wood, to make them, as they say, resemble the full moon (Veigl 1798, p. 78).

Father Acuña, a Spanish Jesuit, notes the practice of modelling the children's heads in his seventeenth-century work on the exploration of the Amazon River Basin. Among other local customs, he describes the techniques and visible results that were obtained, which simulate the shape of a bishop's miter:

... when a child is born its head is placed in a press (*en prensa*), a small board (*tabla*) being fastened to the forehead and another against the occiput (...). The larger board on which the child lay, the top board being fastened over it in a manner which must have been almost identical with that adopted by the Chinook of the North West Pacific Coast. The result of this treatment was that the front and back of the head became flat and the general form resembled, according to the old ecclesiastic, an ill-shaped bishop's mitre instead of a human head (Acuña 1641, p. 24; in Dingwall 1931, p. 198).

Late descriptions of native groups from the Brazilian side of the Amazon Basin also go at lengths to describe this custom. The late dates of these references should not be surprising since the colonization of these territories by the Portuguese began later than their exploration of the western stretches toward the Andes. From the Atlantic, population expansion toward the interior only occurred from the eighteenth century onward. For the topic treated here, it is noteworthy that at that time Ribeiro de Sampaio still describes the visible outcome of infant head flattening among the native folk during an official visit of the pioneer territories in 1774. As others before him, Sampaio compares the artificial head form to a bishop's miter. Apparently, the practice was in the course of being abandoned.

Formerly children used to have their heads compressed between two boards, the effect of a bishop's miter being produced. He himself compares these head form to those of the Macrocephali mentioned by Hippocrates, but adds that at the time of his visit those natives whom he observed had abandoned the custom (Dingwall 1931, pp. 198–199).

5.1.3.8 Codes Prohibiting the Custom of Cranial Modification

Cranial modeling also figures prominently in the colonial codes of both civil and ecclesiastic law. These announced the prohibitions that were formulated by the Iberian colonizers to eradicate the ancestral head practices still pursued after contact and conquest. In the case of the Viceroyalty of Perú, prohibitions of this type also reveal the techniques and forms used to transform the children's heads. The legal codes of Viceroy Toledo in 1573, state:

ITEM, mando, que ningun Indio, ni India apriete las cabezas de las criaturas recien nacidas, como lo suelen hacer para hazerlas mas largas, porque de averlo hecho se les a recrecido, y recrece daño, y vienen a morir dello (Bandelier 1910, p. 25).

Thirteen years later, in 1586, we find a similar prohibition in a text mentioned previously on the visit made by Corregidor Juan de Ulloa-Mogollon to the Province of the Collaguas in the Department of Arequipa in Perú. To define what had to be prohibited, the official goes into detail to describe the different shapes displayed by each ethnic group.

Estos Collaguas . . . traían en la cabeza unos que llamaban en su lengua chucos, á manera de sombreros muy altos sin falda ninguna, y para que se pudiesen tener en la cabeza, se la apretaban á los niños tan reciamente, que se la ahusaban y adelgazaban alta y prolongada lo más que podían, para memoria que habian las cabezas de tener la forma alta del volcán de donde salieron. Esto les esta ya prohibido por ordenanza (Ulloa-Mogollón 1885 [1586], pp. 40–41).

Similar prohibition edicts condemn to the natives of Cavana and the Collaguas who were distinguished practitioners of head modeling still during the colonies.

Estos [los Cavanas] son muy diferentes en la cabeza á los Collaguas, porque recien nacidos los niños é niñas, se las atan muy recio y la hacen chata y ancha. . . . Conócense bien en la hechura de las cabezas el ques natural de Cavana y el ques Collagua, que, como está dicho, los Collaguas se ahusan la cabeza larga y estos Cavanas ancha y chata, muy fea y desproporcionada; la cual se atan con unas cuerdas blancas á manera de mechas, y dando muchas vueltas alrededor, quedan las cabezas ensanchadas (Bandelier 1910, p. 25).

It is further specified that:

Estáles prohibido ya esto por ordenanza. Conócense bien en la hechura de las cabezas el ques natural de Cavana y el ques Collagua, que, como está dicho, los Collaguas se ahusan la cabeza larga y estos Cavanas ancha y chata (Bandelier 1910, p. 25).

The last prohibition we came upon was issued by the Council of Lima of 1614, years after the above edicts. The Constitution offers one of the most exhaustive references to be found on head modeling among New World natives. The resolution had been generated during the meeting of the Bishops of Lima in 1614. This document includes a series of “constitutions”, written in Latin, which list the customs to be eradicated among the different ethnic groups (Fig. 5.4). These also condemn the practice of cranial modeling as a superstitious rite and list the techniques used by the natives. Here, we transcribe Constitution 100:

In antiquity and in a generalized fashion did the Indians of those provinces engage in the custom of modifying the heads of their children in different manners by flattening it from the back as part of a superstitious rite of the lineages of the different provinces (. . .) In some provinces, women compressed the heads of their newborns in a pointed fashion with their hands, a custom that in the zaitahoma language is called “pilleo” when it led to an elongated form, generally this horrid custom implied binding the head (. . .) However, in other provinces, the head without its posterior portion is custom [and accomplished] by flattening the occiput, which among the native language is called “paltahoma”, when different effigies are put on the soft head of the children and compressed with a band until they break it. This custom must not be continued in this part, conscience must be gained that of its evil nature that can result in other insanities still worse, when the natural order of the human kind is changed, one has to put an end to the tradition of such an undesirable custom of

