# UCLA UCLA Electronic Theses and Dissertations

# Title

From Ethnographic to Contemporary: How an Artist Interview May Direct the Study and Conservation Treatment of a Balinese Cili Figure

**Permalink** https://escholarship.org/uc/item/9hs905qs

**Author** Doan, Lily Thuy Ly

**Publication Date** 2012

Peer reviewed|Thesis/dissertation

### UNIVERSITY OF CALIFORNIA

Los Angeles

From Ethnographic to Contemporary: How an Artist Interview May Direct the Study and Conservation Treatment of a Balinese *Cili* Figure

A thesis submitted in partial satisfaction of the requirements for the degree Master of Arts in Conservation of Archaeological and Ethnographic Materials

by

Lily Thuy Ly Doan

2012

### ABSTRACT OF THE THESIS

From Ethnographic to Contemporary: How an Artist Interview May Direct the Study and Conservation Treatment of a Balinese *Cili* Figure

by

### Lily Thuy Ly Doan

Master of Arts in Conservation of Archaeological and Ethnographic Materials University of California, Los Angeles, 2012 Professor Ellen J. Pearlstein, Chair

The sub-disciplines of ethnographic conservation and the conservation of contemporary art share a common goal of incorporating intangible, or non-physical, meanings of the artwork into the preservation approach through collaboration with artists and living descendants. By adapting best practices in contemporary art conservation, namely an artist interview, the tangible and intangible properties of a Balinese *cili* figure with a known artist/maker are studied. In collaboration with the artist/maker, Ni Nyoman Kawiwati, various aspects of the *cili* figure are presented, including cultural context, materials identification, construction techniques, conservation treatment, storage, and display.

Following the artist interview, cross sections were prepared from the *cili* figure and compared with reference material, identifying the palm leaves of the *cili* figure as *Borassus* 

*flabellifer*. The artist/maker also provided a disassembled figure that clarifies construction techniques and internal organs, which are the most important components of the artwork, within the bottom of the *cili* that could not be fully imaged with X-radiography. The artist/maker describes the cultural meanings and functions of the figure and suggests a preference for renewal or replacement rather than preservation of the original object. A compromise in conservation approach is chosen, where the older figure is treated with input from the artist/maker and a new figure by the artist/maker is incorporated into the museum collection as part of her wish for renewal of the object.

Conservators should be mindful of how we perceive an object, for this will influence conservation decisions. The perception of the *cili* figure as a traditional object belonging to a generalized Balinese culture is challenged. As an argument against anonymity, the interview provides an individual's perspective, allowing for the artist to play an active role in the interpretation and preservation of her artwork. The distinction between an ethnographic or contemporary artwork should not be limiting when preserving an object with a known artist/maker; instead, a flexible conservation approach may be adopted, where methodologies from the two sub-disciplines can be interchangeable and combined. The thesis of Lily Thuy Ly Doan is approved.

Roy W. Hamilton

David A. Scott

Ioanna Kakoulli

Jonathan Furner

Ellen J. Pearlstein, Committee Chair

University of California, Los Angeles

2012

### Dedication

First and foremost, special thanks to Ni Nyoman Kawiwati and Dwi Sutaryantha for their patience and time; their contribution was crucial to this project and was above and beyond my expectations. I would like to thank Tom Kalinowski for his support and being a soundboard for my ideas; Ellen Pearlstein, Roy Hamilton, David A. Scott, Ioanna Kakoulli, and Jonathan Furner for their guidance and thoughtful edits; Vanessa Muros and Amber Cordts-Cole for their never-ending assistance; Jo Hill, Rachel Raynor, and the Fowler Museum; Jeffrey Maish, Arlen Higgenbotham, and the J. Paul Getty Museum; the Rancho Santa Ana Botanic Gardens and the Fairchild Tropical Botanic Garden for providing palm leaf samples; and Pip Laurenson at the Tate Museum, Christina Rosenberger at the Center for the Technical Study of Modern Art, Harvard Art Museum, and Kelly McHugh at the National Museum of the American Indian for providing museum procedures as well as their thoughts and comments on artist interviews and consultations.

# **Table of Contents**

# Pages

I. Introduction	.1-4
II. Ethnography, Anonymity, and Conservation	
III. Artist Interviews in Conservation	.8-11
IV. Case Study: A Cili Figure by Ni Nyoman Kawiwati	.12
V. Interviewing Methodology	.13-17
VI. Cultural Information: Palm Leaf Offerings, Namely Cili Figures, in Bali	18-23
VII. Materials for Construction of the <i>Cili</i> Figure: Palm Leaf	24-28
VIII. Construction Techniques of the <i>Cili</i> Figure	29-31
IX. Conservation Treatment of the <i>Cili</i> Figure	32-36
X. Storage and Display of the <i>Cili</i> Figure	37
XI. Conclusion	38-40
XII. Appendices	41-51
XIII. Figures	52-63
XIV. Bibliography	64-68

## List of Appendices

- Appendix A: Transcript of Artist Interview with Ni Nyoman Kawiwati
- Appendix B: Analysis of Cross Section from the Cili Figure
- Appendix C: Cross Section of Borassus flabellifer
- Appendix D: Cross Section of Cocos nucifera
- Appendix E: Cross Section of Arenga pinnata
- Appendix F: Cross Section of Corypha utan

### Appendix G: Terminology for Examination of Palm Leaf Cross Sections

### **List of Figures**

Figure 1Front and back views of the *cili* figure

Figure 2 The areas sampled from the base

Figure 3 Cross section from the *cili* figure

Figure 4 Cross section from *Borassus flabellifer* 

Figure 5 Cross section from Cocos nucifera

Figure 6 Cross section from Arenga pinnata

Figure 7 Cross section of Corypha umbraculifer

Figure 8 The X-rays of the figure show square or rectangular shaped cells of the epidermis, a

feature commonly found among the Borrassus palms.

Figure 9 X-ray of the *cili's* internal structure

Figure 10 Internal organs of the *cili*, inside the base

Figure 11 The internal organs are secured around the center bundle.

Figure 12 The plaited body is formed around the center bundle and internal organs.

Figure 13 The bottom, made of palm leaves secured with wood-like splints, finishes the body of the *cili*.

Figure 14 An image of Ni Nyoman Kawiwati, the artist/maker, placing the bottom onto the body.

Figure 15 The belt, of plaited palm leaf, is wound around the central bundle, creating the torso.

Figure 16 The *badan/awak* (body) is secured to the central bundle by the belt.

Figure 17 The torso of the *cili*, displaying the plaited part of the body, the belt, and the

body/arms

Figure 18 Nyoman is completing the body and arms.

Figure 19 The kepala (head) and mukah/wajah (face) of the cili

Figure 20 Nyoman in the process of sewing the head/headdress together with bamboo splints

Figure 21 The telinga (ears) of the cili, which are secured to the head with thread

Figure 22 The anting-anting (earrings). The ears are wound around the earrings.

Figure 23 The spiral-shaped, flower-like rambut (hair) of the cili

Figure 24 The head and face are secured to the central bundle by a strip of palm that also fashions the *cili's* mouth.

Figure 25 The second *cili* by Nyoman, created in 2011

Figure 26 The artist/maker, Ni Nyoman Kawiwati, posing with a complete cili and a

disassembled cili

Figure 27 The plaited bottom of the figure

Figure 28 Nyoman uses a knife to cut the palm leaves into shape.

Figure 29 According to the artist/maker's wishes, the grey marks will not be removed.

Figure 30 Photographs of several tears were sent to the artist/maker during the interview.

Figure 31 Areas of the headdress were bent out of plane

Figure 32 Mending the tears

Figure 33 Bent elements of the headdress were successfully humidified

Figure 34 Comparison of the 1996 and 2011 cili figures

Figure 35 The pointed bottom of the figure

### I. Introduction

Ethnographic conservation and contemporary art conservation have developed within the last twenty to thirty years into sub-disciplines that focus on different museum collections. However, these sub-disciplines have a great deal in common with regards to conservation approaches.

In his paper and presentation at the ICOM-CC 15th Triennial Meeting in New Delhi, India, Maori conservator Tharron Bloomfield noted that the term ethnographic conservator "is at best old fashioned and inadequate, and at worst offensive and racist." (Bloomfield 2008:148) Following this presentation, members of the ICOM-CC Ethnographic Working Group voted on whether or not to change their name, with some interesting discussions on how to define the term "ethnography" (Dignard 2011; Johnson 2009).

Ethnography is the "scientific description of the customs of individual peoples and cultures" (Oxford Dictionaries 2011); it is, essentially, a discipline dedicated to studying culture. Early ethnographers state that the "goal is...to grasp the native's point of view," (Malinowski 1950:25, originally published in 1922) and many of these works focused on studying groups "from those societies that differ most from our own." (Levi-Strauss 1963:2) The subjects of early ethnographies, which were written by European or Western ethnographers, were usually "natives" who were part of civilizations considered to be primitive and therefore easier to study than complex Western societies. This attitude was challenged in the mid-20<sup>th</sup> century (Miner 1956), and the discipline of ethnography has changed over the decades to include variable methodologies, such as a concentration on Western culture as subject matter. For instance, beginning in the 1960s, multiple ethnographers turned their focus to studying American culture (Spradley and Rynkiewich 1975), resulting in ethnographies on topics such as Portland

longshoremen (Pilcher 1978), construction workers (Applebaum 1981), undocumented immigrants (Chavez 1998), Latino subculture in New Mexico (Bright 1998), and the drug-selling subculture of East Harlem (Bourgois 2003). Therefore, the term ethnography has come to encompass various aspects of all cultures, both Western and non-Western, from viewpoints both within and outside of the culture under study.

How, then, does an ethnographic collection differ from a collection of contemporary art? The term "contemporary" may simply refer to an artwork that is recent or new, dating to post-1945; according to this definition, recent ethnographic objects may very well be considered contemporary. However, contemporary art may also refer to a recent or new work that "engages with [the] contemporary theory...of postmodernism" (Timms 2004:15) and is often subversive, self-ironic, and allegorical, as opposed to traditional art which aims to reinforce cultural traditions. Peter Timms takes this definition further, suggesting that contemporary art is a "dialectical term separating what's considered worthwhile from what is not," it refers to "nothing more than recent art that meets the approval of whoever happens to be talking." (Timms 2004:14) Since it is dependent on point of view, institution, and inevitably the art market, the category of contemporary art is subjective and ever changing.

If an object is classified as ethnographic rather than contemporary, or vice versa, does this influence the conservation approach? While this distinction (or at least our perception of this distinction) may influence our decisions, it should not limit our choice of conservation approaches.

It is important for a conservator to be mindful of how we perceive an object, for our perceptions may influence treatment decisions. This, I believe, is at the heart of the debate regarding a name change for the ICOM-CC Ethnographic Working Group. How conservators

2

define the collections we work with and the values that accompany these viewpoints will ultimately affect the decisions we make in our treatment approach. This is demonstrated by the Balinese *cili* figure under study in this paper. Being a motif and artwork that has endured over time in Balinese offerings, the *cili* figure may appear to be a traditional artwork and therefore an ethnographic object. However, upon closer examination, the *cili* figure, which has a known/artist maker, challenges the notion that it is simply a traditional object meant for religious use. Although the artist/maker does not specifically aim to be subversive, this figure cannot be definitively categorized as either an ethnographic or a contemporary artwork.

