

University of Nebraska - Lincoln

DigitalCommons@University of Nebraska - Lincoln

Textile Society of America Symposium
Proceedings

Textile Society of America

2008

From Construction to Ritual Function: An Exploration of New Guinea Fiber Masterworks

Jill D'Alessandro

Arts Museums of San Francisco, jdalessandro@famsf.org

Christina Hellmich

Young Museum, chellmich@famsf.org

Follow this and additional works at: <https://digitalcommons.unl.edu/tsaconf>



Part of the [Art and Design Commons](#)

D'Alessandro, Jill and Hellmich, Christina, "From Construction to Ritual Function: An Exploration of New Guinea Fiber Masterworks" (2008). *Textile Society of America Symposium Proceedings*. 88.

<https://digitalcommons.unl.edu/tsaconf/88>

This Article is brought to you for free and open access by the Textile Society of America at DigitalCommons@University of Nebraska - Lincoln. It has been accepted for inclusion in Textile Society of America Symposium Proceedings by an authorized administrator of DigitalCommons@University of Nebraska - Lincoln.



**From Construction to Ritual Function:
An Exploration of New Guinea Fiber Masterworks**

Jill D' Alessandro
jdalessandro@famsf.org

Christina Hellmich
chellmich@famsf.org

The island of New Guinea is fringed by many small islands to the east. The west portion of the island, called Papua or West Papua, is politically part of Indonesia. The narrow Torres Strait separates New Guinea from Australia to the south. Physical features have profoundly and diversely shaped the lives of people living there for over fifty thousand years. The natural world, supernatural world and the rituals surrounding life's passages, inspired the creation of the Jolika Collection works we explore today. They are complex compositions layered with imagery and meaning. Designs and motifs are often specific to clans and communities and their meanings concealed by the maker or revealed to only the highest grade initiates. They can relate epic histories of a clan or ancestor, represent a spirit or ancestor during ceremonies and, in some cases, serve as a dwelling place for a spirit or ancestor. When worn, they can signify the status of a wearer. Extensive and historic trade networks involving cultural objects, including many forms fiberworks, are documented throughout the island and outer islands for tens of thousands of years.

Marcia and John Friede began collecting African and Oceanic art in the 1960's. Over the years, they grew more passionate about New Guinea art and amassed a collection with thousands of works—now known as the Jolika Collection of New Guinea art—named in honor of their children, John, Lisa, and Karen. 400 works are currently on view in the Marcia and John Friede gallery at the deYoung museum in San Francisco, California. Our paper seeks to illuminate works in the Jolika collection that represent the scope of non-loom fiberwork in New Guinea. The works we present today come from just a few clans and villages of New Guinea. Often the work of a single anthropologist, archaeologist or art historian is our primary source of information about these works.

The string bag or *bilum* is one of the few objects in the study of New Guinea fiber work where there is a detailed regional study of the tradition, in large part due to Maureen Mackenzie's seminal work, *Androgynous Objects: String Bags and Gender in Central New Guinea*. The string bag or bilum is one of the most universally worn and ubiquitous objects in New Guinea.

Made from two-ply fiber cord, bilums are constructed in a single-element looping technique. In an interplay between form and function—the strength and functionality of the open looping technique has made it indispensable in New Guinea. Bilums, an essential accessory of domestic and ritual life, are present during each stage of life's cycles. Newborn babies are cradled in the bilum and the bilum symbolically is referred to the mother's womb. At the end of the life, sacred bilums are used to carry the bones of the deceased. The universal importance of the bilum is described by a Tona woman interviewed in 1984 by MacKenzie: "If there wasn't such a thing as a bilum, then, my word, there wouldn't be anything. The bilum is the bones of our people. We only need to know how to make one thing, the bilum, because it is such a good and useful

thing.”¹ In addition, the bilum bag serves as a marker of clan membership with each cultural group employing their own unique combination of raw materials, dyes, design elements, applied accessory objects, and variations of the looping technique. Women are primary creators of the bilum bag; however, there is a division of labor in bilum making that is not consistent throughout New Guinea. While most commonly men’s bilum making is limited to the creation of ritual bags and attire using tight looping techniques or in embellishing bilums worked by a woman, in some highland groups men also create a functional open looped bilum.

