

Chapter 2

Cultural Frameworks for Studying Artificial Cranial Modifications: Physical Embodiment, Identity, Age, and Gender

*Ex visu cognoscitur vir, et ab occurso faciei cognoscitur
sensatus: amictus corporis et risus dentium et ingressus hominis
enunciant de illo*
[Bartolomé de las Casas 1967, Chap. XIX]

The human body, with its physical and psychological properties, figures both as a basis and mediator in all cultural interactions and, as such, is also affected by the social life it supports. Thus, its anthropological study, and that of its cultural modifications, does not only inform on morphological adaptation and plasticity but equally grants glimpses on society itself. Regarding archaeologically retrieved cultures of the past, permanent body enhancement is still evident in buried human bones and teeth, two body tissues that resist decomposition much longer than soft tissues. The bioarchaeological study of artificial modifications of hard tissues therefore provides invaluable insight into ancient customs and may hint at underlying cultural and social dynamics involved in their execution. This chapter explores broad concepts of cultural and social meaning that facilitate the linkage of past head-shaping practices and body modifications in general with social processes; namely, their role in the physical embodiment of ancient society, culture, identity, gender, and age. The concepts, detailed here, anticipate the more specific interpretations of meanings in Chap. 6.

2.1 Individuals, Corporeality, and Ancient Head Practices

El cuerpo humano es núcleo y vínculo general de nuestro cosmos, centro de nuestras concepciones, generador de nuestro pensamiento, principio de nuestra acción y rector, beneficiario y víctima de nuestras pasiones. (Alfredo López-Austin 1989, p. 7)

Anthropologists' and sociologists' inquiries on the relationship between the body and its reflective and sociocultural roles have spanned the notions of its physicality, conceptualization, self-reflection, and model for the surrounding world (Le Breton 1994; Mauss 2007; Shilling 1993; Turner 1984; see also Lock and Farquhar 2007; Sofaer 2006). Recent inquiries tend to focus on the social "construction" of the body and its implications for understanding aspects of agency on agential behaviors and sociocultural negotiations. In general, scholars have been receiving feedback in the last 30 years on a host of phenomenological, structural, and semiotic proposals, mostly gleaned from explanatory readings on cultural phenomena. These studies

attempt to reproduce and recreate broader meanings at the interstice between the mind, the body, and culture, and their mutual interaction (Csordas 2003; Douglas 1973; Featherstone et al. 1991; Sandoval 1985; Sauvain-Dugerdil 1991; Shilling 1993; Sofaer 2006; for specific work on cultural vault modeling in the Americas, see also Blom 2005; Geller 2006; Yépez 2006, 2009; Yépez and Arzápalo 2009).

Although I consider that these cultural readings are innovative, some invaluable for assigning new meanings and for providing new venues for future inquiries and general cultural understanding, my own approach neither attempts any a priori “agential” narratives on infant head modeling nor do I wish to engage in semiotic readings of the patterns these left in the archaeological record. Instead, I have given priority to comprehending Native American—namely Mesoamerican—head practices from an “emic” point of view, by carefully categorizing, analyzing, and contrasting different sets of data and by conceptualizing the expressions of indigenous body notions, specifically those of the head and its vital components. A point of departure for this approach is the abstract notion of the “individual” with its indivisibly bio-psycho-social properties, inseparably entwined with its materiality and integration into the human collective. The latter embraces populations and societies, including all its cultural and specifically its ideological expressions.

2.1.1 Recognizing the Individual in the Material Record

Any attempt to assign a set of sociocultural motifs, or even just any role to the artificial head modeling among ancient Mesoamericans, would be in vain without a framework of bio-socio-cultural reference and criteria that would allow its interpretation above the interdisciplinary divides. Specifically, the skeletal approach of this work requires a framework that authorizes sociocultural evaluation from the material record, first as part of material culture and then as data directly relevant to sociocultural reconstruction and interpretation. In the case of archaeological interpretations of past Mesoamerican society and cosmovision, permanent body modifications (such as cranial-vault modifications) that leave a mark on archaeologically retrieved human remains can be directly studied from the perspectives of physical anthropology and bioarchaeology, lending to fertile interdisciplinary dialogues between human biology and archaeology.

In recent years, the analysis of skeletal materials has increasingly responded to the parameters of bioarchaeological research agendas, a term coined by Jane E. Buikstra during the 1970s (Buikstra 1991). “Bioarchaeology” broadly designates a thematic specialization in archaeology or physical anthropology that studies human remains in their context and as part of the archaeological body of information employing explicit biocultural approximations. This line of research is noteworthy for integrating skeletal research and cultural sets of data. South of the USA, Mexican “biosocial archaeology” similarly devises a series of theoretic and methodological concepts that anchors the study of human remains as an integral part of the archaeological context jointly with other cultural data (Terrazas 2000; Tiesler 2007, p. 31–40).

These concepts facilitate the interpretation of head modeling from the material record.