In the case of this *cili* figure, would a conservator choose a methodology seated in the sub-discipline of ethnographic or contemporary art conservation? More importantly, is it necessary to view the methodologies of these two sub-disciplines as mutually exclusive?

The "ethnographic" of ethnographic conservation may refer to the methodology of simply "working with people," (Clavir 2002a:3) a definition that certainly extends to best practices in the conservation of contemporary art. A focus on studying the tangible, or physical, properties of an artwork is well established in the field of conservation, as seen through technical studies that concentrate on the identification of materials and fabrication methods. The 1990s saw the addition of a focus on the intangible, or non-physical, qualities of museum objects, particularly within the fields of archaeological and ethnographic conservation. In this approach, a concern for understanding the broader cultural context, often obtained through the investigation of ethnographic accounts and collaboration with living descendants, became an important component of conservation (Clavir 1996; Johnson et al. 2005; Odegaard 1995).

The inclusion of intangible meanings in the conservation of an artwork is not unique to archaeological and ethnographic conservation. Best practices developed in the conservation of contemporary artworks now include artist interviews designed to record artistic process, meaning, and artist intent; this sort of intangible information cannot be obtained through the material-based focus of technical studies (Conservation Department S.M.A.K., Ghent 2007; Davies and Heuman 2004; Huys 2000; Laurenson 2001; Macedo 2006; Pullen, Otterbeck, and Laurenson 2005; Tate Modern 2009).

While it is important to be mindful of how our perceptions may influence the conservation approach, when preserving a recently made cultural object with a living artist/maker, it is not necessary to view methodologies within ethnographic conservation or contemporary art conservation as separate entities. Rather, the similarities between the two sub-disciplines, which is based on the principle of "working with people," allows for a flexible conservation approach where the two methodologies may be interchangeable, combined, and adapted.

### II. Ethnography, Anonymity, and Conservation

Many ethnographic collections are historically based on the collection, by Europeans, of objects associated with non-European peoples. Staring in the early 15<sup>th</sup> century, as Europeans began to explore non-European lands, the collection of ephemera from exotic places and made by exotic peoples became a popular pastime. The objects were often assembled into curiosity cabinets, which were collections common among royal and noble households designed to invoke awe of the collector's adventures and travels. These souvenirs are essentially collections of the Other, the margins or periphery of European society, a "place of romance, exotic beings, haunting memories and landscapes, remarkable experiences." (Said 1985:1) The curiosity cabinets are literally the foundations of several European museums, for many of these collections were incorporated or expanded into major institutions (Caple 2000; Duckworth, Genoways, and Rose 1993; Errington 1998).

During colonial expansion, from 1789-1914, ethnographic collections were displayed as if they were natural history specimens. Non-European peoples were seen as "objects of knowledge rather than producers of knowledge." (Errington 1998:24) Non-European societies were organized based on a typological or evolutionary schema that moved from simple to complex, primitive to evolved (Ames 1992). Primitive civilizations were non-literate and non-Christian, and associated objects were seen as ornamental and grotesque. China and the East Indies were considered as archaic civilizations, literate and more advanced than primitive societies, yet behind in science and religion (ie. non-Christian). Being literate, Christian, and advanced in scientific methods, Western societies were considered as the most complex and evolved cultures (Errington 1998). Historical methods for obtaining objects, such as the collection of curios or souvenirs, early ethnographic fieldwork, and acquisitions by dealers for the art market, made little attempt to record the names of artist/makers. This has resulted in ethnographic collections being largely anonymous. The objects are often associated with a region or culture but rarely attributed to an artist or maker. This is a reflection of early ethnographic methods and theoretical frameworks, where individuals were collapsed into a culture or community in an attempt to describe social norms and cultural practices. The objects were romanticized as part of a timeless tradition created according to the conventions of age-old practices. According to Price (2001), by maintaining an object's anonymity, Western collectors, art historians, and ethnographers gained complete control over the interpretation of an object, thereby ignoring artist intent. In the last few decades, there have been multiple attempts at assigning artists to ethnographic objects through diligent research and current fieldwork and acquisition practices (Bennett 1980; Dobrzynski 2011; Holm 1974; Peabody Museum of Archaeology and Ethnology 2009; Roberts 2010; Wright 1983).

Additionally, in a post-colonial era, where travel, communication, and a global market has allowed for connectivity and influence of different cultures, and where very few, if any, cultures live in isolation, a new approach for the display and interpretation of ethnographic collections has developed. This approach, dubbed the "insider's point of view" by Ames (1992:54-58), incorporates the perspective of individuals native to the culture with the hopes that the "insider and outsider perspectives might interact and build upon one another in the process of truth-seeking and understanding." (Ames 1992:56)

The representation of ethnographic collections within museums and approaches within art history and cultural anthropology have evolved over the years; how, then, may the field of ethnographic conservation reflect these changes? In the case of seemingly traditional artworks created by contemporary and living artist/makers, the adaptation of best practices established in the conservation of contemporary artworks, namely artist interviews, will assist the ethnographic conservator in ascertaining artist intent, an insider's view, and enable self-representation for both the interpretation of artistic meaning and artist wishes for the preservation of their own artworks. By collaborating with the artist/maker, the conservator plays a role in the discussion against anonymity in ethnographic collections.

#### III. Artist Interviews in Conservation

A specialized focus on the conservation of modern and contemporary art began in the 1990s with projects initiated by Dutch modern art museums (van Straaten 2005). This focus resulted in two international symposia, *Modern Art: Who Cares*, which was held in 1997, and *Contemporary Art: Who Cares*, held in 2010, as well as the organization established in 1999 entitled International Network for the Conservation of Contemporary Art (INCCA), along with multiple other organizations dedicated to the conservation of contemporary art. INCCA is dedicated to the exchange of information among professionals involved in the care of contemporary art, particularly through a database that allows member access to artist interviews and providing guidelines for best practice.

Modern and contemporary artworks are composed of materials that are poorly understood by the conservation community (Conservation Department S.M.A.K., Ghent 2007; Hummelen et al. 1999; Sille 2005). Additionally, the conservation of artworks meant to be ephemeral requires a consideration of intangible meanings, for the idea or concept behind an artwork may be as, if not more, important than the physical artwork. For instance, an installation made of bee pollen or foodstuffs are a challenge to conserve, for the original materials are, in essence, ephemeral. The traditional approach in conservation, an approach focused on preserving the tangible elements of a work, would concentrate on the conservation of the original material used by the artist during the artwork's creation. However, the artist may decide that the meaning or the overall look of the piece is of primary importance and may intend for its conservation to include the renewal of the bee pollen or foodstuffs. The challenge of conserving ephemeral artworks is also demonstrated with time-based media, where the original material of the installation is often secondary to the concept or meaning of the artwork. For instance, it may not be necessary to preserve the original format of a video installation; rather, the video itself, complete with essential images and sounds, give meaning to the installation and are therefore preserved (Laurenson 2001; Pullen, Otterbeck, and Laurenson 2005).

In these situations, it is extremely difficult for a conservator to grasp which salient components should be preserved, for the decision of which components give meaning to an artwork is highly dependent on artist intent. Therefore, it is necessary for the conservator to expand their methodology to include the documentation of artist intent and intangible meanings of an artwork through artist interviews, which in turn will direct the long-term care and future exhibition of the artwork (Conservation Department S.M.A.K., Ghent 2007; Davies and Heuman 2004; Huys 2000; Laurenson 2001; Macedo 2006; Pullen, Otterbeck, and Laurenson 2005; Tate Modern 2010).

Primary sources, such as the artists and their colleagues, are unique and indispensible resources for information on material, process, and meaning that can be gathered through interviews. The dialogue with an artist is part of an ongoing process; establishing meaning and intent may require multiple collaborations, particularly since opinions and meaning may change over time (Hummelen and Scholte 2004; Laurenson 2010). Artist interviews are an established method in the move towards a holistic approach in the conservation of contemporary art, and multiple publications and guidelines are available for best practices (Conservation Department S.M.A.K., Ghent 2007; Crook 2001; Hummelen et al. 1999; Huys 2000; Netherlands Institute for Cultural Heritage/Foundation for the Conservation of Modern Art, Amsterdam 1999), as well as an international database for recording and sharing the interviews (INCCA).

Interestingly, a similar development has occurred in the conservation of ethnographic collections. Specifically, when working with indigenous collections or collections with a colonial

history, of which objects are often anonymous, conservators are encouraged to collaborate with living descendants and stakeholders. It is well established that the ethnographic conservation approach must expand beyond the preservation of material objects; instead, collections must be preserved within the larger context of a living culture (Clavir 1996, 2002). Collaborations may result in conservation approaches and treatments that successfully preserve an artwork or artifact while respecting larger cultural concerns (Johnson et al. 2005; Wharton 2002).

The connection between approaches in ethnographic conservation and the conservation of contemporary art has been noted (Kaminitz, Kentta, and Bridges 2005; McHugh 2010), as well as the contribution of artist interviews to the interpretation of information gained through material evidence and ethnographic accounts (Moffett, Hornbeck, and Mellor 2002). Just as consultations are meant to provide living descendants with an active role in the preservation of their cultural heritage, interviews allow the individual artist to have a voice in the interpretation and conservation of their own artworks. By adapting the methodology of artist interviews to a Balinese object with a known artist/maker, I will employ a conservation approach that takes into account artist intent and offers an opportunity for the artist/maker to play a role in the study and preservation of her artwork.

It should be noted that this interview presents an individual's (the artist's) interpretation of the object's role within her culture. In the book *Contemporary Art and Anthropology* (2006), Schneider and Wright refer to the artist as an anthropologist engaged with their culture. The artist adds to, perpetuates, and maintains their culture by essentially using their culture. This paper does not attempt to understand the creation and function of all *cili* figures within Balinese culture from the viewpoint of a single individual, for that would be a rather reductionist approach. Instead, my approach in this paper acknowledges that, as Ames (1992:57) noted:

There are many voices, many stories. They do not add up to one consistent view, nor should they, because they represent different people with different interests and experiences. We nevertheless need to listen. Native [or artist] points of view may remind us that outsiders do not have the final word. It is the continuing interaction between these various perspectives that is important.

### IV. Case Study: A Cili Figure by Ni Nyoman Kawiwati

To illustrate how communication with an artist/maker may direct the study and treatment of an object, a *cili* figure (Figure 1) from the UCLA Fowler Museum was chosen as a case study. As mentioned previously, the majority of objects in ethnographic collections are anonymous; in fact, out of the seven Balinese *cili* figures housed at the Fowler Museum, only the figure under study has a recorded artist/maker.

The artist/maker, Ni Nyoman Kawiwati, donated the figure to the UCLA Fowler Museum in 1996, the same year it was made. The *cili* figure was handed to Roy Hamilton, Senior Curator for Asian and Pacific Collections at the Fowler Museum, when Nyoman and her husband, Dwi Sutaryantha, visited the museum during a trip to the United States.