For the Mountain Ok people, the string bag, embellished with bird feathers is a signifier of male initiation. This *kabeel men* adorned with the feathers of the hornbill bird marks the third phase of initiation for a young man.



Figure 1 (left). String bag (*kabeel men*), 20th century New Guinea. **Figure 2 (right).** String bag (*tiyaapl men*), mid-20th century New Guinea. **Both Figures:** Upper Sepik River, Mountain Ok people. Jolika Collection of New Guinea Art, Fine Arts Museums of San Francisco, (left - 2007.44.79) (right - 2007.44.135).

During this phase, a young man will be given an unadorned bilum by a close female relative that he later transforms into a *kabeel men* bilum. Unlike the women, who create their bags in communal gatherings, the men work within the confines of the men’s house-restricting technical skills through a formal hierarchical system. McKenzie explains the feather bilum as a signifier of rank, position, and age set. “The feather’s on a man’s bilum enhance his physical appearance, proclaim his masculine skills as a hunter and provider, mark the level of initiation a man has reached, and extend his metaphorical connection between the bilum and motherhood beyond the female and biological.”² And while the feather bilum proclaims his new status in society, the young initiate is also informed that the ‘true’ purpose of the feathers is to conceal the secret, sacred objects (cucumbers, bamboo tubes, and face paint) now in his custody.³

The *tiyaapl men bilum* richly adorned with the shiny plumes of the cassowary bird is the most prestigious of bilum of them all. This rare bag is the privilege of only a few men who have achieved the final grade of initiation and its ritual importance is derived from the mythology surrounding the cassowary bird. The aggressive cassowary bird is a difficult prey for hunters, conversely however as a mate it is charged with nurturing the eggs through incubation. In Telefol

¹ Maureen A. Mackenzie, *Androgynous Objects: String Bags and Gender in Central*.

² *Ibid.*, p. 156.

³ *Ibid.*, p. 167.

mythology the cassowary is identified with Afek the primal mother—as it is believed that Afek gave birth to everything within the Telefol world, the cassowary bilum is associated with extraordinary potent powers.

The construction starts with bunches of three or four feathers being adeptly threaded through the top of each loop of the finely interlaced bilum- these are then bound in position with unspun fiber. The entire side of the bag is covered and expertly shaped. The “ tail “ is constructed by binding large clusters to a pliable cane, in two successive rows of thirteen or fifteen clusters. The Telefol refer to the tail of their cassowary *bilum* as *unam* or woman’s grass skirt. Thus underscoring the cosmological significance of the bilum as it is seen as the “embodiment of the essential characteristics of both men and women.”⁴

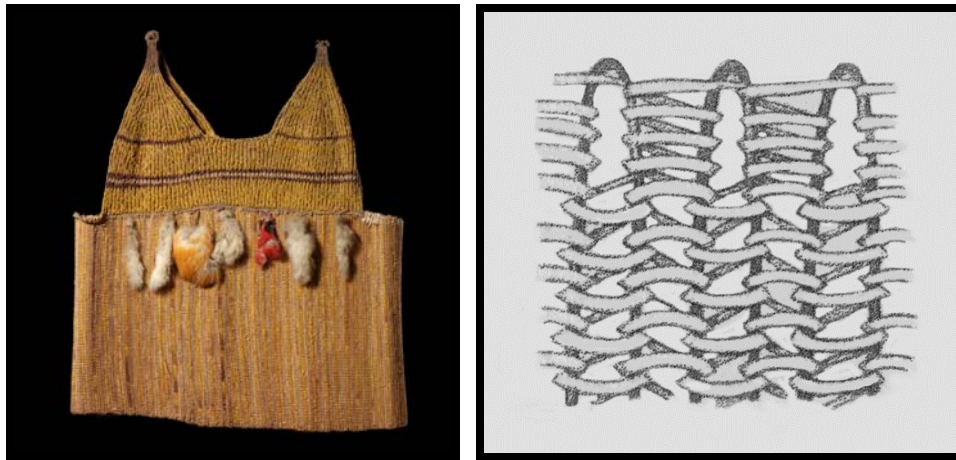


Figure 3 (left). Cuirass (tin, kabasi), 20th century New Guinea, West Papua, Central Highlands, Dani people New Guinea, Upper Sepik River, Mountain Ok people. Jolika Collection of New Guinea Art, Fine Arts Museums of San Francisco, 2007.44.86.