The following paragraphs strive to set theoretical foundations and more specific tenets on the human being and his sociocultural references, in particular, the “individual” as an abstract concept and as a basic analytical unit to translate the material record into dynamic behavior and human interaction. These are followed by speculations concerning the body and matter, the human parts in their biocultural dimension, and their meaning among ancient as well as modern Mesoamericans. Some of these ideas have already been established and widely discussed in previous works (Tiesler 1996, 1997a, b, c, 1999, 2007). For a more general review of this subject and recent literature on biosocial and biocultural inferences and their acceptance, I recommend the works of Dogan and Pahre (1991), Fox and King (2002), Goldschmidt (1993), Goodman and Leatherman (1998), Joyce (2005), Sauvain-Dugerdil (1991), Sofaer (2006), Vera (1998), and taken to a more general level, Skibo and Schiffer (2009). Today, the analysis of the “individual” or the “person” in its historical, vital, and social context has started to constitute a major concern also in mainstream archaeology.

A conceptual point of departure for this study is the abstract notion of the “individual” with its indivisibly bio-psycho-social properties and as inseparably entwined to the human collective in the form of both (biological) populations and society, which include all of its cultural and specifically its ideological expressions. For the purposes of this work, the “individual” is conceived of as a dynamic entity, as a living human that interacts actively and is formed and transformed by society. The individual in its physicality is converted after death into an object of mortuary treatments, and, still later in the timeline, becomes a study object for archaeologists.

Generally speaking, we can conceive the individual human as an organic unit, as a thinking being who reflects, socializes, produces, and reproduces. As a biological system, the individual is intertwined with the biosocial medium around him, with whom he or she forms part of different chains of relationships. In its physical body, the individual is subject to physiological and pathological changes during the life cycle and as an organic system in exchange with the environs and the mass of society that he or she is intrinsically tied to. The individual engages in constant and dynamic transformation both as a singular organism (embryogenesis, life cycle), as well as collectively (human evolution, adaptation), with the speed of those changes tending to operate at different levels and in different cycles. The quantitative physical–biological scope of individuals identifies *populations*, defined as the set of individuals who engage in biological and social relationships among them.¹ Biologically, the population is formed by individuals of both sexes in different phases of their life cycle, who interact and reproduce.

In the psychosocial sphere, the capacity of being conscious of—and of reflecting on—reality, epistemologically converts the individual into a subject, capable of

¹ The concept of population is delimited by other definitions than those given here. Many emphasize the biological aspect of the concept. Note that population, present and past, according to many authors forms the purpose and unit of analysis of physical anthropology, as a study of man and his origins, evolution, and diversity (Buettner-Janusch 1980).

acting and interacting consciously, of reflecting on him- or herself, and of knowing the physical and social environment around him or her. The subject studied here emphasizes, more than the structural relationships established by the individual with society (a social being), their articulation by system of shared ideas, prone to be affected by shared value systems, by standards or even actions instrumented by organizations or institutions (Bate 1998). We will explore the different ideological dimensions of Mesoamerican head practices extensively in Chap. 6.

It is the social dimensions that directly link the individual with the society of which he or she is a part. This relationship is dynamic, complex, and mutual, but never symmetrical. Although there can be no social history without individuals, individuals by themselves are not self-sufficient. They require society for their biological and social reproduction and to satisfy their material and psychological needs (Bate 1996, p. 60–61; Meillassoux 1987). Of course, social interaction occurs in different spheres. These range from the domestic realms (intrafamily, gender, between families), and others, established between social sectors, subcultures, cultures, and groups (Service 1971). These are frequently, although not necessarily, tied to social positions or “status.” In general, the members of a society interact and integrate depending on their culturally conferred age and phase of procreative and productive life, which in turn has a biological component (age groups formed according to growth, maturation, and degeneration). This dimension is conditioned by a succession of life stages that must also have guided the course of pre-Hispanic life among ancient Mesoamericans. As in other societies, the transitions are manifested here in a fluid, yet scaled progression of stages, many acknowledged, some sanctioned collectively with ceremonies. These separated the persons from their previous (age) groups and integrated them with a more advanced age group, culturally enacting group cohesion and conferring identity to those involved. Transition rituals typically reinforced the cohesive power of the collective *Weltanschauung* (world view) by celebrating the inclusion of the individual into society, its progressive transformation within the social structure of social relationships.

On a more operative scale, the dynamic physical and social characteristics of the “individual,” as an analytical unit, provide both a starting point and link for the archaeological patterning and sociocultural generalizations on head-shaping practices. They relate directly to both the performance and the outcome of the practice in the head, and from here, allow to decode and understand more collective behaviors directed to treatment of infant heads.