Nyoman is an English schoolteacher by profession (Hamilton 2010). It should be noted that the interview incorporates contributions from her husband, who is a tour guide by profession.

#### V. Interviewing Methodology

The interviewing methodology for this project is heavily adapted from guidelines for best practice available from INCCA (Conservation Department S.M.A.K., Ghent 2007; Crook 2001; Hummelen et al. 1999; Netherlands Institute for Cultural Heritage/Foundation for the Conservation of Modern Art, Amsterdam 1999). These guidelines were supplemented by information generously provided by Pip Laurenson, Head of Time-Based Media Conservation at the Tate Modern (Laurenson 2010; Tate Modern 2010), Christina Rosenberger, Research Coordinator at the Center for the Technical Study of Modern Art, Harvard Art Museum (Rosenberger 2010), and Kelly McHugh, Objects Conservator at the National Museum of the American Indian (McHugh 2010) on how artist interviews and consultations are put into practice within a museum setting.

The guidelines and procedures offer sample questions and suggestions for the preparation, conduct, and documentation of the interview. For instance, in preparation for the interview, research on the artwork and artist should be completed by consulting appropriate literature and experts, such as curators, in addition to visual examination of the artwork under study. Interview questions should be developed prior to the interview and, when possible, in consultation with appropriate curators. The questions may be organized by category, such as materials/techniques and their meanings to the work, creative process, art historical context, installation and presentation, preventive conservation, conservation and restoration, deterioration and aging, and appearance of the work (Crook 2001). The preferred interview method is face-to-face and in front of the artwork or in the artist's studio (Crook 2001; Hummelen et al. 1999; Rosenberger 2010; Tate Modern 2010). Depending on the interview method, documentation is completed through notes, audio or video recording, or a record of email correspondence.

Additionally, in compliance to the UCLA Office of the Human Research Protection Program (OHRPP), which is responsible for ensuring the safety and welfare of human participants involved in studies conducted at UCLA, I completed training in compliance to the Institutional Review Board (IRB). This training stressed the importance of obtaining consent and ensuring that the interviewee is not at risk of physical harm or damage to financial standing, employability, and reputation. The IRB process is a reminder that during collaborations, conservators should keep in mind our responsibility to the welfare of those we work with.

It is also imperative to respect the artist/maker's wishes, for they are not obligated to take part in the interview. For instance, since the artist/maker lives in Bali, an interview in person was not feasible due to funding and time constraints. While Nyoman preferred email correspondence, I was persistent in my preference for a video or phone interview, and the negotiation over the communication method resulted in hesitancy on the part of the artist/maker. During consultations with living descendants, it is important for the conservator to listen rather than direct the interaction (Johnson et al. 2005); therefore, in the case of this project, it was necessary to respect the artist/maker's preferences. Hence, the interview was conducted via email correspondence.

Interdisciplinary collaboration between a curator and conservator may be particularly advantageous in artist interviews (Crook 2001). Roy Hamilton, Senior Curator at the Fowler Museum is an ethnographer who is active in the field, and his knowledge of Balinese culture and his personal familiarity with the artist/maker was extremely helpful in this project. Initial contact with the artist was conducted by Hamilton, allowing the interview to begin with some ease.

Hamilton also assisted in explaining various cultural differences that affected the interview. For example, it is common for a level of awkwardness during the beginning of a new correspondence. Typically, during contemporary encounters in Bali, interactions often include

introductions designed to establish status (questions such as: Are you married? Do you have children? Where are you from?). In an effort to develop a working relationship with the artist/maker, I took the time to properly introduce myself before continuing with the interview. There is no mention of considering cultural differences in published guidelines for artist interviews in the conservation of contemporary art. While published literature on consultations in ethnographic and archaeological conservation stress the importance of cultural concerns (Bricker, Holcomb, and Dean 1999; Johnson et al. 2005; Odegaard 1999), ultimately, these issues are specific to each individual situation, and collaboration with an appropriate specialist or curator may prove beneficial prior to an interview.

Tone and language will also affect the success of the interview. The original versions of the introduction letter and interview questions were admittedly formal in tone and were revised with input from Hamilton. Since communication in Bali tends to be informal, the tenor of my correspondence was adjusted accordingly.

Nyoman, the artist/maker, and her husband Dwi are fluent in Balinese and Indonesian. Since I am unfamiliar with either language, the interview was conducted in English, which is Nyoman and Dwi's third language. Published guidelines for artist interviews suggest a simplified vocabulary to overcome language issues. Therefore, the interview questions were phrased colloquially, and terminology specific to conservation and conservation science, which may be difficult even to native English-speakers, was avoided. The questions were introduced with an explanation of the role of a conservator (to take care of artworks), analytical methods were related to common experiences (X-raying in a doctor's office), and simplified, colloquial language was used ("cut a very small piece" instead of sampling, "paste or glue" instead of adhesive or wheat starch paste).

15

Careful choice of language, particularly when mentioning condition details, was necessary in order to avoid unintentionally offending the artist/maker's skill. Care should also be taken with regards to specific terminology: for instance, the word "interview" should be avoided altogether during correspondence with the artist, for there are negative connotations, such as probing journalistic exposés associated with this term in Indonesia.

Hamilton also mentioned that with traditional Indonesian gender roles, communication outside the family is generally conducted by the male of the household. Therefore, communication with the artist/maker was probably filtered by her husband. In fact, the email address used for correspondence belongs to her husband; in essence, the interview was conducted with both husband and wife as a team. Interestingly, as the interview progressed and a working relationship developed, some emails were signed by both Nyoman and Dwi, some by just Nyoman, and even some by just Dwi.

During the collaboration, the conservator should be mindful of the disparity between the "conservation culture" and those who are not familiar with conservation. Careful choice in terminology, as mentioned above, is important in effective communication. Additionally, how the field of conservation is perceived may differ from person to person and will influence the interview. While conservators often stress the importance of preserving the original object through an attempt to suspend deterioration, other cultures may condone a different method of preservation. The difference between how a Balinese artist/maker and I, a conservator, may perceive the preservation of the *cili* figure certainly influenced the outcome of the interview and conservation treatment, an issue that will be addressed in a later chapter.

Based on the interview, and under the direction of the artist/maker, I completed conservation treatment, X-radiography, and identification of plant samples from the *cili* figure.

16

The artist/maker also provided input on cultural information, storage, and display. The interview was transcribed and submitted for addition to the object's record at the Fowler Museum. Portions of the interview are included throughout this paper with some light editing for ease of reading. A full, unedited transcript of the interview is provided in Appendix A so the reader may encounter the discussion directly from the artist/maker's voice.

#### VI. Cultural Information: Palm Leaf Offerings, Namely Cili Figures, in Bali

The *cili*, which means "little girl" (Brinkgreve 1987:144) or "small and nice" in the sense of the term "cute" (Covarrubias 1937:171), is a common motif in Balinese offerings and ritual decorations. The *cili* are stylized representations of a female figure that often have hourglass-shaped bodies, a fan-shaped headdress, and ear ornaments (Figure 1).

Published literature about Balinese offerings are primarily by non-Balinese ethnographers (Brinkgreve 1987, 1997, 2003; Brinkgreve and Stuart-Fox 1992; Covarrubias 1937; Hamilton 2003; Moerdowo 1973; Ramseyer 1986; Stuart-Fox 1974); additionally, I myself am not Balinese. In order to provide an insider's view, these published accounts, as well as my own, will be supplemented with the artist/maker's input. By presenting the information in this manner, I again refer to the work by Ames in hopes that "insider and outsider perspectives might interact and build upon one another in the process of truth-seeking and understanding." (Ames 1992:56)

The religion on the island of Bali, Indonesia is a unique blend of Hinduism, Buddhism, and pre-Hindu belief in spirits. The gods create, maintain, and destroy the universe, and offerings by the Balinese people are meant to placate the gods, thereby maintaining equilibrium of the cosmos. Offerings are made on a daily basis; they may be simple, such as rice and salt placed on a banana leaf, or more complex, such as offerings designed for special ceremonies (Brinkgreve and Stuart-Fox 1992).

Offerings made of palm leaves are called *jeijatan*, a term appropriately derived from the Balinese "to sew" (Brinkgreve and Stuart-Fox 1992:51) for these leaves are cut, folded, plaited, and secured, or sewn, with bamboo splints. There are three varieties of palm used for the construction of *jeijatan*: the coconut palm (*Cocos nucifera*), the sugar palm (*Arenga pinnata*), and lontar palm (*Borassus flabellifer*) (Brinkgreve and Stuart-Fox 1992). *Sampian*, an elaborate

form of palm leaf offerings, are hung from long, curved bamboo rods placed along houses, temples, and streets. According to Nyoman, the type of *cili* figure under study may either be hung as *sampian* or placed upright in a bowl.

Generally, the women of a household are charged with the creation of offerings; however, in modern times, as women find occupation outside of the home, the demand has increased for professional offering makers known as *tukang banten* for occasions that require more elaborate offerings. This is confirmed by Nyoman:

*LD: Who usually makes the cili in your culture?* N: [U]sually the *cili* will made by [a] priest or offering maker.<sup>1</sup>

The professional offering maker learns her craft through apprenticeship. Once hired, she will supervise the women of a household or village while making the most complex offerings herself. The *tukang banten* will finalize the details, ensuring the offerings are arranged correctly on the altar (Brinkgreve 1987).

LD: Tell me about how you learned to make the cili? N: I learn to make cili [figures] by myself (otodidak) [which means self-taught], and [I] learn[ed] from sample[s] as well.

*LD: Have you made other cili? Do you still make cili?* N: Yes, I am still making *cili.* 

Nyoman is not a traditional offering maker; she is a modern Balinese woman with a particular interest in cultural traditions. She is self-taught in the creation of *cili* figures and takes inspiration from existing figures for her own work. This does not invalidate her input, for Nyoman is essentially an artist as anthropologist engaged with her culture (Schneider and Wright 2006). By

creating artworks and offerings, Nyoman is using her own culture to perpetuate and maintain her culture. It is nevertheless important to note her background, for this may influence her viewpoint.

The form and material of the *cili* motif is varied; it may be painted onto rice wafers or sculpted from palm leaves, clay, wood, rice cakes, or coins (Brinkgreve 1987; Brinkgreve and Stuart-Fox 1992; Covarrubias 1937).

LD: If you have made other cili, did you use the same materials and the same techniques? N: [Y]es...same techniques...but [they] can be made from other material[s].

The *cili* motif is probably pre-Hindu, and over time it has become associated with *Dewi Sri*, the Balinese rice goddess, whose name is based on the Hindu deity *Sri Devi. Dewi Sri* represents fertility, prosperity, and the ideal of feminine beauty. In Balinese folklore, like many other myths from Southeast Asia concerning the origin of rice, *Dewi Sri* was sacrificed and the first rice plants sprouted from her body. Rice is therefore sacred, and the fertility and growth of rice corresponds to the life cycles of the goddess. *Dewi Sri* is at the center of many rituals in Bali, which may take place in either temples or rice fields. During these ceremonies, the goddess may be explicitly represented, perhaps as a palm leaf sculpture such as a *cili* figure or as an image painted on rice wafers. On some occasions, these offerings are merely a vessel that the goddess or, in the case of cremations, the soul of the dead will occupy (Brinkgreve 1987; Covarrubias 1937; Hamilton 2003; Ramseyer 1986).