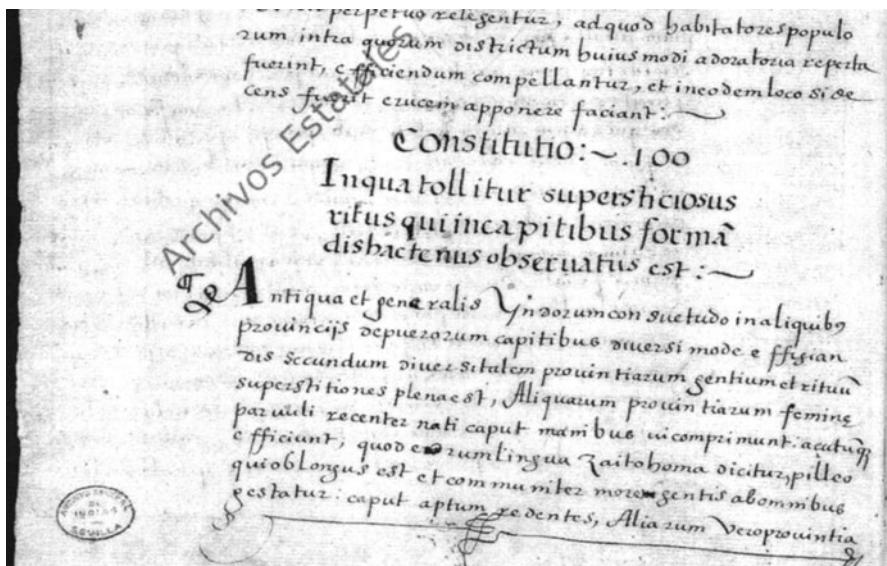


Fig. 5.4 Extract of original copy of Constitution 100 (A.G.I. Patronato, 189-R. 40), prohibiting native head modifications in infants

some lineages (...) The Christian religion (...) detests these ceremonies and sacrilegious rites [that] put such harm to the care of the diligent priests of the Indians. (A.G.I., Patronato, p. 189, R. 40; translation from Latin to English by Pilar Zabala and Vera Tiesler).²

² From the original text in Latin: *Inquitollitur supersticiosus ritus qui in capitibus formam disbacterius observatus est: Antiqua et generalis yndorum consuetudo in aliquibus provinciis de puerorum capitibus diversi mode effisiandis sucundum diversitatem provintiarum gentium et rituum superstitiones plena est. Aliquarum provintiarum femine parvuli recenter nati caput manibus vi compriment acutumque efficiunt quod eorum lingua zaitohoma dicitur pilleo qui oblongus est et communiter morem gentis abdominis gestatur caput aptum redentes. Aliarum vero provintia cum mos est capita excerebrantes plano occipite deformare quod yndorum lingua dicitur paltahoma dum vero diversas capitum effigiens componunt mollia puerorum capita quarantes et vittes ea comprimentes frangunt ex quo pars eorum non minima sepe obiit vel discompositis sensuum cellulis in amentiam decidit est et aliud maius malum quia tempore quo hec tanto pere humano generi nociva fiunt et dum nature ordinem mutare contendunt multi (ut fertur) solis sacra vel peragunt vel phanis de more gentis e mira nota per soluunt que omnia sine gravi Christiane religionis contemptu fieri non possunt. Igitur has ceremonias et ritus sacrilegos abominatur et damnat omnibusque sacerdotibus yndorum curam agentibus districte precipit hoc predictos sacrilegos semel et iterum et pluries admonere ut abhisamis supersticionibus et nocivis omnime desistant supost predictas admonitiones res sippiscere no luerint iuris pena que supersticio sis statuitur plectantur exhortamus in domino quantum possumus huius provincia guvernatores et presides catholicosque judices et civitatum prestores quod sui muneric est in hac parte exequi iubeant et ut indicibus ecclesiasticis ope et auxilio faventes ecclesiasticis reformationi non desint.*

5.2 Persistence of the Custom of Cranial Modification Between the Eighteenth and Twentieth Centuries

Up to this point, we have transcribed all references available to us on head-modeling practices among the different ethnic groups of the Caribbean region, New Spain, and the Peruvian viceroyalty, as witnessed by the chroniclers from the first years of colonization. However, we also know that the practice persisted in some areas throughout the centuries of the Colonization, including the independent era and in some cases, up to the twentieth century. The following sections incorporate those late colonial and postcolonial references that testify to the continuity of the practice in some regions that were colonized later or among groups that were further from the centers of control, where the tradition also persisted. The survival of Ibero-American head practices to relatively recent dates leads us to question the total success of the different laws, codes, synods, etc., that were issued by civil as well as ecclesiastical authorities for the purpose of eradicating the custom. Naturally, the domination process was not equally intense in all provinces of Hispanoamerica; in some places, such as Portuguese Brazil, colonization was slower. In some regions of South America, native groups remained isolated from Western civilization and closer to their ancestral ways.

5.2.1 *Continued Practices in the Caribbean Area*

5.2.1.1 Caribbean Area During the Nineteenth Century

In his account of his voyage to the Antilles, published in 1813, Father Leblond refers to the modification process among the native inhabitants of the islands, where he saw children, four or five months of age, wearing head splints (Fig. 5.5):

That the boards were kept in place for nine days at time: then they were taken off and subsequently soon replaced, until the head seemed to the parents to be satisfactorily formed, when they were finally discarded. That occasionally the device was worn for some time may be seen (Leblond 1813, pp. 197–199).

Father La Borde, in his history of the Caribs, mentions the modification process among local natives and explains that it was practiced for the sake of beauty:

La Borde declares that the Carib artificially flatten the heads and noses of their children, the mother compressing them at birth and during the time that they are suckled, thinking the result beautiful (Dingwall 1931, p. 197).