2.1.2 *Conceptualizing the Body*

The essential locus of the individual is the body. The host of research on body theory, materiality, and embodiment, usually “read” or reconstruct the dynamic living body with its changing intrinsic or given properties. These may vary according to physical and cultural age, sex and gender, or specific uses of the body (Csordas 2003; Lock and Farquhar 2007, p. 50–68; Mauss 1971). In this scheme, recent bioarchaeological

approaches are especially well suited to examining those body attributes that leave permanent traces in the skeleton, as they are capable of granting insights on wide-ranging aspects of aesthetics and crafted beauty, on identity and culture, gender, ritual performance, and social structure. This is achieved by translating attributes from the joint contextualized evaluation of the material record. It comes as a surprise in this regard that studies on head modifications still remain only marginally treated in the bioarchaeological literature and likewise, in fact, in most resource compendia on archaeological and anthropological body theory, embodiment, and gender (see, for example, Joyce 2000; Joyce 2005; Klein and Quilter 2001; Lewis 2007; Lock and Farquhar 2007; Moore and Scott 1997; Sofaer 2006).

Most of the recent bioarchaeological scholarship on head-shaping practices that does incorporate broader concepts of the biological, social, and cultural body, advocates life history approaches and individual life narratives, or more general thoughts on agency, body theory, and embodiment (see for example, Blom 2005; Geller 2006; Lorentz 2008; Lozada 2011; Reischer and Koo 2004; Yépez and Arzápalo 2009). The underlying idea of the body in much of this work is that of Michel Foucault's docile body, a manipulated, socially constructed or "inscribed" entity that conveys social information, linked to gender, age, personhood, lived experience, identity, and embodied group affinity, thereby constituting a forum of power relationships and negotiations (Joyce 2005; Meskell 1998). Tentative hermeneutical, cognitive "readings" of the material record ascribe agential properties and intentionality to long-vanished cultural dynamics and embodied experiences of personhood. Lorentz (2008) interprets cultural cranial modeling in this vein as a form to generate physical capital, emphasizing the dynamic and mindful properties of the body. Beyond general embodiment, some of the regionally oriented (bio)cultural studies on ancient head-shaping practices on Mesoamerica and on Highland Andean head practices (see for example, Duncan 2009; Duncan and Hofling 2011; Lozada 2011; Yépez 2006) have made laudable efforts to reach a culturally sensitive, *emic* understanding of the body and its body parts, by engaging overlapping lines of arguments derived directly from native ideological frames and worldviews. This is also the line of thought advocated here and will be the focus of Chap. 6.

This work, following the approach of López-Austin's seminal work on the human body in the ideology of ancient Mesoamerica, conceives the body as both the core and link to the human cosmos, perceptions, and thoughts. It is both the originating component and the recipient of human action and interaction (López-Austin 1989, p. 7). At the same time, this entity is the immediate study object of bioarchaeologists, albeit only in its incomplete material nature and departing from its static quality, because its organic metabolism has ceased long ago with death, while its human carrier has vanished together with his or her quality as active sociocultural participant, now only hinted at faintly from the mortuary record. The object of study now contains the "frozen" corporeal properties that the body held at the time of death, such as the age-related skeletal morphology or the stage of a given disease, to name just a couple. Specifically for bioarchaeological approximations, the convenient immediate analytical unit is the single dead skeleton, which harbors the information that remits to the living individual through its biological and cultural materiality (see also Sect. 4.7).

This conceptual frame is also heuristically suited to overcome the disciplinary divide between the physicality and static nature of the skeletal record and the dynamic cultural qualities reconstructed from its material expressions (Schiffer 1987; Skibo and Schiffer 2009; Tiesler 1993).

The material record may also convey past experiences of the human life course, specifically those that are still materialized in bones and teeth. These lend themselves to the reconstruction of the behavioral components of body performance (Schiffer 1999, p. 116–120; Skibo and Schiffer 2009). Marcel Mauss (2007, 50–66) conveys the idea of “body techniques.” These are sorts of acquired abilities or faculties of habits which vary according to the age, sex (or more correctly, gender), as well as to the efficiency and training within a given social fabric and, more so, between societies or education. Mauss stresses the learned behavioral component and highlights the body as a type of tool or vehicle for learned behavior. In his specific terms, the practice of cranial-vault modeling, as performed daily by female caretakers on their infant kin, projects a kind of *chaîne d’opérateur* of tasks, typically transmitted by elder women and learned by younger mothers who will gradually improve their skills in modeling their baby’s head.

2.2 Body Modifications of the Past: An Overview

Permanent alterations of the human anatomy are not isolated cultural phenomena of the past but identify now, more than ever, omnipresent incorporated epitomes of modern lifestyle and individual aesthetic expression and assumed identity. Apart from long-standing cultural traditions, such as religiously motivated circumcision, body sculpturing now often follows medical indications. Also, body plastic surgery for nonreligious and nonmedical purposes has reached our mainstream (post)modern society. Body piercings and tattoos are customary now alongside other, more drastic surgical body alterations. They may be carried out for the sake of aesthetics and beauty, body art and sexual enhancement, individual self-expression and, almost always, group affiliation. It is noteworthy that the state of the art of body makeovers also includes surgical transformations of adult head shape by transdermal and subdermal implants (Gump 2010).