Figure 4 (right). Diagram showing the method of coiling employed in the lower part of the cuirass in Report made by the Wollaston Expedition on the Ethnographical Collections from the Utaqua river, Dutch New Guinea, 1912-1913, p. 5.

The Dani of the West Papua represent a highland culture where the men employ the looping technique to both create their own open flexible bilums but also to create tightly looped objects, such as this men’s armor.

Various types of basketry armors were worn as protection against arrows. The upper portion of this male armor is created out of tightly looped fiber. The beautiful yellow hue comes from the orchid stem, wrapped around a plied fiber core. The lower portion of the armor is created by a wrapped coiling technique, worked so tightly that the rattan rod foundation is only visible with magnification. The armor appears to have been worked horizontally and then turned vertically when added to the upper bodice. The textured surface is created by the coiled stitches changing direction in each subsequent row. This diagram (Fig. 5) drawn from the example collected during British ethnographer Alexander Fredrick Richmond Wollaston’s 1912 expedition illustrates the technical structure of a similar armor. Of note, this illustration is the first European documentation of New Guinea basketry armor. Reports from early 20th c. explorers indicate that these armors were quite rare and cherished. For the Asmat of West Papua, the *jipae* ritual for which the elaborate spirit mask costume is created (*Doroe* or *Dekewar*) is the most sacred.

⁴ Ibid., p.173.



Figure 5. Spirit mask costume (*doroe, dekewar*) for *jipae* festival, 20th century New Guinea, West Papua, Asmat people. Jolika Collection of New Guinea Art, Fine Arts Museums of San Francisco, 2007.44.17.

The Asmat believe that the dead do not immediately leave the earth and while they linger there is the potential for danger.⁵ The *jipae* ceremony takes place every few years to commemorate important people who have passed away since the last ceremony and to rid their spirits. The creation of the spirit mask is surrounded with as much ritual as the ceremony itself. The process begins with strips of mulberry being collected and brought into the confines of the men's house. A member of the *yeu* (initiated male) community twists the mulberry into a fine cord and presents it to the mask's sponsor. The mid-section and shoulders are then constructed of the rattan in a single-rod coiled basketry technique. The mulberry cord is attached to the rattan waistband and the mask is gradually built up- using a delicate single-element looping technique to complete the chest and headpiece. The mask is painted with red ochre and lime and important appendages are added including the wooden eye lozenges and the feathered stick protruding from the back of the head. The palm leaf skirt is not added until needed for ceremony. The construction of the mask can take four to five months-during which time the makers are supported by the mask wearer.

During the *jipae* ceremony masked dancers representing the dead enter the village from the forest or river for a final visit to their descendants. The dancers travel from home to home and are treated with the greatest respect. A dance commences at sunset with the masked performers imitating the gait of the cassowary bird. At sunrise a mock fight occurs—the village men attack the dancers with sticks chasing them back into the forest—symbolically expelling them into the world of the dead. Great importance is attached to the role of the mask wearer—not only does

⁵ Smidt, Dirk, "Major Themes in New Guinea Art" in *New Guinea Art: Masterpieces from the Jolika Collection of John and Marcia Friede*, vol. 2. (San Francisco: Fine Arts Museums of San Francisco, 5 Continents Editions, 2005) p. 40

he play the part of the deceased, he takes on the dead persons responsibilities and adopts any orphaned children.⁶

For the Marind-Anim of West Papua, women play an important role in the funerary rites. In what can be seen as the completion of the life cycles, women as the bringer of life are also responsible for caring for and mourning the dead. Women commemorate the dead in their own ceremony *makan hawn*, which translates to seeing the earth or seeing the places the deceased use to visit. This intricately plaited head covering would be worn by a close female relative, commonly the widower or sister of the deceased, during the woman's mourning procession.



Figure 6 (left). Woman's mourning hood (*kabu*), 19th –early 20th century New Guinea, West Papua, Marind-anim people, Yei-nam, Jee-anim sub-group. Jolika Collection of New Guinea Art, Fine Arts Museums of San Francisco, 2007.44.42.