The *cili* motif may serve as a representation of the rice goddess; however, this is not always the case. Many Balinese simply use the *cili* motif in various offerings as decorative elements not necessarily associated with the rice goddess (Covarrubias 1937). The headdress and

ear ornaments are similar to those worn by brides and dancers, suggesting that in some instances, the *cili* may simply represent the ideal of feminine beauty (Brinkgreve 1987).

Indonesia proclaimed independence from the Dutch empire in 1945. After four years of armed conflict, the Netherlands transferred sovereignty in 1949. The sixteen years following independence were characterized by political and economic instability. General Suharto came to power in 1966 and created a political program called the New Order. The hallmarks of the New Order included pro-Western sentiments, centralization of power in the hands of an elite few (Ricklefs 1993), and policies of modernization and economic development with a focus on exploitation of natural resources and cultural tourism (Errington 1998; Hooker 1993).

Tourism and modernization in Bali have commercialized offerings, which are often taken out of context and used in advertisements or given as greetings to guests at hotels. The *cili* motif has become a particularly popular logo in Bali and is often used to decorate t-shirts, ceramics, bottles of rice wine, and hotels. The palm leaf *cili* figures themselves have been modified over time, perhaps to a form with an open bottom that is different from the *cili* studied in this project, for sale to tourists (Brinkgreve 1987; Brinkgreve and Stuart-Fox 1992; Brinkgreve 2003; Hamilton 2003).

#### LD: How is the cili used in your culture?

N: The function of [*cili*] in my culture...depend[s] on size, [type of] figure, [and type of] ceremony...But the [main] function is as a symbol of [fertility] ([in]...bu[s]iness, men and women, etc).

*LD*: You said that the function of cili is different depending on size, figure, and ceremony. What would your cili be used for?

N: [T]his kind of *cili* will be use[d] a lot when we mak[e] offering[s] in the rice field temple, or other ceremon[ies] related to rice.

Although the *cili* motif has been widely commercialized and appropriated in Bali, the artist/maker asserts this particular form of *cili* figure as a symbol of fertility for use in ceremonies, including those related to rice.

*Cili* figures intended for religious use are made specifically for that purpose. In fact, Nyoman makes a distinction between figures made for a decorative rather than religious use.

*LD: Can the cili be displayed by itself, or should it be seen with other things?* N: If for decoration only [then] the answer is yes [it can be displayed by itself], but if we use...[it for] religious purpose[s] [the] *cili* will come with a lot [of] other offering[s] (and we only make that *cili* for a relig[i]ous purpose).

It can therefore be inferred that while this type of *cili* figure may be used as a symbol of fertility during rice ceremonies, the *cili* under study, which was made specifically for the museum, was designated for non-religious purposes and may be treated accordingly. Furthermore, once an offering has been used during a ceremony, it cannot be used again. Instead, offerings are made anew for the next ceremony (Stuart-Fox 1974). Hence, Balinese offerings are ephemeral; they are often made from natural materials that are prone to deterioration. Even more permanent forms of art, such as those of stone or paintings, are subject to deterioration in the extremely humid climate of Bali (Covarrubias 1937; Stuart-Fox 1974). This is confirmed by Nyoman: "But as you understand the we[a]ther in my country, [makes it] hard for us to keep [an] old item well." How should an item from a culture of constant renewal, where offerings are ephemeral and not intended for a prolonged life, be preserved within a museum collection?

Also challenging are issues relating to Balinese artworks and artists. According to ethnographic accounts, Balinese art is traditionally meant to be anonymous – no single artist is to be held above the art itself, particularly in the case of religious offerings (Brinkgreve and Stuart-Fox 1992; Covarrubias 1937). Is the application of artist interviews, which certainly celebrates

the artist and brings the object out of anonymity, appropriate for this *cili* figure? Nyoman gave consent for use of the interview in this paper and corresponding publications and presentations, she provided images of herself in the process of making a *cili* figure, and she has presented workshops at various schools and institutions in the United States about the process of making Balinese offerings. Although she does not speak for all Balinese offering makers, it would seem that Nyoman accepts recognition as an artist/maker.

While ethnographic accounts may provide background information on a cultural object, it is clear that an artist interview lends greater depth to the understanding of broader cultural context. The artist/maker's input both confirmed and questioned information provided in ethnographies, showing that this particular *cili* figure cannot be simply categorized as a traditional ethnographic object but is rather complex in its interpretation.

<sup>&</sup>lt;sup>1</sup> In the interview transcript, LD designates the author while N designates the artist/maker. The interview has been edited with grammatical corrections in the main text for ease of reading and comprehension. The full, unedited version of the interview is provided in Appendix A, allowing the reader to interpret the interview directly from the artist/maker's voice.

### VII. Materials for Construction of the Cili Figure: Palm Leaf

Examination of the materials used to construct the *cili* figure, namely palm leaf, is conducted through the artist interview as well as microscopic analysis of cross sections. Additionally, the artist/maker provided information on processing techniques of the palm leaves prior to construction of the *cili*.

Nyoman consented to sampling as long as permission was granted by the Fowler Museum.

LD: Conservators and museum workers like to study artworks using science. Is it ok if I...[c]ut a very small piece (about 3 or 4 mm big) of the leaf to look at it under a microscope?

N: ...[T]he *chili* in the museum is already own[ed] by the museum, may[be] you need agreement from the museum to cut a bit part of the *chili*.<sup>1</sup>

Museum records note that the *cili* figure is made from lontar palm leaves, which are

chosen for their enduring properties, something the artist/maker confirmed:

*LD: What did you used to make the cili?* N: *Cili* are made from a kind of a palm leaf which is dry already, the leaf is called LONTAR LEAF.

*LD:* Why did you use lontar leaves to make the cili? Are cili always made from lontar leaves?

N: I used lontar leaves to ma[k]e [the] *cili* because lontar leaves [are] long last[ing], but we can also use other leaves like...young coconut leaves.

*LD: Do you know if others also use lontar leaves to make cili?* N: [Y]es, most people will use lontar to make *cili.* 

Aside from the lontar palm, offerings are also made from other types of palm leaves, including those of the coconut palm (*Cocos nucifera*) and the sugar palm (*Arenga pinnata*) (Brinkgreve and Stuart-Fox 1992). Lontar palm, also known as palmyra palm, usually refers to *Borassus* 

*flabellifer* (Brinkgreve and Stuart-Fox 1992; Sastrapradja 1987).<sup>2</sup> The early literature on *Borassus* designated all species, from a wide geographic expanse that spanned New Guinea to West Africa, under a single taxonomy, *B. flabellifer* Linn. In 1914, Beccari, an Italian botanist, subdivided *B. flabellifer* Linn. into seven separate species. Noting differences in the outer covering of the leaf (Bayton 2007), Beccari placed species occurring in India and Indochina within *B. flabellifer* Linn., while Indonesian palms were classified as *B. sundaicus* Becc; this taxonomy was adopted by Fox (1977). However, a recent examination of pollen samples and leaf anatomy noted little taxonomic distinction between *B. flabellifer* and *B. sundaicus* Becc (Bayton 2007).

The correct taxonomy of the lontar palm is beyond the scope of this project. Rather, this paper will focus on comparing cross sections of palm leaves used to construct the *cili* figure to reference samples of *C. nucifera* (obtained from the Rancho Santa Ana Botanical Gardens in Claremont, CA), *A. pinnata,* and *B. flabellifer* (both obtained from the Fairchild Botanical Gardens in Coral Gables, FL). The taxonomy of the reference samples as recorded by these two institutions will be used in this project. The reference samples of *B. flabellifer* are green in color; according to Nyoman, green lontar leaves, which are mature, are not used for creating *cili* figures. Rather, yellow-colored juvenile leaves are used. The initial juvenile leaves of *Borassus* palms are simple and lanceolate, being much longer than wide in shape. As the leaves mature, they become successively broader, more segmented, and more complex until they unfold, or bloom, into the adult costapalmate leaf of *Borassus* palms (Tomlinson 1960, 1961).

Samples from the *cili* were taken from near the base (Figure 2). Although samples of the midrib would have been instructive, this region of the leaf was too rigid for safe removal from the object. All samples were hydrated in water and cross sections were obtained on a Lipshaw
microtome fitted with a Physitemp BHS freeing stage provided by the J. Paul Getty Museum. The samples were embedded in frozen water and  $40 - 50 \,\mu\text{m}$  cross sections were removed with the microtome. The cross sections were stained in 0.1% Safranin O in deionized water (Florian, Kronkright, and Norton 1990:36). Magnified images were captured on an Olympus BH-2 microscope using a Canon Rebel digital camera.

Cross sections from the figure and reference samples were compared to illustrations provided by Tomlinson (1961:325-437) (Appendices B-F).<sup>3</sup> The cross sections obtained from the *cili* demonstrate an isolateral lamina and the presence of longitudinal veins that are mostly attached to both surfaces by fibrous buttresses (Figure 3). These features are consistent with *B. flabellifer*, while the *C. nucifera* and *A. pinnata* display dorsiventral lamina and are lacking in fibrous buttresses (Figures 4-6). While fibrous buttresses also occur in *Corypha utan*, the longitudinal veins are attached by fibrous buttresses to only the adaxial surface layers (Figure 7). Additionally, X-ray images of the *cili* show square or rectangular-shaped cells of the epidermis, a feature also commonly found among *Borassus* palms (Figure 8). Therefore, based on comparison of cross sections (Appendix B-F), the sample from the *cili* is not *C. nucifera*, *A. pinnata*, or *C. utan*; it is, however, very similar to the reference sample of *B. flabellifer*.

Little published information is available on processing techniques of palm leaves used for Balinese offerings. Offerings of coconut and sugar palm are made from both immature leaves, which are flexible and light green in color, and older leaves. If the offering maker wishes to add color, then the palm leaves may be dyed red or yellow (Brinkgreve and Stuart-Fox 1992). Other preparation techniques are reported for palm leaf manuscripts, which are also made from lontar palm leaves, such as boiling (sometimes in lime water), heating, burnishing, burial, and coating with spices and oils; these techniques may be responsible for deterioration (Sah 2002). By asking the artist directly, a great deal can be learned about her methods for processing the raw plant material, which in turn may affect the long term preservation of the *cili* figure.

*LD: Where did you get the lontar leaves?* N: [It is v]ery easy to g[e]t...lontar leaves in the island of Bali

LD: Did you buy the lontar leaves? Or did you harvest the leaves? N: Most of the palm tree[s] which produce the lontar leaves grow in the east of Bali. So to make offerings from lontar I will buy [the leaves] in the market close...[to the] Ubud area. But if I make [a] special thing such as [the] *Chili*...I will send to you, I [will] call my relative in the east of Bali so she can find a better quality of the lontar leaves for me.

The artist/maker does not harvest the palm leaves herself. Nyoman either purchases the

leaves from a local market in the Ubud region, where she lives, or procures them from a

relative who lives in East Bali, where lontar palm trees are plentiful and of higher quality.