2.2.1 Studying Artificial Body Modifications

The humanities established cultural body modifications as a sort of formal study object some time in the nineteenth century, which has since been the focus mainly of ethnology and physical anthropology. Approaches by iconographers or art historians are complementary to the different forms into which the bodies are transformed and their cultural and aesthetic connotations. Cultural body modifications are commonly defined as procedures that are carried out in order to modify the external aspect of the person (Alt et al. 1999; Brain 1979; Feest and Janata 1989; Flower 1881). This

definition excludes mobile body ornaments (i.e., external adornments, like jewelry). Body modifications are distinguished as either temporary (such as body painting), or permanent alterations, such as changes in the skin, the mucous membranes, teeth, and bones. Some permanent modifications are then differentiated as artificial modifications of the body such as, for example, placing objects in the physical orifices, or changes that modify the external aspect of the body for the remainder of life. In traditional societies, these permanent modifications of the body tend to be associated with initiation rituals and rites of passage, as a requirement on the part of each individual as part of a shared cultural manifestation (Van Gennep 1960).

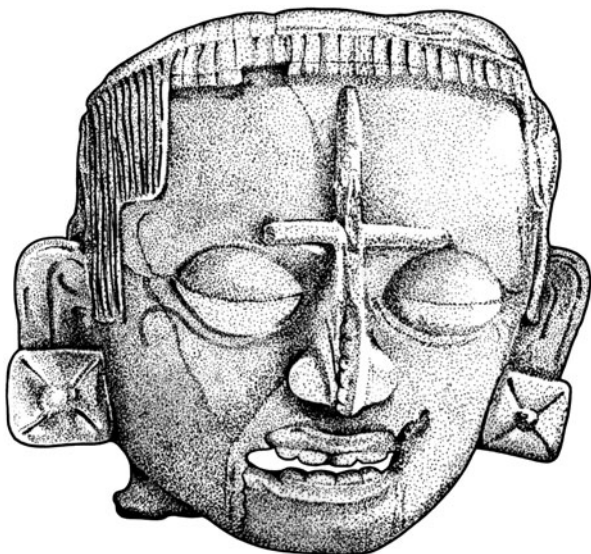
Changes in the appearance of the body constitute a common element in all societies, both today as in the past (Dembo and Imbelloni 1938; Feest and Janata 1989). The body procedures performed on the hair, skin, mucous membranes, teeth, or the skeleton have always been an integral part in the rich network of traditions that define personal choice and, in general, the cultural heritage of a group, sometimes marking ethnic affiliation, gender, or status statements. Some practices, such as the application of body paint or the wearing of head ornaments, are temporary, reserved for special occasions or applied on a daily basis. Others produce longer-lasting impacts on human anatomy, remaining throughout a person's life span. Many of these are strictly personal choices and adhere to individual preferences; others are more collective, as they follow fashions imposed by social dictates of the time. Still others, typically more conservative and restricted in application, may be regulated or even institutionalized.

Beneath or beyond personal and collective choices of looks, there is always visible display and ostentation involved in the performance of body modifications and ornamentation, naturally. Adornments are prone to reify social identities. These may be real or perceived, borrowed or even fictitious (Reischer and Koo 2004). The cultural adjustment of the body may be *doxic* or intentional, its communication of ascribed social identities may either be hidden and subtle or blatantly obvious and even gaudy. Miller (1982) makes this point for the surging rich from the popular sectors, the *nouveaux riches*, who attempt to establish themselves by gaudy displays of possessions and outer looks. This notion has recently been introduced in the study of pre-Hispanic Nicaraguan folk (McCafferty and McCafferty 2011). The authors explore body ornaments from burial contexts that once might have been perceived as flashy, possibly decoding aspects of ancient social revindication and claim to recognition. Also within the Mesoamerican heartlands, the ostentatious display of beauty, riches, or power was on the order of the day and could be enhanced institutionally. Here, I recall the gaudy personal cult that the Classic Maya courtiers indulged in, garnished with self-assigned attributes of perfection and the marking of the divine.

2.2.2 *Modifying the Body in Ancient Mesoamerica*

Beyond doubt, temporary and permanent artificial body modifications materialize a wide range of Mesoamerican ideological expressions. Here, many "looks" of the

Fig. 2.1 Late Classic period clay figurine from the Maya area. The head figurine displays a series of flamboyant adornments and adjustments of the skin and cartilage. (The Museo Popol Vuh, Universidad Francisco Marroquín, Guatemala, adapted and redrawn by B. Ceballos)



body and its anatomical constituents were to evolve into deeply embedded traditions that were shared by families, communities, women and men, among different age groups and social sectors (Fig. 2.1). As a result, a host of distinct forms of temporal body decoration and also some permanent body castings (such as head shaping and dental fillings) came to be popular in Mesoamerica's diversified cultural repertoires, decoding a myriad of roles and meanings in different locations and human contexts.