5.2.1.2 British Guyana During the Nineteenth and Twentieth Centuries

There are also references to the continued practice of the custom among the Mao-pitan on the Carib's southern fringes of British Guyana during the advent of the twentieth century. Roth cites testimonies of the existence of the custom and narrates the form in which it was accomplished:

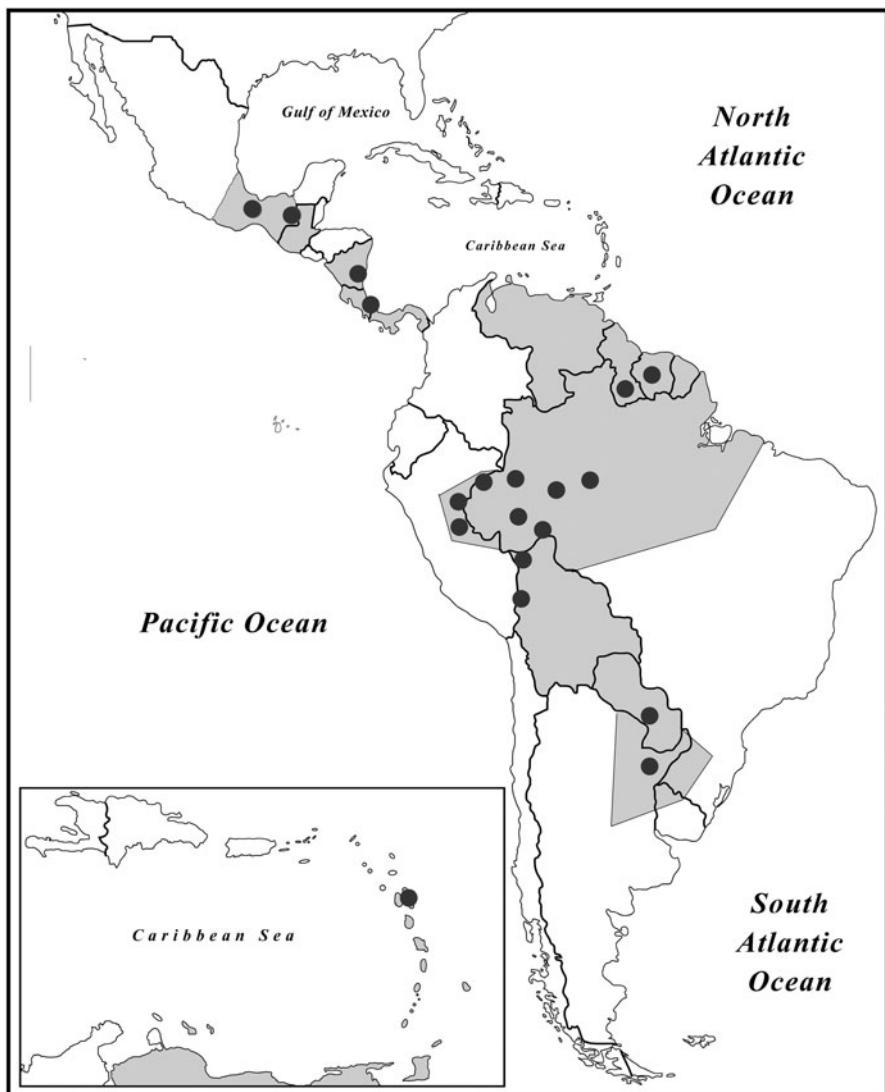


Fig. 5.5 Map of Latin America: highlighted countries denote the areas of sustained head practices as cited by late colonial and post-independence historical sources. Dots indicate the locations where the custom is referred to among the sources transcribed in this chapter. (Drawing by V. Tiesler)

Among the Taruma, this same traveler speaks of seeing two more flat-headed Maopityan, a man and a woman. . . It is said that the Maopityan, who called themselves Mawakwa, were so named from the Wapishana word mao, a frog, and pityan, folk or tribe (SR, II, 472). But in connection with the mention of Taruma it is interesting to note that Schomburgk some 30 years previously had recorded a side-to-side flattening of the head among this same people, but was careful to make the statement that the deformity was not artificial (Roth 1924, p. 501).

Another mention from British Guayana dates back to the nineteenth century in a work published in the first decades of the twentieth century. Here the author argues that the practice continued to that date in the Carib region:

In a remote part of British Guiana or perhaps beyond the frontier near the sources of the Essequibo, there lives a little known people which was in the habit of tying boards to the heads of its children in such a way as to flatten them. Early writers record the fact that the custom formerly prevailed among all the Carib of this region but it has now fallen into disuse (Roth 1924, p. 501).

On a more general note, Gillin discusses recent head-shaping practices in the Suriname area in his contribution for the Handbook of South American Indians and states:

Permanent ornamentation by deformation of the head is mentioned occasionally among the Cayenne and Suriname coastal Carib, Tarumá, and Maopityan, although the evidence is not clear that the deformation was intentional. Frontal deformation occurs on the coast, and fronto-occipital and side-to-side in the interior (Gillin 1948, p. 834).

5.2.2 *Southern Mexico and Central America*

5.2.2.1 Maya and Mixe, Mexico

We also came across some recent references which demonstrate that the cultural practice persisted among Mexican Lacandons (Palka 2005). Maudslay describes the physical features of the native Lacandones in his work published in 1899. He concludes that the custom of head modeling was slowly being abandoned, even though it was still evident in the physical features of the elder folk.

I was much impressed by the striking likeness, which the feature of the elder man, who appeared to be the leader of the village, bore to those carved in stone at Palenque and Menché. The extremely sloping forehead [of elder Lacandon males] was not quite so noticeable in the younger men, and it may be that the custom of binding back the forehead in infancy, which undoubtedly [was] obtained amongst the ancients, is being now abandoned. These people still use bows and stone-tipped arrows, which they carry with them wrapped in a sheet of bark (Maudslay and Maudslay 1899, pp. 236–237).

Further west, native Mixe from Coatlán in the Mexican state of Oaxaca are photographed still at the turn of the twentieth century with a similarly receding forehead and a flattened occiput (Shattuck 1933, p. 29; Trias de Bes et al. 1928, p. 84). The artificial nature of this appearance is only briefly noted by Trias de Bes and colleagues.