Figure 7 (right). Man's mourning headdress (*wud*), 19th century New Guinea, West Papua, Marind-anim people, Yei-nam, Jee-anim sub-group. Jolika Collection of New Guinea Art, Fine Arts Museums of San Francisco, 2007.44.42.

The hood is one element of the elder women's mourning attire. It is plaited from a golden hued orchid fiber, in one long strip, folded in half, and sewn along one edge. The elaborate geometric patterning of the exterior is comprised of a combination of cross-stitch and running stitches sewn in contrasting brown and white pigmented grass fibers. Imported red threads subtly appear with the natural fibers. The ceremony takes place a few days to two weeks after the burial. Noted Swiss ethnographer Paul Wirtz working with the Marind-Anim in the early 20th century describes the ceremony: "A procession forms in which the woman and children also participate. They visit the gardens and other places frequented by the deceased during his lifetime. The children, the girls and young men decorate and paint themselves as though it was a festival occasion, while the old people, bringing up the rear are plastered with clay and wear (mourning apparel). The contrast is striking."⁷ The ceremony is described as being both heartfelt and touching with the women shedding many tears. It is seen in contrast to the drama often experienced at male ceremonies.

Like the women, the Marind-Anim men also participate in their own funerary procession, during which they adorn a plaited grass-fiber cap with long extensions. This man's cap illustrates the complexities and nuisances of their plaiting techniques.

⁶ H.C. Van Renselar, *Asmat: Art from Southwest New Guinea*. (Amsterdam: Royal Tropical Institute, 1961) pp. 5-8.

⁷ Jan Van Baal, *Dema: Description and Analysis of Marind-Anim Culture*, (The Hague: Martinus Nijhoff, 1966) p.795

An embroidered line in white and brown grass fibers is drawn diagonally across the back of the headdress works to delineate the transition in the weft from a light brown grass fiber to the yellow orchid fiber. At first glance at the back of the headdress appears to be two separate panels that have been sewn together, but a closer inspection reveals that this is one continuous panel that has been worked with two separate design elements. On the right, an orchid fiber weft is used to introduce color, whereas the left side is patterned with bands of vertical embroidery. The cap terminates with long extensions, created by wrapping a bundled core with two separate grass fiber cords that cross each other at the mid-section. Imported blue and white Indo-Pacific beads highlight these wrapped extensions. Much of what is known of the Marind Anim funerary rituals is derived from Paul Wirtz's field notes. And while he went into great detail on the women's ceremony, the men's participation and specifically their ritual attire is only tangentially mentioned. Further research is certainly needed to understand the ritual use of the man's cap. For example, there appears to be an unmistakable similarity between the cap and man's hairstyles-this could lead to an interesting comparative study. We are also working to acquire field photos and documentation to help us better interpret pieces in the Jolika Collection such this fantastic mask from the Kapriman village area that was collected without its costume.



Figure 8. *Female Mask, 20th century East Sepik Province, middle Sepik River, between Karawari (Korewori) and Blackwater rivers, Kapriman village area, Kapriman language speakers. Jolika Collection of New Guinea Art, Fine Arts Museums of San Francisco, 2007.44.57.*

A tradition of masterful basketry techniques are recorded in this region of the great Sepik River including coiling used to create very large gable masks for the front of men's ceremonial houses and these elaborate helmet masks. Bundles of split cane have been coiled to create the three-dimensional elements such as the lower jaw. This female mask in the Jolika Collection was collected with its male counterpart. They are a very rare pair. We don't have specific information about how the Jolika Collection masks were used in the village where they were created. However, there is documentation of similar masks from the same area used during initiation ceremonies when initiates received their scarification marks.⁸

⁸ Dirk Smidt, *The Seized Collections of the Papua New Guinea*, exh. cat. (N.p.: Creative Arts Centre, Papua New Guinea, 1972), 74.