LD: When you make the cili, is the lontar yellow in color because it is first dried in the sun? Or are the leaves first green when you make the cili, then the cili turn yellow?

N: Yellow lontar leaves is the colour [when] the leaves [are] still young, not blooming yet. The green lontar leaves...[are] old...we never use this kind of leaves. The most leaves that we use [are] the yellow one[s], so the colour yellow...is from the tree. Of...course I have to dr[y] it in the hot sun before I start to use it.

The lontar leaves are harvested as juveniles, prior to the unfolding or blooming of the leaves and when they are yellow in color. The adult leaves, which are green in color, are too hard for use in offerings. Based on the information provided by the artist/maker, the leaves are not treated with insecticides or fungicides, meaning the *cili* figure is prone to damage from pests and mold while in museum storage. Simultaneously, since the leaves are minimally processed, there has been no introduction of chemicals or processes that may cause accelerated deterioration of the *cili* figure.

However, while Nyoman reports her own processing methods, she cannot speak to any processing that may have occurred prior to purchase.

Through a combination of input from the artist/maker and microscopic analysis of leaf cross sections, identification of palm leaves and processing methods was possible. Removing samples from an artwork is a serious matter, for it results in permanent alteration of the object. Receiving permission from the owning institution is standard practice in conservation and conservation science. In the case of works with a living artist/maker, there is a unique opportunity, through the use of artist interviews, to record his or her views on sampling, thereby allowing the artist/maker to have a voice in the analysis of their artwork.

<sup>&</sup>lt;sup>1</sup>The spelling of these figures appears in various forms due to the reformed Indonesian spelling system of 1972. The pre-1972 orthography used Dutch consonants while the post-1972 orthography utilizes English consonants (Ricklefs 1993). Therefore, pre-1972 museum records and publications will often refer to the figures as *tjili* (Covarrubias 1937; Smithsonian National Museum of Natural History 2010), while those dating to after 1972 utilize the spelling of *cili* (Brinkgreve 1987, 2003; Brinkgreve and Stuart-Fox 1992; Hamilton 2003; Stuart-Fox 1974). Ni Nyoman Kawiwati, the artist/maker, uses both *cili* and *chili*.

<sup>&</sup>lt;sup>2</sup>Perumal (2004) refers to *B. flabellifer* as the palmyra palm and *Corypha utan* as the lontar palm, further demonstrating the confusion over the taxonomy of palms.

<sup>&</sup>lt;sup>3</sup>Terminology for the examination of palm leaf anatomy is provided in Appendix G.

#### VIII. Construction Techniques of the Cili Figure

Various methods of examining the *cili* figure, including visual observation, literature research, and X-radiography assisted in understanding the construction method of the figure. Most helpful, though, was the contribution of the artist/maker, who provided a disassembled *cili* figure in response to inquiries regarding construction technique.

LD: Conservators and museum workers like to study artworks using science. Is it ok if I...[t]ake X-rays (like a doctor would to see your bones) to see what is inside the cili?

N: Yes, you can do X-ray but I [have] prepared the item[s] that [are] inside...the *cili* with all the detail and information...I am also enclos[ing] the new *cili* for you that...can [be] use[d] for research.

X-radiography of the *cili* was conducted at 20 kV/4.8 mA for 120 seconds.<sup>1</sup> Imaging organic material requires such a low intensity of the X-ray beam that the energy may be absorbed by the protective sleeve holding the film, resulting in a poor image. Therefore, imaging was completed by placing the object directly onto the film, without the protective sleeve, in a darkened room.

In the Fowler Museum records, Hamilton notes that within the base of the *cili* figure are representations of internal organs, a detail confirmed by the artist/maker.

*LD: Is there something inside the bottom of the cili?* N: [Y]es, there are a lot of symbol[s] inside of *cili* such [a]s bones, stomach, and other religious symbol[s]...It is the most important part of the *chili*...

While the X-rays indicate the presence of various woven elements inside the base (Figure 9), the resulting image did not clearly define the form of the internal organs. Fortunately, the additional material provided by Nyoman (a second completed *cili* figure, a disassembled *cili* figure, and

photographs of herself making these items in Bali), provides an account of construction methods for the palm leaf figure found in Figures 9 - 26.

As Nyoman mentioned previously, the internal organs are the most important component of the figure. In fact, when questioned about another *cili* figure at the Fowler Museum which does not have a known artist/maker (Appendix A), Nyoman mentions that in her experience, these particular types of figures are lacking internal organs. The internal organs themselves are the offering, and if this figure does not contain the organs, then it is "not use[d] for ceremon[ies]"; rather, she considers it as "just a decoration."

The bottom of the body (Figure 27) was probably created in rectangular plaiting completed on the diagonal. In rectangular plaiting there are two sets of elements that meet at, or nearly at, right angles. The plaiting technique for the base, usually referred to as simple plaiting (Adovasio 1977), is referred to, in Balinese, as *saud besik* (Eiseman 1999:44, 86) where the simple weave goes over and under one element. The elements on either side of the face (Figure 19) and at the back of the head (Figures 1, 23, 25) appear to have been constructed in a radial spiral pattern similar to the *iseh*, a pattern used to start various basketry forms such as trays, covers for cooked rice, and hats. In the radial spiral pattern, the start is made by overlapping several palm strips at their centers, creating a start that radiates out in 360°. The rosettes are then worked in the round by folding and plaiting (Eiseman 1999:185-188).

X-radiography was unsuccessful in fully imaging the interior of the figure. However, the artist/maker offered information and research material that supplied great detail on construction techniques, demonstrating how interaction with the artist/maker can contribute to the technical study of their artwork.

<sup>1</sup> X-radiography is a technique capable of imaging the internal structure of objects. X-rays, a form of electromagnetic radiation, are generated from an X-ray tube; the X-ray beam is directed towards an object, thereby penetrating it. A certain thickness of a material will absorb a specific proportion of radiation. Additionally, relatively dense materials will block more radiation than less dense materials (Lang et al. 2005; Middleton and Lang 2005). The resulting image, showing this difference in density, is captured on photographic film.

#### IX. Conservation Treatment of the Cili Figure

Many condition issues present on the *cili* figure are probably artifacts of manufacture, such as tears that originate from bamboo splints and cuts made with a knife, several W-shaped ends that are bent away from the plane of the headdress, and linear grey marks (possibly graphite) on the base.

LD: The lontar leaf is very hard. When you fold, cut, and sew to make the cili, does the lontar leaf tear or rip? N: Yes, but I am using a very sharp knife (Figure 28) so I try to avoid the tear.

These condition issues seem to originate from the artist's hand, making it a challenge for a conservator to form conservation decisions while respecting artist intent. An artist interview will capture the artist/maker's opinions on preservation as well as specific conservation treatments.

Nyoman is impressed by the generally good condition of the 15-year-old *cili*, which has not drastically changed in appearance since it was made.

LD: This cili is now 15 years old. How do you think it looks? N: Wooowww...[i]t...still look[s] very very good. I am impressed.

*LD: Does it look different than when you made it?* N: Not at all.

When asked about the treatment of specific condition issues, Nyoman expresses a wish to either fix the *cili* herself or to replace the object.

*LD: If the cili gets damaged while in the museum, should it be fixed?* N: I will be glad to fix it or to make new for the museum.

This is a reflection of how a Western conservator and Nyoman, who is a Balinese, possess different views regarding long-term preservation. As mentioned in a previous chapter, Balinese offerings are ephemeral and are not meant to last. Offerings are created for a specific purpose; rather than saving it for another use, a new offering is made (Covarrubias 1937; Stuart-Fox 1974). Western conservators, on the other hand, usually aim to preserve the original material of the object rather than opting for replacement. However, the concept of renewal is not foreign to conservation; in fact, it is commonly encountered in the conservation of contemporary art, where the artwork, or original components of the artwork, is replaced rather than preserved. An artist interview can help clarify treatments of objects that require renewal, and in this case, I chose a conservation approach that was a compromise between our differing viewpoints. Minimal conservation treatment of the *cili* figure was completed with input from Nyoman. Additionally, Nyoman provided a replacement *cili* figure which will also be included in the Fowler Museum collection.

Nyoman did not want the grey marks (Figure 29) on the base of the figure cleaned. The tears that "ruin the look" of the figure may be fixed (Figure 30) and bent headdress elements should be straightened (Figure 31). The artist/maker expressed hesitation with regards to the use of moisture, which posed a challenge to conservation treatment.

*LD: Should the cili be cleaned if it begins to look different?* N: No, if you want to clean it, do not [clean] with water...[it is]enough [to clean] with [a] dry brush or dry napkins.

Humidification and tear repair of palm leaf, or other cellulosic materials, usually require the introduction of moisture, either through elevated humidity with the introduction of water or the use of aqueous adhesives. In the published literature, tears in palm leaf manuscripts, which are

also made from lontar leaves, can be repaired by lamination with new palm leaf, wood veneer, silk chiffon, and Japanese tissue paper with various adhesives, some non-aqueous such as polyvinyl acetate in toluene (Gupta 1974), with the majority being aqueous adhesives including polyvinyl acetate emulsions, acrylic emulsions, methyl cellulose, and starch paste (Agrawal 1984; Crowley 1970; J. F. Dean 1999; Sah 2002). The aqueous adhesives are often applied when wet and allowed to dry for adhesion.

Due to the artist/maker's hesitation regarding the introduction of moisture, a dry stabilization method was adopted for tears in the *cili* figure. To mend the tears, Lascaux Acrylic Adhesive 360 HV, a water-based dispersion of butyl acrylate and methylmethacrylate thickened with acrylic butyl ester (Alois K. Diethelm AG, Lascaux Farbenfabrik), was applied to a thin, long-fibered Japanese tissue backing. Once dry, the Lascaux 360 HV remains tacky, thereby creating a pressure sensitive tape (Museum of Fine Arts, Boston 2008) that will keep the tears in alignment without introducing moisture directly onto the palm leaf. This approach was presented to Nyoman, who responded, "To fix the *chili* with dry glue, [L]ascaux I am agree…"

This is a successful method for gentle repairs and mends that are well aligned; it may not be appropriate for severe tears that require a strong mend, or for objects that will be frequently handled. Using a pair of tweezers, the Lascaux pressure sensitive tape can be removed mechanically without damaging the palm leaf. For visual integration, hard edges are prevented by cutting the Japanese tissue into an oval shape and feathering the edges prior to application of the Lascaux. The Japanese tissue can be toned prior to introducing the Lascaux; however, the untoned tissue was often sufficient for visual integration (Figure 32).

Although a non-aqueous method was devised for the repair of tears, a few tears required humidification for proper alignment. However, it is difficult to humidify palm leaf without the introduction of moisture. Additional questions were asked to better understand why Nyoman was hesitant about the use of water.

*LD: I am curious, what will happen to the lontar if I clean it with water?* N: This situation [is] not just water, damp, humidity, and moist can [also] ruin the lontar leaves.

LD: ...Mold will only grow if in very high humidity for a long time... N: ...I can understand about hum[i]dity...[however, during her visit to the US] we [brought] a few *chili* to [a]...school, i[n]stitute, and friends...as a gift. [I]n one house...the *chili* was moldy after the[y] wash[ed] it with water.