Regarding temporal body changes, most hairstyles and body paintings were part of everyday engagements in Mesoamerica, while others, usually more elaborate displays, were reserved for festive occasions. Body painting was widespread and could communicate kingly or warrior status, mourning or sacrifice, among other more mundane motives (Vela 2010). Other interventions, such as scars and tattoos—or cartilage piercings for holding ear plugs, labrets, and nose rings—permanently changed the aspect of those who wore them, translating into enduring expressions of cultural identity or social membership (Vela 2010). As with head shaping, permanent perforations of soft tissues, facial scarification, and dental modifications (in the form of inlaying, filling and incision), came to acquire special importance in many parts of Mesoamerica over the centuries. Unfortunately for Mesoamerican scholarship, the scars that once covered ancient living bodies have decomposed posthumously along with the skin it once marked, except for very rare examples of soft tissue preservation by natural mummification that are limited to the dry northern and western highlands. Therefore, only figurative presentations of body scarification lend to their study in the Mesoamerican sphere. Equally vanished are skin piercings and larger cartilage perforations. Their presence can only be inferred indirectly by the form and size of those personal body ornaments found together with the skeletal remains of graves.

Among Mesoamerica's permanent body modifications and apart from head shaping, only dental decoration has left "hard" evidence in the material record of Mesoamerica. This is because enamel and dentine are the body components that resist decomposition more than any other human tissues, including bone. The archaeological record of Mesoamerica shows artificially pointed teeth already by the second millennium B.C. and probably even before. These are the dates given to dental fillings, such as the ones documented from El Arbolillo in Mexico (Romero 1958; Romero 1974). By the onset of the Classic period, tooth filling had turned widespread across most of Mesoamerica's cultural landscape. This modification implied the selective attrition of the dental tissues by help of abrasive sand and stones, whereas incisions with sharp lithic instruments led to grooves on the dental labial surfaces. A third style of dental work consisted of securing hard and soft tooth inlays in drilled teeth. This procedure was much more demanding on the artisanal skills than filing, as it necessitated meticulous single or multiple perforations of enamel and dentine with subsequent precision adjustment and permanent fixation of the material to be inlayed (Ramírez et al. 2003). At the end of this operation, people would put on view in their anterior teeth semiprecious stones such as pyrite, turquoise, and jadeite. Also, fibrous filling materials could be employed to seal the dental cavity; these materials appear to have been alternative choices of fillings or were used once the inlayed stones had fallen out of their dental sockets (Romero 1958; Tiesler 2000).

Different from artificial cranial-vault modifications, dental work appears—in Mesoamerica—not to have been performed before having reached late adolescence or early adulthood. The overwhelming majority of dental modifications appear in permanent dentitions and show different degrees of postmodification physiological abrasion (Romero 1952, 1958, 1970, 1984, 1986), whereas alteration of deciduous teeth is beyond doubt infrequent (Peña 1992). This means that dental work and its observable results would have visibly exhibited acquired and achieved qualities among grown-ups. In fact, status distinctions must have played a role in the display of dental work in certain social contexts, at least among Classic period lowland Maya (Tiesler 2000). When considered jointly with other indicators of the Maya cultural record, "Ik" styles and inlays appear more frequently in privileged burials than in plain mortuary contexts (Tiesler and Benítez 2001). However, beyond this general tendency, there are no radical, socially affiliated distinctions in dental wear. Dental styles manifest themselves in the material record only in terms of preference, never denote exclusivity (exercised by some people but never by others). This lack of practitioner codes appears to indicate that dental decoration was not regulated by any explicit prohibition or strict norms among the Classic Maya, and no relationship could be established between the presence and style of the dental work and artificial head form among lowland Maya. This lack of association confirms, as do the age differences, that both body practices once responded to different cultural needs, an observation that should be analogous in other parts of Mesoamerica. (Tiesler 2000) Considered jointly with the archaeological record, the evolution of dental practices and their multifaceted visible expressions in the dentitions of their carriers manifest daily behaviors and individual, circumstantial choices besides also long-standing patterns of cultural change across the evolving Mesoamerican landscape.

Among the distinct Mesoamerican techniques employed for the dental work, incisions and incrustation were much less widespread than tooth filling in terms of cultural distribution and time depth. The latter is circumscribed to the Late and Terminal stages of the Preclassic period, a time after which it gained prominence in Veracruz, Oaxaca, and the Maya territories during the Classic period. Although no dental procedure or pattern appears as exclusive to either sex, more Maya men than women appear to have had their frontal dentition inlayed (Tiesler 2000). Similar to head shaping, in most parts of Mesoamerica, the canons of dental decorations became homogenized at the onset of the Postclassic period. During the first half of the second millennium A.D., incrustation disappeared from almost all parts of the Mesoamerican material record (Romero 1958, 1984, 1986).

2.3 Head-Shaping Practices and Identity

The following paragraphs seek points of departure in the conceptualization of ancient cranial-vault modifications from different angles of past social life. Each of these elaborates on a different component in these practices: the practitioners and the “wearer” of the custom are addressed; then the procedure’s role in gender and age expression; and more collectively, as a tradition and visible emblem of beauty, identity, and ethnicity (see also Chap. 6).