5.2.2.2 Nicaraо, Sumo and Miskito, Nicaragua

Dingwall also refers to various authors who mention the persistence of the custom of cranial modification, among Nicaraо groups of what today is Nicaragua. Here he transcribes Lehmann who writes at the beginning of the twentieth century that the custom was still in use among this group:

Apparently the custom is still persisting in certain regions. In Managua, Lehmann reported that some of the natives possessed the custom, and there is no doubt that in the more isolated districts there is the possibility of the distortion still being practiced although not to the same extent as formerly (Lehmann 1909, p. 535; in Dingwall 1931, p. 155).

In his work on the archaeology of Central America, Joyce recalls the late practice of this custom in the Sumo region (east of Nicaragua), at the beginning of the twentieth century:

In the Sumo district in the east of Nicaragua one tribe at least, according to Joyce, practised deformation upon the heads of their children by pressing their infant skulls between pieces of wood and stones (Joyce 1916, p. 35).

Joyce also documents the practice of head shaping by Nicaraо groups and other Maya settlers further north, although no defined time frame is provided. They alleged that the gods had told their forebears that in this way they would acquire a more noble aspect, and gain strength to carry heavy loads:

The Nicaraо moulded the heads of infants so as to produce a boss on either side and a depression in the middle. They alleged two reasons for this custom: first that the gods had told their ancestors that it gave a noble appearance to the individual so treated, and second that it made the head harder for carrying burdens. The Maya tribes further to the north also practised head-deformation, but their aim was to produce a flat and receding brow. The ears were pierced for ornaments, and probably the lips also, in Mexican fashion (Joyce 1916, pp. 31–32).

Regarding the Miskito groups that settled the Mosquito Coast of Central America, Pim and Seemann communicate in their work of 1869.

The Mosquito also flattened the heads of their babies, although when they became adults their tangled hair concealed the signs of the deformation (Pim and Seemann 1869, p. 308).

5.2.2.3 Talamanca Area, Costa Rica

Head practices are also mentioned in some areas of the region of Costa Rica, which induces Mac Curdy, to believe that there must be a certain relationship between this region and Perú:

In some parts of Costa Rica it appears that the custom was not usually practised although in the Talamancan area it was at one time apparently prevalent. A form of frontal deformation seems to have been the rule, and MacCurdy has suggested that connection with Perú might be established through an examination of the archaeological material, although the details are at present too scanty to be discussed (Dingwall 1931, p. 155).

5.2.3 The Amazon Basin

5.2.3.1 Brazilian Amazon Natives of the Nineteenth Century

A brief reference from 1822 notes the practice of this custom in Brazil. Again, the visible result of the cranial transformation is compared to with a bishop's miter.

Spix and Martius in 1822 simply mention the canoe-shaped cradles in which children are placed and secured whilst their heads are compressed between boards to give them a mitre shape (Dingwall 1931, p. 199).

5.2.3.2 The Amahuaca and Eastern Perú and Brazil, During the Nineteenth Century

The reference to these people is even briefer, discussing the custom of cranial modification at the end of the nineteenth century:

Similarly the Amahuaca, who live in the high country near the head waters of the Sepauha and Piedras rivers, artificially flatten the heads of their children by tying boards to their foreheads, and in addition they try to compress their noses by tying bands across them (Dingwall 1931, p. 201).

5.2.3.3 Macheyenga, Eastern Perú

Farabee mentions the cultural practice of cranial modification among groups of Macheyengas, theorizing that the custom satisfied the need for group identity:

A rather different result is achieved by the Macheyenga, a tribe related to the Campa who lived along the middle course of the Urubamba river. Here heads are deformed by binding a board upon the occiput and a roll of cotton over the forehead, so that a groove is formed on the frontal bone, which, it is said, can be felt distinctly (Dingwall 1931, p. 202).

5.2.3.4 Omagua, Eastern Perú

Another nineteenth-century reference to the practice by Jorge Juan y Antonio Ulloa is transcribed by Dingwall. The “monstrous” appearance of the Omagua is emphasized by the author who considers the practice of cranial modification to be very ancient.

Jorge Juan and Antonio Ulloa describing the monstrous appearance of the Omagua head state that in proportion as the forehead is compressed it rises upwards to such a height that the space between the bridge of the nose and the beginning of the hair is greater than that between the bridge of the nose and the tip of the beard. They add that the practice is of some antiquity, nevertheless, they rigidly conform to it and deride other tribes amongst whom it is not met, calling them contemptuously “calabash heads” (Dingwall 1931, p. 199).

5.2.3.5 Loreto District, Eastern Perú, During the Nineteenth Century

There is also a visual reference from 1860, showing the practice of cranial modeling in the Loreto region of Perú, although no name of any specific native affiliation is provided. The photo is provided by Raimondi who, in the Sarayaco Mission, observed a boy who showed a cranial modification:

He says that the child had been brought to the Mission to be baptized, and had its head elongated behind, with a rounded projection on the frontal bone, the remainder of this region being much depressed apart from this protuberance. Upon being questioned, the mother replied that there was a hole of considerable size in the board, a statement, which can be paralleled as we have previously seen in the case of the North American Indians (Raimondi 1862, p. 20).

5.2.3.6 Conibos, Shipibos, Ribera del Ucayali, Perú, of the Nineteenth Century

A fairly detailed description of cranial modeling among the Conibo of Perú dates from the turn of the nineteenth century.

The same custom has been reported of the Conibo of the Pampa del Sacramento and the Ucayali river. Skinner in 1805 says of the Conibo what La Condamine had said of the Omagua, namely, that they flattened their foreheads and occiputs with the view of resembling the full moon and of becoming the strongest and most valiant people in the world (Dingwall 1931, pp. 199–200).

Condamine specifies on the way the compression boards were adjusted:

the forehead of the child, . . . , is first of all wrapped in cotton, and then a small square board is laid on it, another being applied to the occiput and the two adjusted with cords. Skinner remarks that this practice cannot fail to alter the functions of the brain, and states that the reproach of stupidity has been levelled against certain Japanese priest whose heads are compressed into the form of sugar-loaves, a statement for which I have not seen any reliable evidence elsewhere (Dingwall 1931, pp. 199–200).