At Nyoman's request, humidification tests were completed on samples of lontar palm leaves provided by the artist. Humidification using GORE-TEX, a microporous and waterproof fabric that is impermeable to liquids but permeable to water vapor (Museum of Fine Arts, Boston 2009), blotter paper moistened with deionized water, and gentle pressure was completed for the duration of one hour. The artist was notified that no resulting mold occurred, and humidification of the *cili* was completed with successful results (Figure 33).

To assist this project, Nyoman generously provided several items, including lontar palm leaves for testing humidification, two additional *cili* figures that were recently made (in 2011) and photographs of herself in the process of creating these items. Comparison of the *cili* figure under study, which will be referred to as the 1996 *cili* figure, with the new *cili* figures led to some interesting observations about condition issues:

• The new and old *cili* figures were similar in color; therefore, the yellow color of the palm leaves is original to the objects, rather than a result of aging.

- Similar to the 1996 *cili* figure, the W-shaped elements of the headdress of the new figure were also bent out of plane, indicating that this condition is indeed an artifact of the creative process (Figure 34).
- The new *cili* figures had only cut marks, identified by clean, straight edges, in the headdress, suggesting that the tears of the 1996 *cili* figure probably occurred after its manufacture. It also confirms that the tears require stabilization, for they may worsen over time, as the figure is handled.
- The new *cili* figures have two earrings, one in each ear, indicating that the 1996 *cili* figure is missing an earring from its proper right ear (Figure 34).

Many of the observed condition issues were a result of the artist/maker's creative process, thereby requiring input from the artist in order to conserve the *cili* while preserving the artist's intent. This process required a relatively extended conversation, a sort of negotiation, which combined my experience as a conservator and Nyoman's experience as a Balinese artist/maker, in order to devise a successful treatment method.

#### X. Storage and Display of the Cili Figure

The hair elements at the back of the *cili's* head (Figure 1) are delicate and threedimensional; therefore, the *cili* figure is currently stored lying face down. Additionally, examination and display of the figure in an upright position is complicated by its pointed bottom (Figure 35). The orientation of the object during display is closely linked to the meaning of the object, for it directs the interpretation of the artwork. The artist interview assisted in ascertaining appropriate methods for storage and display.

*LD: In the museum, should the cili be standing up, lying down, or hanging?* N: Either way can be, but [t]he best way is "standing" and [to] put something in the bottom to hold the *cili*.

*LD: Which part is most important to be seen – the front, the back, or the side?* N: The most important part to be seen is the front side.

*LD: Can the cili be displayed by itself, or should it be seen with other things?* N: If for decoration only [then] the answer is yes [it can be displayed by itself], but if we use...[it for] religious purpose[s] [the] cili will come with a lot [of] other offering[s] (and we only make that *cili* for a relig[i]ous purpose).

If the *cili* is meant for ceremonial use, it would be displayed hanging or standing up, perhaps in a bowl; it would also be displayed with many other items. However, as mentioned previously, this particular figure was not made for religious use. Instead, it was created for the museum collection and is therefore decorative and non-religious, indicating that it may be displayed by itself, while standing up and supported at the base, with the front in view. Nyoman consents to storing the *cili* figure in a prone position.

#### XI. Conclusion

Over the last few decades, ethnographic conservation and the conservation of contemporary art have developed into separate sub-fields and methodologies, yet seemingly traditional objects with known artist/makers may not clearly fall into either category. In the case of a Balinese *cili* figure with a known artist/maker, which was studied in this paper, upon first impression, this object appears to have been made with traditional materials and forms. However, by interviewing Ni Nyoman Kawiwati, the artist/maker, it appears that she is not a traditional offering maker, nor is the figure a traditional ceremonial offering. In fact, Nyoman makes a distinction between figures meant for decorative purposes rather than religious use.

When caring for an ethnographic object made in contemporary times, it is important for a conservator to be mindful of how we perceive the object, for this may influence our conservation approach. While consulting published literature on the culture of origin may prove useful in devising treatment and method of care for an object, the perspective of an individual artist may question and further enlighten the conservator's perspective. Furthermore the methodologies of the two sub-fields, namely ethnographic and contemporary art conservation, are not necessarily mutually exclusive. Rather, a flexible approach that combines and adapts the two methodologies can prove quite successful.

Artist interviews have become a part of best practices in the conservation of contemporary art, and this methodology can be adapted for cultural objects with known artist/makers. Historically, acquisition and collection practices paid little attention to recording the names of artist/makers, thereby creating anonymous collections that romanticize the objects as part of timeless traditions within a generalized culture. By conducting artist interviews,

conservators may contribute to the argument against anonymity by considering artist intent, views, and processes and by allowing the artist to play a role in the preservation of their artwork.

This project serves as a case study where the technical examination and conservation of the *cili* figure was completed in collaboration with the artist/maker. Nyoman provided information on materials, construction methods, and her opinion on sampling. The cross sectional examination confirms that the *cili* figure is made from leaves of *Borassus flabellifer*, commonly known as the lontar palm tree; additionally, the artist/maker indicated that only yellow-colored juvenile leaves are utilized. The leaves are minimally processed, for they are simply dried in the sun prior to use. In response to inquiries regarding construction methods, Nyoman provided a disassembled figure as well as photographs that allow for a step-by-step understanding of how the figure was made. Particularly interesting are the woven elements within the base that represent the internal organs of the *cili*, which, according to the artist/maker, are the most important component of the figure. The internal organs are the offering, and in her opinion, figures without these internal components were made for decorative rather than ceremonial purposes.

The ephemeral nature of Balinese offerings may suggest an ethical challenge to its preservation, raising the question as to whether or not offerings should be preserved for longevity within a museum. When interviewed about her thoughts on conservation treatment, Nyoman expressed a preference for renewal or replacement of the object rather than preservation of the original material. In this particular case, the treatment approach was a compromise between the artist's wishes and a more traditional conservation ideology. The original *cili* figure was treated in collaboration with Nyoman, who in turn made a replacement figure that was incorporated into the museum's collection.

39

When preserving a collection that is associated with living artists/makers, it is important to develop and maintain a dialogue, for open communication may enrich the study and conservation of an object, preserving both the physical qualities as well as the intangible properties of meaning and artist intent. The application of artist interviews can be an effective tool in an ongoing, and hopefully fruitful, collaboration with an artist/maker for both ethnographic and contemporary art collections.

# XII. <u>Appendices</u>

### Appendix A: Transcript of Artist Interview with Ni Nyoman Kawiwati

Note: The answers are left unedited so that the reader may experience the interview from the artist/maker's voice.

LD: May I use the information you give about the cili in my school projects? The types of projects are reports, books, and presentations. If you would like, I can give you a copy of my report when I am done. N: Yes you can.

*LD: What did you used to make the cili?* N: Cili are made from a kind of a palm leaf which is dry already, the leaf is called LONTAR LEAF.

LD: How is the cili used in your culture?

N: The function of it in my culture are a lot depend on size, figure, ceremony are held. But the mean function is as a symbol of vertelity (vertelity on bussiness, men and women, etc).

*LD: When did you make the cili?* N: That cili was made on 1996

*LD: Tell me about how you learned to make the cili?* N: I learn to make a cili by myself (otodidak) (self-taught), and learn from sample as well

*LD: Have you made other cili? Do you still make cili?* N: Yes, I am still making cili

*LD: If you have made other cili, did you use the same materials and the same techniques?* N: yes, there are same techniques how to made cili but can be made from other material

LD: Why did you use lontar leaves to make the cili? Are cili always made from lontar leaves? N: I used lontar leaves to made cili because lontar leaves make long last, but we can also use other leaves like a young coconut leaves

LD: Where did you get the lontar leaves? N: very easy to got a lontar leaves in the island of Bali

*LD: I have some lontar leaves, and they are very hard. How did you soften the lontar leaves so it will be easy to work with?* 

N: the lontar leaves that I use is the "young one" which the leaves is not blooming yet, so that is not so hard

*LD: Do you know if others also use lontar leaves to make cili?* N: yes, most people will use lontar to make cili

*LD: Is there something inside the bottom of the cili?*N: yes, there are a lot of symbolies inside of cili such us bones, stomach, and other religious symbol

LD: This cili has a pointed bottom, so we usually have it lying down in the museum. If this cili was used in your culture for fertility, how would it be displayed (standing up, lying down, leaning against something?) N: usually this cili will hang on something, or will stand on a bowl, so they can be stand, or other position

*LD: Who usually make the cili in your culture?* N: usually the cili will made by priest or offering maker

*LD: Do you know if the cili are different from village to village?* N: yes, there are a lot of style of cili - almost every village has their own style. LD: You said that the function of cili is different depending on size, figure, and ceremony. What would your cili be used for?

N: this kind of cili will be use a lot when we making offering in the rice field temple, or other ceremony related to rice

*LD: Did you boil or scrape the lontar before making the cili?* N: We don't need to boil or scrape the lontar, we only dry it into direct hot sun

*LD: In the museum, should the cili be standing up, lying down, or hanging?* N: Either way can be, but The best way is 'standing' and put something in the bottom to hold the cili

*LD: Which part is most important to be seen – the front, the back, or the side?* N: The most important part to be seen is the front side

*LD: Can the cili be displayed by itself, or should it be seen with other things?* N: If for decoration only the answer is yes, but if we use as religious purpose cili will come with a lot other offering (and we only make that cili for a religous purpose)

LD: This cili is now 15 years old. How do you think it looks? N: Wooowww, I don't relise 15 years. It's still look very very good. I am impressed

*LD: Does it look different than when you made it?* N: Not at all

*LD: Have you seen older cili? If so, how old are they? How do they look?* N: Yes, I seen a lot other cili. They look depend what they use for

*LD: Should the cili be cleaned if it begins to look different?* N: No, if you want to clean it, do not with water, enough with dry brush or dry napkins

LD: If the cili gets damaged while in the museum, should it be fixed? N: I will be glad to fix it or to make new for the museum

*LD: The lontar leaf is very hard. When you fold, cut, and sew to make the cili, does the lontar leaf tear or rip?* N: Yes, but I am using a very sharp knife so I try to avoid the tear.

LD: If there are tears in the lontar leaf, should it be fixed? N: No, but if the tears a lot and ruin the look, let me fix it

*LD: Would you fix a tear in a cili you made? What would you use to fix it?* N: Yes, I can fix but let see the tears first

*LD: If I fix the tears, is it ok if I use paper and paste or glue to fix it?* N: No, glue contain water, can more damage the cili



LD: Did these marks happen when you made the cili? Should these marks be cleaned? N: No, the mark will stay there, I am so impressed with the condition LD: Conservators and museum workers like to study artworks using science. Is it ok if I do these things to study your cili?

1. Take X-rays (like a doctor would to see your bones) to see what is inside the cili?

N: Yes, you can do X-ray but I am prepared the item that inside on the cili with all the detail and information for you. How do you want me to send ?? Where ?? I am also enclosed the new cili for you that you can use for research.

#### 2. Cut a very small piece (about 3 or 4 mm big) of the leaf to look at it under a microscope.

N: I dont know how soon that you need for your research, As I tell you I will send you the new chili and some other extra items which based in side of the chili. How ever the chili in the museum is already own by the museum,may be you need agreement from the museum to cut a bit part of the chili.