2.3.1 *Head Practices as Traditions*

More conservative and generation bridging than most other body modifications was the artificial head molding of newborns. These were not conducted (or even influenced) by the subject him- or herself, but effected by a grown-up person, usually the parents or kin. In this procedure, the prospective “wearer” of the artificial shape had no possibility to change or avert the processes and their lifelong visible outcome on the head. Performed by second or third generation women on newborns that later bore the visual result for the rest of their lives, artificial vault modification is a practice that has transcended generations (Blom 2005; Torres-Rouff 2002; Yépez 2006). This protracted, conservative quality of head shaping identifies long-lasting cultural dynamics and raises the cultural importance of this practice above that of more ephemeral, transitory body shaping, which erroneously still permeates the literature on head modeling (Christensen 1989).

This practice, performed within the domestic confines, rested in the experienced hands of women who daily applied this technique to their infants. Beyond the mechanical quotidian routing the maneuvers on the infant heads surely established links with the cosmos for their Mesoamerican practitioners, who were in regular converse with the divine. (Chap. 6). The fact that this ultimately became a regular practice among most Mesoamerican peoples allows us to establish head modeling,

by definition, as a custom (or customs), which enjoyed general approval by society, at least before the Spanish Conquest. As a long-standing and deeply rooted custom, cranial modeling actually constitutes a Mesoamerican tradition following the interpretative approach by López-Austin and López-Luján (1996), understood as “an intellectual heritage that is socially created, shared, transmitted and modified, comprised of representations and forms of action, in which ideas and rules of conduct are developed with which the members of a society either individually or collectively confront, mentally or physically, the different situations that they face in life” (López-Austin and López-Luján 1996, p. 62). Their enactment and mental background expressed a complex range of values and beliefs (as we will see later) that were shared and passed from one generation to another, thereby participating in the collective and long-lasting construction of the group identity. This custom in turn was capable of assimilating underlying social changes, and of transforming and renovating over the centuries. Considering that head modification endured for thousands of years it must be included among the most ancient and long-lasting of Mesoamerican traditions, found within the innermost spheres, the “hard core” of Mesoamerican ideology and beliefs (López-Austin 1998, 2001).

In these terms, and aware of the widespread practice in the bosom of pre-Hispanic Mesoamerican society, it follows that the practice of head modeling must have been a principal expression in daily life, family identity, and cultural belonging. It must have been a form of ideological credential—both on an emblematic as well as ritual plane—for the infants (both boys and girls who experienced this), for their preproductive and preprocreative integration with the group. In all probability, the women who practiced this custom on these infants, their own sons and daughters as well as those of others, must have engaged in its daily performance, perhaps without much reflection but following a self-evident notions of things desirable, in fulfillment of the proper way to rear a child passed on by the elderly. Apart from individual social fulfillment, these actions, formalized in practices, must have expressed broadly shared, yet changing, sometimes conflicting values.

2.3.2 *Age and Head Practices*

Cranial modification links biological and cultural aspects of age and ageing as have few other practices of the past. It is biologically conditioned, as it can only take place while the baby’s skull is still malleable during the first few years of an infant’s life. Most of all, the first months after birth show peak cranial growth; after that age, head expansion slows and ceases at the age of 2–3 years. Once the skull hardens, the resulting shape becomes permanent. This physiological sequence, recorded roughly here in terms of months and a couple of years (see also Chap. 3), puts natural constraints on the maximum duration of infant head molding. It allocates compression practices between the developmental stages of baby and toddler age, which by themselves designate progressive stages of gaining independence and growing up (Lewis 2007). But what about the cultural correlates of biological growth? Native Mesoamerican

cultures specifically consecrated the milestones of infant maturation, such as sitting on the hip, walking, or eating maize for the first time. These were in tandem with education, evolving personhood, and progressive social and economic integration, sometimes consecrated by initiation ceremonies (see Chap. 6).

Although the infant transition rites and their performance were varied within Mesoamerica and should have differed from analogous age ceremonies held in other areas, the phenomena of rites of passage that deal with birth, adolescence, and death, by themselves constitute universal manifestations (Van Gennep 1960). It is noteworthy in this regard that the ethnographic literature identifies many permanent body transformations in these types of festivities, specifically initiation rites during puberty (Feest and Janata 1989, p. 211; Dembo and Vivante 1945; see also Dembo and Imbelloni 1938). Regarding the role of head-shaping practices in transition ceremonies, it appears that the procedures span the time between postpartum rituals and later infancy rites among a surprising number of ethnic groups (Dingwall 1931). Some areas mark the beginning of head-compression devices with induction rituals, others consecrate its finalization. For example, among Inca Peruvians, the first placement of the newborn into the cradle device was an occasion of joyful gathering among family and kin. This was the time the crib was presented to the family Huaca or totem, that was believed to protect the little one from harm (Latcham 1929, p. 542; Latcham 1937; Purizaga 1991, p. 43–45).