Father Sala goes into further detail in his 1897 work when characterizing the instrument that served for the head-flattening procedure.

The first part of the operation consisted in the construction of a sort of straw comb-like arrangement made out of a bunch of reeds and fastened with two lumps of metal. This device measured seven inches in length and two and a half inches broad. Under it was placed a small cotton pad or cushion shaped rather like a money roll, and this was fastened firmly behind the occiput by a bandage or thong. As the child was forced to become used to the device just after birth, the head was flattened without much suffering on its part, and the child developed a wedge-shaped head (Sala 1897, p. 80; in Dingwall 1931, p. 201).

The cleric goes on to declare the custom, which was practiced on boys as well as girls, to be barbaric. The simple interpretation he gives for it resides in the high forehead, which was to prevent the hair from blocking their vision.

Church, in his study on the native tribes of South America, likewise briefly mentions this custom among the Conibo, commenting that the purpose of this operation was for reasons of beauty:

That two boards were used and children who were still being suckled were to be seen wearing these attachments the people thinking the result “very pretty” (Church 1912, p. 185).

5.2.3.7 East Peruvian Natives of the Twentieth Century

Farabee writes at the beginning of the twentieth century on the Conibos and the Shipibo on the banks of the Ucayali River, and mentions that the Conibo still practice head modeling.

Soon after birth, he says, the head of the infant is fitted with a board bound upon the forehead, and a pad of cotton upon the occiput, and these are left in place for five or six months. A similar method is followed by the Sipibo, another tribe of the Ucayali, and the high C.I. found amongst them is probably due to the distortion arising from the board method of deformation (Dingwall 1931, p. 201).

Cranial modification among the Conibo and Shipibo also fills Reichlen's work, as he describes a device that was used for this cranial modification and details how the device was fastened to the heads of children for 5–6 months:

The Conibo admire a flat, broad head, and plump arms and legs. Soon after birth, the child's head is bound with a board on the forehead and a pad of cotton behind. This bandage is kept in place for five or six months, which insures the permanency of the deformation. This method is followed also by the Shipibo, and this accounts for the high cephalic index of these two tribes (Reichlen 1961, p. 61).

Tessmann, speaking of Conibo, Shipibo, *Cashibo*, *Nokamán*, and other natives of northeast Perú, discusses the persistence of the custom up to the time of his writing:

The Omagua are no longer addicted to the practice, and similarly the custom is not reported among the Kokama, Panobo, Ssensse, Koto, Pioché, Lamisto, Aguano, Kandoschi, Kichos, Bora, Ssabela, Uitoto, Muinane, Mayoruna, Tschamikuro, Chebero, etc. Amongst the Cashibo, who dwell between the Pachitea and the Cushabatay, the customs both of cranial deformation and of nose perforation have been reported.

The head press is called *wuömidi*, and consists of a wooden tablet with woven band (*nyumbi*), which is secured upon the forehead of infants shortly after birth (Tessmann 1930, 211; in Dingwall 1931, p. 202).

Tessmann further specifies that:

Again the Nokamán (Pano), who are now settled near the source of the Inuya, a tributary of the lower Urubamba, use a piece of apparatus which they call *yewuitsígage*, and the Auschiri (Pano-Tukano) try to produce long heads by means of bandages, a custom also practiced by the mixed Kahuarano. Similarly the Zaparo, who lived north of the River Tigre, mould and press the heads of their infants to produce long faces, whereas the Ikito and the Pioché try to produce broad faces by the same means (Tessmann 1930, p. 211; in Dingwall 1931, p. 202).

Tessmann goes on to describe the device used by the Conibo and Sipibo to carry out this cranial modification, known as *vuitá-nete*. This devise was applied on the head of the children for at least three months:

The Conibo constitute, together with the Sipibo and other tribes, the so-called Tschama peoples who have long been known to practice head deformation. Generally speaking it appears that the newborn infant is forced to wear the head-presser (*vuitá-nete*) continuously for three months, except when the child is being washed. They say that if the head is not treated thus it becomes ugly and thus care is taken to see that the head is properly flattened when the bones are still plastic (Dingwall 1931, p. 200).

In another work by Reichlen, we find a more detailed description of the technique of *vuitá-nete* mentioned by Tessmann:

D'après le témoignage de Tessmann, en 1928, le vuitá-nete (étymologiquement: bande de front) de Indiens Chama de l'Ucayali se compose essentiellement d'une planchette frontale, faite d'un bois souple et doublée d'un épais coussinet (don't il n'indique pas la matière et d'une angle sagitto-occipitale en forme de T renversé dont la partie horizontale, reforçée au centre par un rectangle plus large, se prolonge des deux côtés par des cordelettes qui s'enroulent dans des encoches pratiquées sur les bords latéraux de la planche frontale (Reichlen 1961, p. 60–61).

Reichlen also affirms that:

L'étrémité libre de la bande verticale se noue à l'intersection des liens qui partent des quatre coins du coussinet et se croisent sur la face externe de la planchette à laquelle ils le fixent. Garçons et filles portaient l'appareil dès la naissance et durant deux à trois mois jour et nuit, sauf pendant le bain (Reichlen 1961, p. 61).

Reichlen mentions an additional device used for this cranial modification. This was described later, in 1954, by Juan Comas (1958) for the Cashibo of the Laguna de Yarinacocha:

Il parle d'une tablette antérieure en bois et d'une sangle postérieure, mais pas de sagital. S'agit-il d'un oubli? La photo, prise de profil, ne permet pas de l'affirmer, mais Tessmann, qui ne la mentionne pas non plus dans sa description de l'appareil cashibo (vuömidi, et bande de tissu, nyumbi), la représente cependant sur sa Carte de répartition (Reichlen 1961, p. 62).

