Woolen felt hats were formerly made in Oaxaca City, Jamiltepec, and possibly in other communities; they are still made in the Zapotec town of Yalalag, in the Villa Alta district. The 1578 Zapotec vocabulary of de Córdova includes references to hatters and felt making. Large-brimmed, high-crowned felt hats popular at the turn of the century in the Valley of Oaxaca were richly embroidered with silver thread (Cook de Leonard et al. 1966:134). A smaller, dark red felt hat with a silver, ropelike *toquilla* (a decorative band that encircles the base of the crown) appears to have been distinctive of the Isthmus Zapotec. The Regional Museum collection includes some outstanding examples of both types.

Silk

Wild silk was used until recently in some areas of Oaxaca. The species that produced it appear to be Gloveria psidii, a moth, and Eucheira socialis, a butterfly, both of which are found in midaltitude, relatively dry forests (Peigler 1993:156-57; Peigler et al. 1993). In Santa Catarina Estetla, a Mixtec community in the mountains west of the Valley of Oaxaca, a wild silk called, in Mixtec, *doko tachi* was gathered from oak trees and spun and woven into very durable sashes (de Avila B. 1985, Field Notes). Wild silk was also used to weave sashes in Santo Tomás Quierí and other communities in the Zapotec area of Yautepec; two types of wild silk were known in this area-one found on oaks, the other on madrona trees (Arbutus) (Johnson n.d.). A silk gathered from oaks is also remembered in San Miguel Cajonos, a Zapotec community in the Villa Alta district (de Avila B. 1986, Field Notes). The use of wild silk in precolumbian times in Oaxaca and other areas of Mesoamerica has been debated; Borah (1943:102-14) proposed that indigenous weavers began to use wild silk only after sericulture, brought from Europe, began to wane. However, a document dating from 1777 describes the excavation of a precolumbian burial in which textiles of wild silk, cotton, and feathers were found; this took place in the area of Teotitlán, in the dry Tehuacán-Cuicatlán Valley (Esparza 1994:59).

Bombyx silk and the mulberry to feed it were introduced to Oaxaca by the Spaniards in the 1530s (Borah 1943). By the 1550s the Mixteca Alta in western Oaxaca had become the most important center of sericulture in the continent, and Mixtec silk is said to have compared favorably with Asian silk in quality. Late sixteenthcentury documents attest to the prosperity of indigenous communities in Oaxaca that produced it. Silk-raising in Mexico thrived for less than a hundred years; in the early seventeenth century,



Silkworms thriving on a leaf of a mulberry tree. *Bombyx* silkworms and the mulberry trees on which they feed were introduced from Europe soon after the Spanish conquest. By the middle of the sixteenth century, the Mixteca Alta in western Oaxaca had become the most important center of silk raising on the continent. Photo by G. Aldana.



A woman's hand-spun silk sash from the Cajonos area. The sash was woven on the backstrap loom in a plain weave; the warp ends were knotted into an elaborate fringe. Wide sashes of either silk or wool are worn today in a number of Zapotec communities. The popularity of this type of sash may have developed during the mid-twentieth century; prior to that, narrow belts with woven patterns were worn. Photo by G. Aldana.

it was interdicted by the king to protect Spain's own silk industry. Although production dwindled and export was halted by the decree, locally raised silk continued to be used in Oaxaca until the present, mostly for ceremonial textiles. It is still raised in two areas: the Mixtec community of San Mateo Peñasco in the Mixteca Alta, where it is spun and dyed for sale in Pinotepa de Don Luis and Santiago Ixtayutla, two Mixtec communities in the coastal district of Jamiltepec (the dark red Peñasco silk is known locally as *biladillo*); and in a number of Zapotec communities in the Villa Alta and Ixtlán districts, including San Pedro Cajonos, San Pablo Yaganiza, and Santiago Laxopa, where it is woven into pink-red sashes worn locally and natural-color shawls for the folk art trade. In the early part of this century, silk was also raised in the Mazatec town of Huautla de Jiménez (Johnson n.d.), and it was produced in the Mixtec area of Santa María Peñoles as late as the 1960s (Cordry and Cordry 1968:286-87). Small quantities are still raised by Zapotec families in Macuilxóchitl in the Valley of Oaxaca, who send it to the Cajonos area to be spun and woven into sashes (Aquino 1987).