As in all other societies, the increasing locomotive abilities, mental maturation, and independence of the little ones are vocalized by the sequence of successive infant age categories that are identified in Mesoamerica. Here, one important maturation category is the spiritual heat or energy (*calor*) and the prospect of becoming a person (Furst 1995; see Chap. 6). Younger infants especially, regardless of sex, were deemed frail and spiritually vulnerable among many Mesoamerican native groups, as they were believed to be at risk of losing their vital energy because of extrinsic or intrinsic harm. They were in need of constant protection against malignant influences and of positive spiritual and natural reinforcement. Therefore, mothers were induced to apply carefully a set of measures and prohibitions during the first weeks, months and years of their little ones' lives (Bonavides 1992; Tiesler 2011). This care would feel for the mothers like a direct progression of the care taken during pregnancy (López-Austin 1989; Nájera 2000).

Alfredo López-Austin (1989, p. 322–328) has delineated age progression through semantic attributes in the native Aztec (*Nahua*) languages, which align roughly with past and modern concepts of growing up in the Mesoamerican world. Within this scheme, native terminology labels distinctly those children who are nursed and those that still do not talk. Older child age categories distinguish ages below and above 6 years of age, a transition marked by the children's gradual gendered incorporation into the household duties in native society, although age references vary (see, for example, Ardren and Hutson 2006, p. 8–9; Boremanse 1997; 1998, p. 80–81; Farriss 1984, p. 135–136; Kramer 2005). The successive stages of infancy and later childhood define their role and needs within the family, their duties and rights, and ultimately, their social and economic integration.

2.3.3 *Gender and Head Practices*

The archaeology of gender seeks to understand female (or perhaps also male) roles and forms of involvement in performing child-rearing practices, such as head modeling. Unfortunately, the mortuary record itself, at least in the Mesoamerican cultural sphere, does not hold in situ information on the gender of those who managed the techniques and implements used for compression, which have vanished like most other organic vestiges. More eloquent is the material record of ceramic figurines in the pre-Hispanic Mesoamerican legacy, which includes probably hundreds of cradleboard and splinting scenes from different epochs and cultural areas. In all Mesoamerican figurines of this sort under study ($N = 88$), the baby or toddler is depicted either by itself, with a mystical creature or animal, or together with a female caretaker. Conversely, no scene shows any male practitioner positioned together with the minor (see Sect. 4.4). In the adult-child pairs, babies most often rest in a cradleboard or crib device; some of the body kits include either a separate head wrap or head splint. The age of the female adult varies, suggesting that not only the presumed mother but also other older female kin in postreproductive age, possibly midwives or respected elders were actively involved in the daily procedures on the baby (see Chap. 6).

The above glimpses of the ancient practitioners enable us to cautiously relate the enactment of infant head shaping to womanhood and female gender expression within a broader context of social theory and regional interpretation. As in most ancient societies of the past, the role of Mesoamerica's women was more circumscribed to the house and its immediate environs, while men worked outside and at a distance. In this ambit, women were in charge of domestic chores, such as food processing, weaving, house maintenance, and child rearing (Claasen and Joyce 1997; Klein 2001). In Mesoamerican thought, for example, the gendered identity and place in the community, society, and in the Maya cosmos itself, was considered as essentially complementary. Male contributions were predetermined as the production of crude material, while the role of women in society was prescribed to the transformation of crude mass into objects of use.

Also, the genders of the infants who experienced the head procedures, who grew up and later in life still displayed the insignia imprinted by their mothers, provide a starting point to explore the role of head shaping and its resulting head form in signaling “girlhood” vs. “boyhood” in the early stages of life. For the Mesoamerican sphere, it is noteworthy that the *Nahua* terms for preadolescent individuals are rather vague with no clear linguistic distinction even between prepartum and postpartum periods or between boys and girls (López-Austin 1989, p. 321). Only when deemed necessary in conversation, a term was added to the word “baby” or “child” to designate its gender. Also among Mayan speakers, the designations for male and female babies tends to be applied indistinctly and changed only after entering the toddler age and beyond, a time span marked by transition ceremonies, such as naming rites or *hetzmek* festivities (Boremanse 1998, p. 80; see also Sect. 6.4). These ceremonies could well have marked the end of infant protection and molding. Analytically, these may set stones of departure in exploring early age progression and evolvment of

gendered personhood, “womanhood” vs. “manhood”, in the Mesoamerican value system. If we believe Landa, Yucatecan Maya *hetzme*k (which means “sitting on the hip for the first time”) ceremonies appear to have sanctioned the onset of distinct, gendered life trajectories among colonial Yucatecan Maya, and in fact still do in traditional Maya communities (Cervera 2007; Marion 1994; Redfield and Villa Rojas 1967; Villa Rojas 1978).