The author offers still another description, transcribed from the Franciscan missionary Father Sala, who had observed the custom as practiced by the Cunebo, describing the techniques used and the forms acquired by the heads. Father Sala also stated that the modification process was applied to both sexes, edioing previous interpretations.

También pude observar en las muchas criaturitas que llevaban, el método que usan para aplastar su frente. Primeramente forman una especie de peine de paja del plumero del carrizo, sujetándolo con hilo con dos rieles por la parte de abajo. Este rastre ó peine tiene unas siete pulgadas de largo por dos y medio de ancho. Debajo de este peine se coloca una almohadita de algodón, como un cartucho de cuarenta soles, y por último, se sujetta con una venda ó cinchito muy fuerte, por detrás del occiput. De modo que poniendo al infante recién nacido este instrumento, se va acostumbrando a ello sin mucho dolor, y por otra parte se le va aplastando el cráneo hacia atrás con mucha suavidad y facilidad, quedando al fin su cabeza en forma de un cono ó de una cuña toda su vida. La única razón que dan de esta barbaridad es que de este modo no les tapa la vista los cabellos y tienen la frente más grande, lo que no sucede con las campas y otros chunchos. Y esto lo practican tanto con los hombres como con las mujeres (Sala 1897, in Reichlen 1961, p. 60).

More insightful the testimony by still another missionary, Father Izaguirre, who spent many years among the Cunebo. He communicates his observations on the customs in a work published in 1922. After describing the techniques used for this practice, he interprets head modeling from the native perspective of animistic worldviews, equating the head to the sun:

El distintivo de la tribu [Cunebo] es el Pánchaue, manera de achatar la frente de los niños de ambos sexos, por la aplicación de un aparato ad hoc, que consta de las siguientes piezas: una tabletta cuadrada en forma de rectángulo (abi), sobre la que se coloca un almohadoncito de arcilla (buitanoti), adaptable a la frente del de niño; este almohadoncito esta forado en tela

de algodón y atado a una ranura practicada en ambos extremos de la tableta, en la misma que se ata el tuibanoti, liga que abraza la cabeza por el cerebro y la coronilla (Izaguirre, cited by Reichlen 1961, pp. 60–61).

Father Izaguirre goes on to detail on the specific measures taken:

Después de dos o tres días que un niño ha nacido, se le ata el buitanoti a la frente, al principio tan suavemente que solo el peso de la arcilla ejercerá su acción; pero conforme crece se ajusta la liga progresivamente, hasta dejar la frente del niño muy por debajo del nivel del rostro; lo que se consigue después de diez a doce meses. La cabeza trepanada de tan extraña manera toma entonces una forma semejante a la mitra de un obispo; creen ellos así asemejarse al Sol. Naturalmente no todos los niños achatados viven, pues hay muchos que con la vida pagan su tributo a tan bárbara costumbre (Izaguirre 1922; in Reichlen 1961, pp. 60–61).

5.2.4 Southern Bolivian Highlands During the Nineteenth and Twentieth Centuries

Some authors consider that in the Bolivian Highlands native head-modeling practice existed only during the colonial past and by the twentieth century was no longer known. Yet, Bandelier, in his work on the Islands of Titicaca and Coati, published in 1910, mentions the sustained practice of head modeling in some isolated districts of those regions that were less exposed to mainstream national life:

It is probable that the practice of deformation is dying out today throughout the whole of this area. Chervin stated in 1912 that in the Bolivian highlands the custom was no longer found(. . .)two years earlier that certain of the Indians on Lake Titicaca were still practicing the artificial elongation of the head, and doubtless in isolated districts the custom persisted for a longer period than in those regions which were more exposed to the influences of civilization (Bandelier 1910, p. 67).

Various works published in the early twentieth century mention the practice of cranial modeling in regions of Bolivia and Paraguay and relate the techniques used to accomplish this transformation to the importance of forming the heads into predetermined forms. These reasons approximate the arguments stated by native groups from colonial Mesoamerica further north. Dingwall recalls the work of *Nordenskiöld* who reports that:

When a child was born at Ascención in north-east Bolivia, . . . it had an unnaturally long head. The old woman who was assisting the mother during the confinement explained to her that this was of no consequence as the child's head could easily be made rounder, and among certain of the tribes in south-east Paraguay much attention is paid to the infant's head.

Details are provided on the exact measures taken.

The child, when it is being washed, is thoroughly massaged with the finger tips, no part of the body being neglected. Each finger and toe is pulled and pressed and then the head is manipulated. Mayntzhusen reports that the majority of the children are born with very long heads, but he was not able to take any measurements in order to confirm this. This dolichocephaly is considered very ugly by the natives, and for this reason trouble is taken to make heads broader (Dingwall 1931, p. 203).

5.2.5 *Guaycuru and Related Native Groups of Paraguay During the Nineteenth and Twentieth Centuries*

Relatively late are the references to indigenous head-modeling practices among some of the Guaycuru or Guaykuru tribes of South America, a set of ethnic groups that at the time of the conquest spanned the present-day national territories of northern Argentina, east Bolivia, Paraguay, and south Brazil. Hutchinson refers to the Paraná:

Again, further south some of the Guaycuru may have had the same custom at one time since Hutchinson describes some natives whom he thought to belong to this tribe as having an almost total absence of frontal development (Hutchinson 1868, p. 24).

Also G. Mazzoleni refers to the Guaycurus, stating that they have a “ferocious, imposing and terrifying look” (Mazzoleni 1876, p. 540; in Dingwall 1931, p. 202). And F. C. Mayntzhusen (1913, p. 409) adds:

The form of forehead resulting from the treatment is said to give those who have submitted to it a pleasing and intelligent expression, although the shortened nose is not beautiful according to Western standards (Dingwall 1931, p. 203).