A skirt of sago fronds concealed the dancers body when wearing the masks. A photo from the La Korrigane expedition in 1935 shows masks with their skirts in the interior of the men's house. The female and male masks are recorded to be "manifestations of spirit beings that live in the water or in hollow trees- made visible in this form."⁹ Suzanne Greub indicates that, "the spirit is only present when the mask is being worn."¹⁰ The Vatican collection has a similar female mask to the Jolika example. When that mask was collected in 1932 by a Father Kirschbaum he indicated that, "such masks were made exclusively by the Kapriman and Kaningara peoples [but] they were used as well by neighboring tribes, who either traded for or stole them."¹¹ Anthropologist Christian Kaufmann and art historian Douglas Newton have also indicated that they "were exported to the [nearby] Iatmul [people] through exchange."¹²

We can see similarities in technique and materials when we look at another mask also from the East Sepik region—from an area north of the Sepik River. This rare mask from the Sawos people has been built of numerous individual coiled basketry units combined together into an elaborate helmet shape.



Figure 9 (left). Mask, *mivai*, 20th century East Sepik Province, middle Sepik River, Sawos people. Jolika Collection of New Guinea Art, Fine Arts Museums of San Francisco, 2007.44.104.

Figure 10 (right). Basketry Mask (*mivai*) belonging to Meipe clan and kept in Aulimbit Nggaigo, July 1960. Photo by J. Anthony Forge. Courtesy of Metropolitan Museum of Modern Art, PSC 2006.99.

The large multifaceted eyes and broad lower jaw contribute to its wonderful complexity of construction and form. Field photographs, taken by English anthropologist J. Anthony Forge in 1960 show that an attached framework originally supported a costume and also bands of basketry now missing from the top and rear of the mask.

When worn, the mask and costume transformed the wearer into the spirit or ancestor represented by the mask.¹³ Forge recorded that the mask belonged to the Meipe clan and was kept in the ceremonial men's house (*Nggaigo*) in Aulimbit village.¹⁴ A Sawos mask and costume from

⁹ Kocher Schmidt in Greub, *Authority and Ornament: Art of the Sepik River, Papua New Guinea* (Basel: Tribal Art Centre, 1985), 198, fig 120.

¹⁰ *Ibid.*, fig 120.

¹¹ Penkowski, Josef. "Pontificio Museo Missionario-Ethnologico." In *The Vatican Collections: The Papacy and Art*, 226–41. (New York: Metropolitan Museum of Art, 1982) 240.

¹² Kaufmann in Adrienne L. Kaeppler, Christian Kaufmann, and Douglas Newton, *Oceanic Art* (New York: Harry N. Abrams, 1997), 580.

¹³ Notes by Anthony Forge accompanying field photographs, July 1960. Christian Kaufmann, email correspondence, 2006.

UCLA has adornments that might be found on this type of mask including nose ornaments and a headdress of cassowary feather and shells.

Further north of the Sawos reside the Abelam people. The Abelam revere yams as a dietary staple and as objects imbued by powerful spirits.¹⁵ This small yam mask, measuring just 27 inches in height, called a *baba mini*, was probably used to decorate the finest yams in annual exchange ceremonies and competitions celebrating the harvest.



Figure 11. Yam mask, *Baba Mini*, 20th century New Guinea, East Sepik Province, Prince Alexander Mountains, Abelam people, Wosera subgroup. Jolika Collection of New Guinea Art, Fine Arts Museums of San Francisco, 2007.44.24.

Larger, helmet style masks created using the same materials and techniques were worn by dancers during these ceremonies. Yam ceremonies begin with families arranging and decorating their fresh yams in the village square and then, one by one, the clan elders present their yams to a man from another clan.¹⁶ Diane Losche indicates that “to give a larger one than you receive demonstrates your superiority over your exchange partner and brings you prestige.”¹⁷ A yam is judged primarily by its animism and size. Other decorations in the display might include carvings, sea shells, snail shells and colorful fruit in addition to the masks. A zoomorphic face with mesmerizing eyes and a ridgeline nose, as seen in these masks, is common.¹⁸ Scholars have interpreted *baba* masks as a variety of otherworldly beings, including a female fertility figure, a totem bird, and a pig-like animal.¹⁹ The Abelam have mastered the art of creating complex, openwork forms using coiling. Anthropologist Noel McGuigan has told us that “this motif of

¹⁴ Christian Kaufmann, email correspondence, 2006.