LD: I sent you pictures of 4 tears. Please let me know if you think these should be fixed. I do not think they ruin the look (the cili is very beautiful, and still in good condition), but I wonder if the tears will get bigger if I don't fix it. What do you think?









N: It's seem the condition of the chili look very well, once a gain I am so Impressed to see after 15 years. I can not give any comments do we need to fix the tear or not. but if you feel you can fix it please do but how?

#### LD: Did you buy the lontar leaves? Or did you harvest the leaves?

N: Most of the palm tree which produce the lontar leaves grow in the east of Bali. So to make offerings from lontar I will buy in the market close in Ubud area. But if I make special thing such as Chili like I will send to you, I call my relative in the east of Bali so she can find a better quality of the lontar leaves for me.

# LD: When you make the cili, is the lontar yellow in color because it is first dried in the sun? Or are the leaves first green when you make the cili, then the cili turn yellow?

N: Yellow lontar leaves is the colour which the leave is still young, not blooming yet. The green lontar leaves is the old one we never use this kind of leaves. The most leaves that we use is the yellow one, so the colour yellow it is from the tree. Ofcourse I have to dried it in the hot sun before I start to use it.

LD: I am curious, what will happen to the lontar if I clean it with water?

N: I will added some extra lontar leaves whis is still not bloom yet, and you can use it for experiment how it is look after get wet. This situation not just water, damp, humidity, and moist can ruin the lontar leaves.

LD: I agree that the cili is in good condition, and the tears do not ruin the look. But, I worry that some of the tears will get bigger if we don't fix it. I appreciate that you are willing to fix it, but it may be safer to not ship this cili back and forth (I am worried it will get damaged during shipping). If you are ok with me fixing some of the tears, then I have an idea of how to fix it. Since you said water will cause more damage, I will not use a paste or glue with water. There are many different kinds of glue that we use in conservation. One type of glue, the name is Lascaux, is still a little bit sticky when it is dry. Maybe I can take a small piece of very thin paper and put some Lascaux on it. Once the glue is dry, the paper will be a little sticky, and I can put this on the tear to fix it. It will be like a piece of tape. What do you think?

N: To fix the chili with dry glue, lascaux I am agree, I am sure with nowdays technology is much better. As I write to you in My last e mail, I will added some extra "Hands woven Lontar Leaves" that you will find inside of the chili. There are few of them but the most inportant I will explain it to you. I will attach this information again on each extra item, so you will understand the meaning and also the figure. It is the most important part of the chili which is the "woven lontar leaves" in side of the chili.

1. A set of "Tulang Lindung " if I translate to english become "the bones of eels" this is the symbol of the world, the earth, or the universe.

2. "Sri Mumbul" is a symbol that we are hopping or prayer for the result of the farmers to overflow, or more than a lot.(plentiful)

3. "Sri Tetel" is a symbol that we are hopping or prayer for the result of the farmers to be stable , not shake or unfluctuating

4. "Sri Sudamala" is a symbol that we are hopping or prayer for the result of the farmers free from contamination, impurity.

5 "Sri danda" is a symbol that we are hopping or prayer for the result of the farmers to be free from curse.always bless.

6 "Sri Bunga" is a symbol that we are hopping or prayer of charm life. happiness.

7 "Sri Tumpuk" the symbol of balance of the life. (Ying and Yang in China) (Skala and Niskala in Bali)

8 A set of "basang - basang" definition TBA

9 A set of "Tangkar Iga" Definition TBA

LD: I am sending you another picture, of the headdress. One part is bending forward, and another part is bending backwards. Do you think this ruins the look of the cili? Do you think I should try to make it straight, or should I leave it like this?

N: Yes try to make it strait. The chili look well kept.



LD: I notice that things made from palm will sometimes grow mold, especially if it gets wet or is in high humidity for a long time. Your cili is in very good condition, there is no mold at all! Do you know why your cili has no mold? The museum has low humidity, especially since Los Angeles has much, much lower humidity than Bali. I wonder if putting the leaves in the hot sun before you made the cili helps stop the mold from growing? What do you think? N: I have been in to the room where all chili are kept in your museum. I am so surprise how that the museum keep the humadity, and everything kept well. Yes, we always drying the keave in a very hot sun before we use it for something. But as you understand the wether in my country, hard for us to keep old item well. Also the new chili that we send to you it's already well dried in avery hot sun. Hopely can hold for long time. How ever if the chili get wet or damp will get moldy.

LD: You have been to the Fowler Museum? They do a good job of taking care of their art. But the weather in Los Angeles is not humid at all, it is dry here. Especially compared to Bali! Mold will only grow if in very high humidity for a long time. To make the headdress straight, I will use a little bit of water mix with a chemical to help mold not grow. It will be wet for a short time, until I make it straight. I will be careful, to make sure mold will not grow. What do you think?

N: Yes, I have been to the museum, we My self and Dwi were there sept 1996. on that time I handed the chili to the museum and Roy Hamillton show us arround to see the museum. That why I know how the museum take care all item from all over the world well. I can understand about humadity, how ever on that year we bringing a few chili to some school, imstitute, aand friends that we know as a gift. in one house that we left the chili was moldy after their wash it with water. How ever I am also enclose two pieces of extra lontar leave in the packing of un build chili, you may try to put it in the water and let see the result. Please let me know is there mold ar not. That visit to your country was great visit we learn a lot from that time to understand your country. We are visiting for 2 month and stay from one to next friend house we never stay in the hotel Dwi have a lot of friend there. We start from Honolulu, LA, san diego, carpentaria, nepenthe, santa cruze, bodega beach, muir beach, Anaheim, long beach, disney land, orange county, san francisco, red wood, salt lake city, flag staff, boulder, colorado, tucson arizona back to LA. My close friend(more than a sister) from ohio drive Us arround. We also visiting, school, museum, istitute etc to give a talk about offering.I am doing some demontration to make the offering and Dwi tell the audience about it. We bring a lot of lontar leaf on that time.

LD: There is another cili in the museum. I am sending you pictures of the front and back. We do not know very much about it. Have you seen cili figures like this before?



N: The chili photo that you send, i have seen a few in Bali, but mostly their are not use for ceremony, because the inside part are not there. As I mention in my last e mail the inside part is the offering, which is a symbol of something to related with God and Goddess. We have been buy one of these chili and nyoman unfold it, we found that the inner part is not there so we are consider this is just a decoration.

	Sample, <i>Cili</i> Figure	Itoros butrosos		fboar brittees thous brittees thous brittees
	Reference Sample, Borassus fla- bellifer from Fairchild Botanical Gardens	From Tomlinson (1961:386)	From Tomlinson (1961:436)	Industries for the formation of the form
	Diagnostic Feature	Yes	Possibly	Yes
)	Section	Transverse	Paradermal	Transverse
	Observations	Almost isolateral	Cells are square or rectangular in shape	The veins are attached to 1 or both surfaces by fibrous buttresses.
		Lamina	Epidermis	Longitudinal Veins

Appendix B. Cross Section from the Cili Figure

	Reference Sample, Borassus fla- bellifer, from Fairchild Botanical Gardens	terror terr		the state of the s	fbrout buttresse
	Reference Images of Borassus Aabellifer from Tomlinson (1961)	From Tomlinson (1961:386)	From Tomlinson (1961:436)	From Tomlinson (1961:386)	From Tomlinson (1961:386)
	Diagnostic Feature	Yes	Possibly	Yes	Yes
	Section	Transverse	Paradermal	Transverse	Transverse
	Observations	Almost isolateral	Cells are square or rectangular in shape	2 or more layers be- neath each surface	The veins are attached to 1 or both surfaces by fibrous buttresses.
1		Lamina	Epidermis	Hypodermis	Longitudinal Veins

Appendix C. Cross Section of Borassus flabellifer

	Oheamatione	Contion	Discussio	Defension Imaging of Connection	Dofounno Comulo Constant
	Observations		Feature	cifera from Tomlinson (1961)	reterence sampre, <i>Cocos nu-</i> <i>cifera</i> , from Rancho Santa Ana Botanic Gardens
Lamina	Dorsiventral	Transverse	No	transverse vein	adatali surface
Epidermis	Cells are square or rectangular in shape, usually longitudinally extended	Paradermal	Possibly		
				From Tomlinson (1961:436)	
Hypodermis	2 or more layers adaxi- ally. 1 layer abaxially	Transverse	Possibly	From Tomlinson (1961:380)	adruati un for
Midrib region of the lamina	Prominent adaxial midrib. The vascu- lar tissues are usu- ally in several discrete bundles, but all are enclosed within a com- mon sclerotic cylinder. Expansion cells are usually in bands on ei- ther side of the midrib.	Transverse	Possibly	From Tomlinson (1961:368)	adatal surface expansion cells

Appendix D. Cross Section of Cocos nucifera

Reference Sample, Arenga pin- nata, from Fairchild Botanical Gardens	adatal Surface		tatish untre factorie
Reference Images of Arenga pin- nata from Tomlinson (1961)	Trom Tomlinson (1961:392) of Arenga saccarifera.	From Tomlinson (1961:375, 384)	From Tomlinson (1961:392) of Arenga saccarifera.
Diagnostic Feature	No	Possibly	Possibly
Section	Transverse	Paradermal	Transverse
Observations	Dorsiventral	Cells are rhombohedral or polygonal, usually obliquely extended	1-2 layers adaxially 1 layered abaxially
	Lamina	Epidermis	Hypodermis

Appendix E. Cross Section of Arenga pinnata

	Observations	Section	Diagnostic Feature	Reference Images of <i>Corypha Utan</i> from Tomlinson (1961:325-335, 419, 436))
Lamina	Lamina asymmetrical (there are adaxial and abaxial surfaces, although the two surfaces are very similar)	Transverse	No	
				From Tomlinson (1961:419), cross section of <i>Corypha</i> <i>umbraculifera</i> .
Epidermis	Cells are square or rectangular, usually longitudinally extended	Paradermal	Possibly	
				From Tomlinson (1961:436)
Hypodermis	2 or more layers adaxially Usually 1 layer abaxially	Transverse	Possibly	
				From Tomlinson (1961:419), cross section of <i>Corypha</i> umbraculifera.
Longitudinal veins	Veins are in the adaxial meso- phyll, mostly in contact with the adaxial surface layers	Transverse	Yes	
	*This feature differentiates Corypha from Borassus.			
				From Tomlinson (1961:419), cross section of <i>Corypha</i> <i>umbraculifera</i> .

Appendix F. Cross Section of Corypha utan

## Appendix G. Terminology for Examination of Palm Leaf Cross Sections

**Abaxial**: The abaxial surface is the side of the leaf facing away from the stem. Generally, the abaxial surface, which faces away from the sun, contains a higher concentration of stomata.

Adaxial: The adaxial surface is the side of the leaf facing towards the stem. It is the opposite of the abaxial surface.

Cross or Transverse Section: A cut that is oriented perpendicular to the flat surface of the leaf.

**Dorsiventral**: Having different upper and lower surfaces. Tomlinson (1961:68) uses this term to distinguish whether a palm leaf cross section displays lamina with dorsiventral mesophyll.