5.3 Final Considerations

Our purpose with this chapter was to make available to the broad academic community (and interested readership in general), the many and diverse references that appear in historic documental sources on cranial modifications among the different ethnic groups that did, and still do, populate a large part of the American continent. We are aware that many references and mentions of the ancestral head practices have long been forgotten, buried within the abundant colonial written legacy, which has given more attention to subjects deemed to be more relevant to the colonizers at the time. Some authors are more exhaustive in their descriptions of this cultural practice; others simply mention it more as an aside. It is clear that it all depends not just on the simple observation of a physical characteristic, but on being able to interpret the hidden or underlying significance at the time when the practice was common among different ethnic groups.

We have learned in the course of this compilation that almost all references in one way or another show an attitude that reprobates the custom, including those who attempted to understand the reason for this modification of the heads of newborn babies (see also Chap. 10 and Tiesler and Aguirre 2011, 2013). It is clear that that condemnatory attitude prevented the authors’ from understanding the cultural subtleties of why so many peoples attempted to change their physiognomy. Some of the simplistic interpretations that have been given by historic sources are: tribal distinction; a manifestation of social hierarchy; greater strength as a warrior; worldviews and ritual enactment; aspects of domination over the lowest strata of society to make them more obedient or being able to carry greater loads in carrying out their work; still others refer to prophylactic reasons. As stated in Chap. 10, although we cannot

ascertain the underlying realities, it is clear that the head custom was deeply rooted among the different ethnic groups, as it continued despite all the prohibitions enacted for its eradication and even, as has been seen, to persist to recent years.

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References

- Archivo General de Indias (A.G.I.) sixteenth to nineteenth century, Fondo Patronato 189, R. 40. Acuña, C. de. 1641. Nuevo descubrimiento del Gran Rio de las Amazonias. Madrid.
- Bandelier, Adolph F. 1910. The islands of Titicaca and Coati. New York: The Hispanic Society of America.
- Calancha, Antonio de la. 1974 [1638]. Cronica moralizada del Orden de San Avgvstin en el Perv, con svcesos egemplares en esta Monarqvia, ed. Ignacio Prado Pastor. Lima: Universidad Nacional Mayor de San Marcos.
- Casas, Bartolomé de las. 1967. Apologética historia sumaria, ed. Edmundo O’Gorman, 2 vols. Mexico: Universidad Autónoma de México.
- Castillo, Cristóbal del. 2001. Historia de la venida de los mexicanos y de otros pueblos e historia de la Conquista. Mexico: Consejo Nacional para la Cultura y las Artes.
- Church, George E. 1912. Aborigines of South America. London: Chapman and Hall.
- Cieza de León, Pedro. 1984. La Crónica del Perú. Madrid: Historia 16.
- Clavijero, Francisco Javier. 2009. Historia antigua de México. Mexico: Editorial Porrúa.
- Cobo, Bernabé. 1893 [1653]. Historia del Nuevo Mundo, Vol.2. Sevilla: Sociedad de bibliófilos andaluces.
- Comas, Juan. 1958. La deformación cefálica intencional en la región del Ucayali, Perú. In Miscelánea Paul Rivet 2, 109–119. México.
- Cruz, Laureano de la. 1900 [1653]. Nuevo descubrimiento del río de Marañón llamado de las Amazones. Jay I. Kislak Reference Collection.
- D’Olwer, Luis Nicolau. 1963. Cronistas de las culturas precolombinas. Mexico: Fondo de Cultura Económica.
- Diez de San Miguel, Garci. 1964 [1567]. Visita hecha a la provincia de Chucuito en el año de 1567. In Documentos regionales para la Etnología y Etnohistoria Andina, Vol. 1. Lima: Ediciones de la Casa de la Cultura.
- Dingwall, Eric J. 1931. Artificial cranial deformation; a contribution to the study of ethnic mutilations. London: Bale & Sons & Danielsson.
- Fernández de Oviedo, Gonzalo. 1945 [1557]. Historia general y natural de las indias. Paraguay: Editorial Guaránia.
- Fournier García, Patricia. 1999. La arqueología del colonialismo en Iberoamérica: Balance y perspectivas. Boletín de Antropología Americana 34:75–87.
- Guaman Poma de Ayala, Phelipe. 1944 [1615]. Primer nueva Crónica y buen gobierno (1580–1613). La Paz: Instituto Tiawanacu de Antropología, Etnografía e Prehistoria.
- Gillin, John. 1948. Tribes of the Guianas. In Handbook of South American Indians, Bulletin 143, vol. 3, 799–860. Bureau of American Ethnology.
- Hernández, Francisco. 2001 [1576]. Antiguedades de la Nueva España. Madrid: Dastin.
- Hutchinson, Thomas J. 1868. The Paraná; with incidents of the Paraguayan war and South American recollections, from 1861–1868. London: Edward Stanford, 6 and 7, Charing Cross, S.W.
- Joyce, T.A. 1916. Central American and West Indian Archaeology. London: Philip Lee Warner.
- Krickeberg, Walter. 1933. Los Totonaca. Mexico: Talleres Gráficos de Museo Nacional de Arqueología, de Historia y Etnografía and Museo Etnográfico de Berlín.