¹⁵ Laurie W. Austin and Jehanne H. Teilhet, “Art in its Cultural Context,” *Art of New Guinea: Sepik, Maprik, and Highlands; an exhibition arranged by the Museum and Laboratories of Ethnic Arts and Technology, UCLA and the Ethnic Arts Council*, exh. cat. (Los Angeles: University of California, 1967), 29–30.

¹⁶ Austin, *Art of New Guinea*, 30.

¹⁷ Diane Losche in *New Guinea Art: Masterpieces from the Jolika Collection of John and Marcia Friede*, vol. 2. (San Francisco: Fine Arts Museums of San Francisco, 5 Continents Editions, 2005), 132.

¹⁸ Austin, *Art of New Guinea*, 30–31., and Anthony Forge, *Primitive Art & Society* (London: Oxford University Press, 1973), 184.

¹⁹ Austin, *Art of New Guinea*, 31; Greub, *Authority and Ornament: Art of the Sepik River, Papua New Guinea*, 197.

interlacing between solid bands is very unusual, difficult to create and exceptionally well done on this mask. It refers to the caterpillar found on Yam vines.

A technical tour de force, this complex mask is composed of bark cloth stretched on a bamboo and rattan framework. In the Gulf of Papua, these large-scale masks were used in elaborate and protracted ceremonial cycles centered around the initiation of boys.

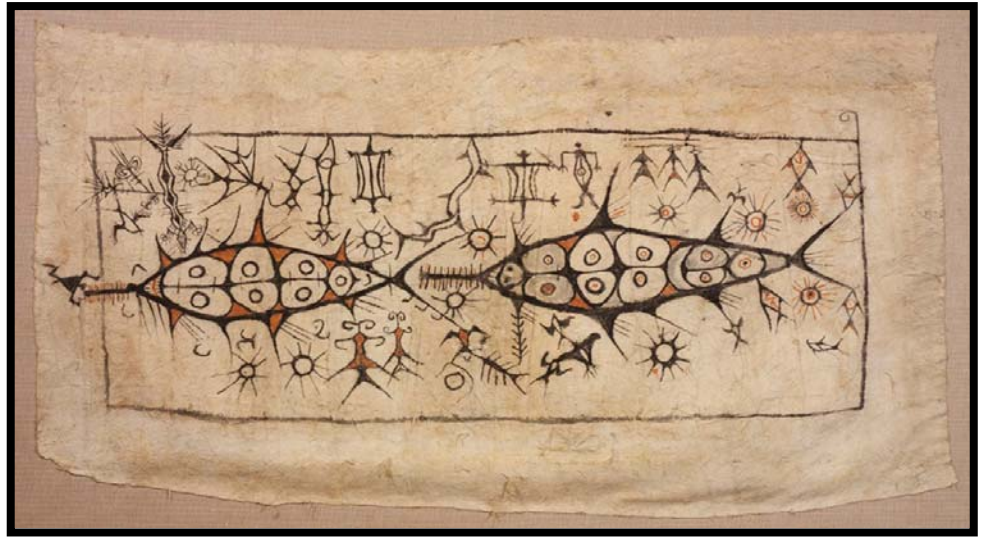


Figure 12, left. Processional mask, Semese, 19th century New Guinea, Gulf Province, Gulf of Papua, Motu Motu village, eastern Elema people, Toaripi subgroup language speakers. Jolika Collection of New Guinea Art, Fine Arts Museums of San Francisco, 2007.44.33.

Figure 13, right. Bark cloth, maro, 20th century New Guinea, West Papua, North Coast, Lake Sentani. Jolika Collection of New Guinea Art, Fine Arts Museums of San Francisco, 2007.44.41.