The gender of head “wearers” also matters when the produced artificial head shapes are compared among grown-up men and women, as documented from the (bio)archaeological record. Biological sex identification from the skeleton, as the probable biological expression of gender, is the necessary point of departure to establish headwear worn by females vs. males (Sofaer 2006, p. 89–101). Surprisingly, most ancient cultures (Dingwall 1931) did not distinguish men and women or, more correctly, boys and girls, by their head shape. Mesoamerica is not the exception. Here, maybe subtle distinctions in terms of the degree of morphological change or in terms of asymmetry may have stood for distinctive amounts of work initiated, or the care and experience inculcated by the mothers in the heads of their boys and girls; however, there is no exclusive shape or preference noted among the sexes for those areas systematically covered (Tiesler 2012). Instead, the patterns of head shape point much more to equality in the head treatment of boys and girls than distinction. It appears that a baby girl’s head was to be protected and modeled the same way as that of a baby boy. I deduce from this that the head practice would have constituted a nongendered tradition, which is consonant with the nongendered quality of babies, projected in most Mesoamerican languages (personal communication, Alfonso Lacadena 2010). It was only later that the children were to take different paths and follow gendered destinies. Probably, also the fact that the practitioners were female, played a role in the similarities between female and male head silhouette.

2.3.4 *Head Practices, Beauty, and Identities*

Apart from the active role of head modeling as an infant body practice, there are also more emblematic meanings to this modification, which in most of the societies who practiced it, epitomized notions of culturally defined beauty, ideological emulation, social distinction, or simply group identity and integration. These generally relate to the outcome of head compression, i.e., the visible transformation of the back, the crown, and the front of the head, including the face. This externally visible result is not superficial by any means but holds deeper significance, especially in Mesoamerican thought. This is communicated also linguistically by many Mesoamerican languages, which use the head with its outer insignia as a metaphor for designating the individual, the person, and the “self,” as argued by Stephen Houston and his colleagues for the Classic Period Maya (Houston et al. 2006, p. 28; Houston and Stuart 1998, p. 83–85).

On a more general note, philosophical and aesthetic concepts of human beauty convey categorically notions of visually pleasing attributes. There are some very broad undercurrents of beauty ideals that express harmony, symmetry, and certain proportions (Forth 2010). Some of these are considered universal elements of beauty.

Yet, it is also true that the social perceptions of physical beauty have evolved over time and change according to the culture in which they are embedded, consonant with culture-specific values and conventions. Most of these standards go beyond superficial, outer features and identify epitomized inner beauty, such as grace, integrity, elegance or serenity, and others deemed desirable by the community.

Physical beauty may still be enhanced by body adornments in the form of cosmetics and accessories or directly by body modifications. Head shaping is a plastic form of transformation to align to beauty ideals. In fact, the notions of beauty or prettiness resonate heavily in the historical accounts on head-shaping practices and their motives (Dingwall 1931; see also Chap. 5). Sometimes, the hand-crafted head shapes were further emphasized by specific hair arrangements or eye-catching headwear that drew attention to the permanently transformed organic substrate (Dingwall 1931; Stresser-Péan 2011, p. 136). Also in the Mesoamerican sphere, such head-form-adapted headdresses were common among the Preclassic Olmec, Classic Mixtequilla people and Classic period Maya, as figurines and vase paintings testify (Acosta et al. 1992; Cheetham 2008; Taube and Taube 2008; Tiesler 2010).

Already among the Gulf Coast Olmecs, artificially contrived, pear-shaped head looks appear to be highlighted by shaving (Tiesler 2010). During the next millennium, Classic Maya small-scale portraiture still adheres to this morphological exaltation when representing strongly reclined heads partly or completely foliated. Other conventions draw the reclined head profiles with pulled-back hair, in a seeming effort to emulate the maize god (García and Tiesler 2011; Houston et al. 2006, p. 45; Taube 1996). Among Classic period Totonac folk, top-flattened heads were framed by spherical head rims, and still later in time, the artificially contrived wedged foreheads of Huastec women were emphasized by their hair parting (Stresser-Péan 2011, p. 136–137). Naturally, for the scholar who is interested in the forms of physical embodiment, these and other visible combo arrangements make worthwhile starting points for exploring the venues of crafted beauty and social identities among ancient Mesoamericans.

Beyond portraiture, we may assume that the forms of facial representations would have reflected or even exaggerated the preferences of the portrayed subjects, which beyond individual choices would have materialized the culturally desirable attributes, as will be explored in Chaps. 7, 8, and 9 for different Mesoamerican cultural environs and time frames. Specifically during the Classic period, artificial head transformations appear prominently represented in those areas with figurative imagery. Different from Andean head forms, which acquired notions of exclusiveness and prerogative (Chap. 5), it appears that in Mesoamerica, more unifying ideas operated in the form of individual integration, group identity, and potentially ethnicity, as we argue further on in this book. Ethnicity is understood here as the pertinence to a population in which its members identify with each other, usually on the foundations of a common genealogy and ancestry (presumed or real), in addition to other historical ties (Hicks 2001; see also Díaz-Andreu et al. 2005 and Jones 1997 for a broader discussion). Those groups that hold an affinity of this type, tend toward cultural cohesion and to express themselves through common cultural practices, in language and shared ideological beliefs, sometimes in confrontation with others.

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