- Landa, Diego de. 1982 [~1566]. *Relación de las cosas de Yucatán* (introd. A.M. Garibay). Mexico: Porrúa.
- Leblond, Jean-Baptiste. 1813. *Voyage aux Antilles*. Paris: Arthus-Bertrand.
- Lehmann, Walter. 1909. *Reisebericht aus Managua*. Zeitschrift fuer Ethnologie XLI:533–537.
- López de Gómara, Francisco. 1987 [1552]. *La Conquista de México*. Madrid: Historia 16.
- Lucena, Manuel. 2005. *Atlas Histórico de Latinoamérica desde la Prehistoria hasta el siglo XXI*. Madrid: Editorial Síntesis.
- Maudslay, Anne C. and Alfred Percival Maudslay. 1899. *A glimpse at Guatemala, and some notes on the ancient monuments of Central America*. London: John Murray.
- Mayntzhusen, F. C. 1913. Über Gebräuche bei der Geburt und die Namensgebung der Guayaki. (PICA, 18 Sess., 1912 [1913], 408–412)
- Mazzoleni, G. 1876. *Gli Indi Guaycurus*. (BSG, 1876, Anno x, 2a Ser., i,[xiii], 539–543). pp. 540
- Molina-Solís, Juan Francisco. 1943. *Historia del descubrimiento y conquista de Yucatán*. Vol. 3, Mexico: Ediciones Mensaje.
- Montalvo, José R. 1884. *Deformaciones artificiales del cráneo*. La Habana: Soler & Alvarez.
- Palka, Joel W. 2005. *Unconquered lacandon maya. Ethnohistory and archaeology of indigenous culture change*. Gainesville: University Press of Florida.
- Paso y Troncoso, Francisco del. 1926. *Códice de la Real Academia de la Historia Mexico: Museo Nacional de México* fols. 46, 47 de *Anticuarios Nova Hispania*.
- Pereira, Grégory. 1999. *Potrero de Guadalupe: Anthropologie funéraire d'une communauté pré-tarasque du nord du Michoacán, Mexique*. Oxford: International Series 816, British Archaeological Research.
- Pim, Bedford, and Berthold Seemann. 1869. *Dottings on the Roadside, in Panama, Nicaragua, and Mosquito*. London: Chapman and Hall.
- Purizaga Vega, Medardo. 1991. *El rito del nacimiento entre los incas*. Lima: Universidad de San Martín de Porres.
- Raimondi, Antonio. 1862. *Apuntes sobre la Provincia litoral de Loreto*. Lima: Tipografía Nacional.
- Reichlen, Paulette. 1961. *La deformation de la tête au moyen d'appareils de type "vuita-nete" au Pérou et en Malaisie*. Travaux de l'Institut Français d'Études Andines 8: 59–82.
- Relación de Michoacán. 1977 [1541]. Morelia: Balsas Editores.
- Riou, Édouard. 1867. Photo created for *Le Tour du Monde*, Paris. Web page: http://www.123rf.com/photo_15180189_cambaba-indian-old-engraved-portrait-brazil-s-amazon-valley-created-by-riou-published-on-le-tour-du.html
- Roth, Walter Edmund. 1924. *An introductory study of the arts, crafts, and customs of the Guiana Indians*. Thirty-eighth Annual Report of the Bureau of American Ethnology to the Secretary of the Smithsonian Institution, 1916–1917. Washington: Government Printing Office.
- Sahagún, Bernardino de. 2005. *Historia general de las cosas de Nueva España*, 4 vols. México: Editorial Porrúa.
- Sala, Gabriel. 1897. *Apuntes de viage del R. P. Fr. G. Sala, (exploración de los ríos Pichis, Pachitea y Alto Ucayali y de la región de El Gran Pajonal)*. Lima.
- Santa Cruz Pachacuti, Juan de. 1995 [1613]. *Relación de antigüedades de este Reino del Perú*, ed. Carlos Araníbar. Lima: Fondo de Cultura Económica.
- Shattuck, G.C. 1933. *The Peninsula of Yucatan, medical, biological, metereological and sociological studies*. Washington, D.C.: Carnegie Institution of Washington, no. 431.
- Stedman, John G. 1729. *The narrative of a five years' expedition against the revolted negroes of Surinam*, 2 vols. London.
- Tessmann, G. 1930. *Die Indianer Nordost-Perus*. Hamburg.
- Tiesler, Vera, and Pilar Zabala Aguirre. 2011. *El modelado artificial de la cabeza durante la Colonia. Una tradición maya en el espejo de las fuentes históricas*. Estudios de Cultura Maya 38:75–96.
- Tiesler, Vera, and Pilar Zabala Aguirre. 2013. Survival and abandonment of indigenous head shaping practices in Iberian America after the European contact. Submitted as a chapter contribution to the volume: *Bioarchaeology of contact, colonial encounters and colonialism*, ed. Melissa S. Murphy and Haagen D. Klaus. Gainesville: University Press of Florida.
- Torquemada de, Fray Juan. 1969 [1615]. *Monarquía Indiana*, 2 vols. México: Editorial Porrúa.

- Trias de Bes, Luis, Pedro Bosch Gimpera, Jose de C. Serra-Ráfols, D. José Batista y Roca, and D. Alberto del Castillo Yurrita. 1928. *Las razas humanas. Su vida, sus costumbres, su arte*, Vol. 2. Barcelona: Instituto Gallach.
- Ulloa-Mogollón, J. de. 1885 [1586]. *Relaciones geográficas de las Indias*, Vol. 2. Madrid: Publícadas el Ministerio de Fomento.
- Vega, Garcilaso de la, “*El Ynca*”. 1982 [1609]. *Comentarios reales I y II*. Mexico: Secretaría de Educación Pública, Universidad Nacional Autónoma de México.
- Vega, Manuel de la. 1826. *Cristóbal Colón: Historia del descubrimiento de la América Septentrional*, ed. Carlos María Bustamante. Mexico: Oficina de la Testamentaria de Ontiveros.
- Veigl, Franz X. 1798. *Gründliche Nachrichten über die Verfassung der Landschaft von Maynas*. Nürnberg.
- Yépez, Rosaura. 2001. El modelocefálico intencional en los pobladores prehispánicos del barrio teotihuacano de la Ventilla. *Exploración* 1992–1994. Master diss., Universidad Nacional Autónoma de México.
- Yépez, Rosaura, and Arturo Romano. 2008. Las malformaciones congénitas de la cabeza. Una diferencia con la modificacióncefálica de tipo étnico-cultural. *Anales de Antropología* 42(1): 31–64.