Preparations over a ten to twenty year period culminated with a month or more of daily performances and displays incorporating the masks. They represent supernatural sea spirits and clan designs, arranged symmetrically on a vertical axis, denoting historical or mythological associations.²⁰ They were worn with “a cloak of shredded fiber that covered their torso leaving only their legs and feet visible.”²¹ Meticulously couched strips of cane are used to create the amorphous shapes on the front of the masks representing plants, parts of animals, sea foam, and clouds.²²

In his book, *Drama of Orokololo; the social and ceremonial life of the Elema* published in 1940, anthropologist F.E. Williams provided detailed descriptions of the ceremonial cycle incorporating the masks and remains the only eye witness account of the total context in which the masks were made and used.²³ The masks were worn by dozens, sometimes hundreds, of dancers in ceremonial processions. Men created the masks over many months in the secrecy of the men’s house. These huge ceremonial houses facing the sea served as the center of ceremonial and community life in Elema villages. Sacred and ceremonial objects were kept there, including

²⁰ Paul S. Wingert. *Primitive Art: Its Traditions and Styles* (New York: Meridian books, 1970) 222.

²¹ Robert Welsch, Sebastine Haraha and Virginia-Lee Webb. *Coaxing the Spirits to Dance: art and society in the Papuan Gulf of New Guinea* (NH: Dartmouth College, 2006) 11.

²² Dirk Smidt, personal communication with John Friede.

²³ Welsch, *Coaxing the Spirits to Dance*, 23.

drums, carved wooden tablets (*hohao*), masks, and other cult objects.²⁴ During the ceremonial cycle, men wore the masks and assumed the identity of the spirit.²⁵ They emerged from a concealed vertical opening in the front of the men's house and showed themselves to the community, drums in hand and played in unison. At the culmination of the ceremonies, the sea spirits in the masks symbolically returned to the sea and the masks were destroyed. The Jolika mask is a very rare example collected in 1895. The only other mask known in this style from the Toaripi subgroup that has endured resides in the Berlin Museum.

In Lake Sentani and Humboldt Bay, women make bark cloth, called *maro*, from the inner bark of young trees. Men then paint designs on the surface of the cloth.²⁶ *Maro* are worn by women on festive occasions, during mourning, and for burial upon their death. It is a versatile garment, alternately worn as a skirt, neckpiece, or headdress. Since young girls wear no clothing, *maro* marks their transition to adulthood²⁷

Lake Sentani and Humboldt Bay are located on the north coast of New Guinea. Artworks from this region have had a distinctive presence in such seminal Oceanic art exhibitions as the 1946 show *Art of the South Seas* at the Museum of Modern Art in New York. This *maro* was collected by French screenwriter Jacques Voit, Joan Miro's first dealer, who visited Lake Sentani between 1924 and 1929. Works from Lake Sentani inspired Surrealist artists in Europe at that time. The proliferation of bodies on this cloth includes two large sawfish surrounded by smaller fish, flying fox, and suns or starbursts. There are also a few stylized human figures, one positioned outside the delineated frame. Due to a paucity of pre-20th century works, the history of decorated bark cloth *maro* is not clear. A drawing by C.B.H. von Rosenberg, draftsman of the Etna Expedition in 1858, shows a woman wearing a decorated *maro* and an 1885 drawing by German scientist Otto Finsch shows a woman wearing a decorated *maro*. Several photos by Swiss ethnologist Paul Wirz in 1928 show young women from Humboldt Bay wearing plain undecorated *tapa*. Jac. Hoogerbrugge's research in the volume, *Art of Northwest New Guinea*, theorizes that the *maro* collected by Jacques Voit full of animals and fanciful designs might reflect a market-driven response and also inspired artists to expand their artistry throughout the 1920' and 1930's. In his compelling essay on *maro* and modern painting, Phillippe Peltier explored the enigmatic painted patterns, their meanings and the interpretation of *maro* as compositions. The bark cloth from Northwest New Guinea emanated from an ever evolving landscape of cultural interaction from the Bronze Age to the present and symbolizes the yet to be revealed histories of incredible fiber creations found in all of New Guinea.

²⁴ Douglas Newton. *Art Styles of the Papuan Gulf*, exh. cat. (New York: Museum of Primitive Art, 1961), 25.

²⁵ Welsch. *Coaxing the spirits*, 22.

²⁶ Suzanne Greub, *Art of Northwest New Guinea: From Geelvink Bay, Humboldt Bay, and Lake Sentani* (New York: Rizzoli, 1992), 127.

²⁷ S. Kooijam, *The Art of Lake Sentani* (New York: The Museum of Primitive Art, 1959), 24.