The processing of silk in Oaxaca uses the fiber in the same way that cotton and wool are spun: rather than unreeling the entire filament of the cocoon (which is only possible if the chrysalis is killed), indigenous silk raisers allow the adult moths to emerge, dissolving their way out of the cocoon and thereby breaking the continuity of the filament. The empty cocoons are boiled in ashes and then spun with light spindles like those used for spinning cotton. The result is a thread that lacks the gloss of other *Bombyx* silks but has a beautiful, subdued sheen and confers an extremely handsome irregular texture to textiles woven with it. Current regional development projects that seek to revive sericulture in Oaxaca by promoting Asian and European strains of silkworms and the adoption of reeling techniques fail to appreciate the unique aesthetic qualities of traditional Oaxacan silk textiles.

Besides its use in the aforementioned sashes and shawls woven in the Cajonos area, silk is used in Pinotepa de Don Luis to weave *pozabuanque* wraparound skirts that combine silk warp stripes with cotton warp and weft. Peñasco silk is used in Ixtayutla as supplementary weft in cotton textiles decorated with brocading. Hand-spun silk was formerly used in supplementary weft weaves in other areas as well; the most notable examples were the extremely fine Zapotec textiles from San Bartolo Yautepec. Warp stripes of hand-spun silk were present in the rebozos woven in the Zapotec communities of San Pedro Quiatoni and San Pedro Mixtepec.



A woman's rebozo (shawl) from San Pedro Quiatoni, a Zapotec community located in the mountains east of the Oaxaca Valley, dating from the 1930s or earlier. A rich variety of materials from ecologically and culturally distinct sources is found in Quiatoni textiles. This rebozo epitomizes the diversity of textiles found in Oaxaca. Some of the cotton threads were dyed with Purpura shellfish colorants, perhaps by Chontal specialists on the Pacific coast; silk threads dyed with cochineal are from a highland region, possibly the Cajonos area; while the white thread was spun locally from cotton imported from the lowlands. Because the art of weaving has not been practiced in Quiatoni for at least fifty years, the few surviving textiles are found only in collections. Regional Museum of Oaxaca (131021). Photo by M. Zabé.



Local silk decorated the black and dark green *tlacoyales* formerly made in the Valley of Oaxaca and worn in many areas. An old Trique huipil from San Juan Copala in the Regional Museum collection includes some hand-spun silk in the brocaded patterns. Old ceremonial textiles from other communities in Oaxaca also included hand-spun silk, such as a huipil brocaded with *biladillo* from San Pedro Amuzgos in the collection of the National Museum of Popular Arts and Crafts in Mexico City, and the magnificent silk sashes formerly worn by Mazatec elders, decorated with gauze weave and brocaded designs, of which there appear to be only two examples known, one in the Chicago Field Museum (in the Frederick Starr collection) and another in the Franz Mayer Museum in Mexico City (Johnson n.d.). Both the warp and weft of these sashes are of hand-spun silk, as are two old square pieces (probably headcloths) in the collection of the National Museum of Anthropology in Mexico City. The wine-red background and darkblue and gold stripes on one of these cloths match the colors of the Mazatec sashes and may indicate that it came from the same area and was possibly worn as a ceremonial headcloth by members of the council of elders. The most outstanding textile from Oaxaca, and possibly the oldest piece that shows local hand-spun silk, is a large, old huipil, conserved at the National Museum of Anthropology, woven of extraordinarily fine hand-spun cotton thread. The gossamer-thin cotton warp and weft of this piece appear as delicate as the finest precolumbian Andean cotton threads. The top portion of the central web of the huipil was woven with a wine-red silk weft. After weaving, a red dye appears to have been applied on this section of the textile, which brings to mind the use of indigo and fuchsin to overdye the Chinantec huipils of Usila. No information has been preserved on the origin, date, or history of this and other remarkable old pieces in museum collections. These superb textiles attest to the virtuosity of indigenous weavers in Oaxaca.

Myth and Motif

The diversity of fibers and dyes and weaving techniques used in Oaxaca has propitiated the development of an extremely rich inventory of design. Specific materials and thread manipulations allow for certain effects of texture and vividness of design. Some techniques, such as 1/1 weft brocading and cross-stitch embroidery, lend themselves to elaborate small-scale motifs, while other techniques, such as 5/3 brocading, are less suited to minutely detailed elements. Design repertories vary markedly from area to area of



Full view (opposite) and detail (above) of a Mixe huipil from San Juan Cotzocón in northeastern Oaxaca. Woven in the 1940s or earlier, this huipil shows white brocaded patterns (supplementary weft patterning) woven into a white plain weave ground. Warp and weft threads are of hand-spun cotton. While older women of this community continue to wear handwoven huipils, white-on-white brocaded patterning is no longer being woven in Cotzocón. The detail shows human figures alternating with stylized double-headed eagles — a predominant motif found on present-day huipils from Oaxaca and Guatemala, as well as on colonial huipils from Central Mexico. Regional Museum of Oaxaca (130989). Photos by M. Zabé.