Epidermis: A thin layer of cells on the outermost surface of the leaf.

Fibrous buttresses: A group of fibers that attach the longitudinal veins to the surface(s) of a leaf.

Hypodermis: A layer of cells directly below the epidermis.

**Isolateral**: Having similar upper and lower surfaces. Tomlinson (1961:68) uses this term to distinguish whether a palm leaf cross section displays lamina with isolateral mesophyll.

Longitudinal veins: Veins that run along the longitudinal plane of the leaf.

Mesophyll: The cells within the interior of the leaf, between the upper and lower epidermis.

**Midrib**: The central, and most prominent, vein of a leaf. It is an extension of the petiole and is usually along the midline of the leaf.

Paradermal or Longitudinal Section: A cut that is oriented parallel to the flat surface of a leaf.

**Petiole:** The stalk of the leaf.

Stomata: Small openings that allow for gas exchange.

Vascular bundle: Strand-like part of the vascular system.

**Vein or vessel**: Veins are part of the vascular system, which moves water and nutrients within the plant. A vein is a rib that runs along a leaf; it typically contains a vascular bundle.

# XIII. <u>Figures</u>





Figure 1 Left image: Front view of the *cili* figure. Right image: Back view of the figure.



Figure 2 The areas sampled from the base are indicated in red.



Figure 3 Cross section from the *cili* figure. The longitudinal veins are attached to both surfaces via fibrous buttresses.



Figure 4 Cross section from *Borassus flabellifer*. The fibrous buttresses attached to both surfaces are similar to that of the *cili* figure.



Figure 5 Cross section from *Cocos nucifera* that displays dorsiventral lamina and a lack of fibrous buttresses.



Figure 7 Cross section of *Corypha umbraculifer* from Tomlinson (1961:419). The fibrous butresses are attached to only the adaxial surface layer.



Figure 6 Cross section from *Arenga pinnata* that also displays dorsiventral lamina and a lack of fibrous buttresses.



Figure 8 The X-rays of the figure show square or rectangular-shaped cells of the epidermis, a feature commonly found among *Borassus* palms.





The X-ray, stitched from two different pieces of film, shows a bundle of palm strips that run through the center of the *cili*. The center bundle from the disassembled *cili* figure sent by the artist is shown on the right.

Figure 9 X-ray of the cili's internal structure

Figure 10 Internal organs of the cili, inside the base





*Sri Tetel* - symbol of hope and prayer for a stable growth season





piness

*Sri Bunga* - symbol of hope and prayer for a charmed life and hap-



Tangkar Iga

Basang-Basang

Sri Pradnyan

Sri Pis



Figure 11 The internal organs are secured around the center bundle.



Figure 12 The plaited body is formed around the center bundle and internal organs.



Figure 13 The bottom, made of palm leaves secured with wood-like splints, finishes the body of the *cili*.



Figure 14 An image of Ni Nyoman Kawiwati, the artist/maker, placing the bottom onto the body.



Figure 15 The belt, of plaited palm leaf, is wound around the central bundle, creating the torso.



Figure 16 The *badan/awak* (body) is secured to the central bundle by the belt.



Figure 17 The torso of the *cili*, displaying the plaited part of the body, the belt, and the body/ arms.



Figure 18 Nyoman is completing the body and arms.



Figure 19 The *kepala* (head) and *mukah/wajah* (face) of the *cili* 



Figure 20 Nyoman in the process of sewing the head/headdress together with bamboo splints



Figure 21 The *telinga* (ears) of the *cili*, which are are secured to the head with thread.





Figure 22 Top: The *anting-anting* (earrings) Bottom: The ears are wound around the earrings



Figure 23 The spiral-shaped, flower-like rambut (hair) of the cili



Figure 25 A second *cili* by Nyoman, created in 2011. The hair is stitched with thread to the back of the head/headdress.



Figure 24 The head and face are secured to the central bundle by a strip of palm that also fashions the *cili's* mouth.



Figure 26 The artist/maker, Ni Nyoman Kawiwati, posing with a complete *cili* and a disassembled *cili*.



Figure 27 The plaited bottom of the figure



Figure 29 According to the artist/maker's wishes, the grey marks will not be removed.



Figure 28 Nyoman uses a knife to cut the palm leaves into shape.



Figure 30 Photographs of several tears were sent to the artist/maker during the interview.



Figure 31 Areas of the headdress that were bent out of plane.


Figure 32 Left: A tear at the bottom of the *cili* under raking light. Top Right: The tear was repaired with Lascaux and Japanese tissue "tape". The tissue was left untoned. Bottom Right: The mend under raking light



Figure 33 Bent elements of the headdress were successfully humidifed.



Figure 35 The pointed bottom of the figure



Figure 34 Comparison of the 1996 and 2011 *cili* figures. Top: The 1996 *cili* is missing an earring from its proper right ear. Bottom: The 2011 *cili* has two earrings and bent elements in the headdress.

## XIV. Bibliography

- Adovasio, J. M. 1977. *Basket technology: A guide to identification and analysis*. Chicago: Aldine Manuals on Archaeology.
- Agrawal, O. P. 1984. *Conservation of manuscripts and paintings of South-east Asia*. London: Butterworth & Co. in association with The International Institute for Conservation of Historic and Artistic Works.
- Alois K. Diethelm AG, Lascaux Farbenfabrik. Lascaux water-soluble acrylic adhesives 360 HV, 498 HV, 498-20X. Alois K. Diethelm AG, Lascaux Farbenfabrik. http://talasonline.com/photos/instructions/lascaux\_adhesives.pdf. Accessed June 7, 2011.
- Ames, M. M. 1992. *Cannibal tours and glass boxes: The anthropology of museums*. Vancouver: University of British Columbia Press.
- Applebaum, H. 1981. Royal blue, the culture of construction workers. New York: Holt, Rinehart, and Winston.
- Bayton, R. P. 2007. "A revision of Borassus L.(Arecaceae)." Kew Bulletin 62: 561-585.
- Bennett, D. H. 1980. "Malangi: The man who was forgotten before he was remembered." *Aboriginal History* 4: 42-47.
- Bloomfield, T. 2008. Pupuru te mahara preserving the memory: Working with Maori communities on preservation projects in Aotearoa, New Zealand. In ICOM-CC 15th Triennial Meeting preprints, New Delhi, India, 22-26 September 2008, 148.
- Bourgois, P. 2003. In search of respect: Selling crack in El Barrio. 2nd ed. Cambridge: Cambridge University Press.
- Bricker, F., T. Holcomb, and J. C. Dean. 1999. A Native American's thoughts on preservation and conservation of rock art. In *Images past, images present: The conservation and preservation of rock art*, ed. J. C. Dean. Tuscon, AZ: American Rock Art Research Association.
- Bright, Brenda. 1998. "'Heart like a car': Hispano/Chicano culture in northern New Mexico." *American Ethnologist* 25: 583-609.
- Brinkgreve, F. 1987. The cili and other female images in Bali. In *Indonesian women in focus: Past and present notions*, 135-151. Dordrecht, The Netherlands: Foris Publications Holland.
- . 1997. "Offerings to Durga and Pretiwi in Bali." *Asian Folklore Studies* 56: 227-251.
  . 2003. The art of rice in Balinese offerings. In *The art of rice: Spirit and sustenance in Asia*, ed. R. W. Hamilton, 321-338. Los Angeles: Fowler Museum of Cultural History.
- Brinkgreve, F., and D. J. Stuart-Fox. 1992. Offerings: The ritual art of Bali. Singapore: Select Books.
- Caple, C. 2000. History of conservation. In *Conservation skills: Judgment, method, and decision making*, 46-58. New York: Routledge.
- Chavez, L. 1998. *Shadowed lives: Undocumented immigrants in American society*. 2nd ed. Forth Worth: Harcourt Brace College Publishers.
- Clavir, M. 1996. "Reflections on changes in museums and the conservation of collections from indigenous peoples." Journal of the American Institute for Conservation 35: 99-107.
- ———. 2002a. "Heritage preservation: Museum conservation and First Nations perspectives." *Ethnologies* 24: 33-45.
- ———. 2002b. *Preserving what is valued: Museums, conservation, and First Nations*. Vancouver: University of British Columbia Press.

- Conservation Department S.M.A.K., Ghent. 2007. Preservation and presentation of installation art. May 30. http://www.inside-installations.org/research/detail.php?r\_id=659&ct=artist\_intent. Accessed October 3, 2010.
- Covarrubias, M. 1937. Island of Bali. London: Cassell and Company Limited.
- Crook, J. 2001. Guide to good practice: Artists' interviews. International Network for the Conservation of Contemporary Art. http://www.incca.org/files/pdf/resources/guide\_to\_good\_practice.pdf. Accessed April 5, 2010.
- Crowley, A. S. 1970. "Repair and conservation of palm-leaf manuscripts." Restaurator 1: 105-114.
- Davies, L., and J. Heuman. 2004. Meaning matters: Collaborating with contemporary artists. In Modern art, new museums: Contributions to the Bilbao Congress 13-17 September 2004, 30-33. London: The International Institute for Conservation of Historic and Artistic Works.
- Dean, J. F. 1999. "Conservation of palm-leaf manuscripts." Paper Conservation News 89: 10-11.
- Dignard, C. 2011. "ICOM-CC Working Group on Ethnographic Collections: Name change consultation results and analysis." *The Ethnographic Conservation Newsletter of the Working Group on Ethnographic Materials of the ICOM Committee for Conservation* 33: 2-14.
- Dobrzynski, J. H. 2011. "Honoring art, honoring artists." The New York Times, February 3, sec. Art & Design.
- Duckworth, W. D., H. H. Genoways, and C. L. Rose. 1993. *Preserving natural science collections: Chronicle of our environmental heritage*. Washington, D.C.: National Institute for the Conservation of Cultural Property.
- Eiseman, F. B. 1999. Ulat-ulatan: Traditional basketry in Bali. Bangkok, Thailand: White Lotus Press.
- Errington, S. 1998. *The death of authentic primitive art and other tales of progress*. Chicago and London: University of Chicago Press.
- Florian, M. L. E., D. P. Kronkright, and R. E. Norton. 1990. *The conservation of artifacts made from plant materials*. Marina del Rey, CA: Getty Conservation Institute.
- Fox, J. J. 1977. Harvest of the palm. Cambridge: Harvard University Press.
- Gupta, C. B. 1974. "Preservation of palm leaf manuscripts." Conservation of Cultural Property in India 7: 59-61.
- Hamilton, R. W. 2003. The goddess of rice. In *The art of rice: Spirit and sustenance in Asia*, ed. R. W. Hamilton, 255-270. Los Angeles: Fowler Museum of Cultural History.
  2010. Personal correspondence.
- Holm, B. 1974. The art of Willie Seaweed: A Kwakiutl master. In *The human mirror: Material and spatial images* of man, ed. M. Richardson, 59-90. Baton Rouge: Louisiana State University Press.
- Hooker, V. M. 1993. Culture and society in New Order Indonesia. Kuala Lumpur: Oxford University Press.
- Hummelen, I., and T. Scholte. 2004. Sharing knowledge for the conservation of contemporary art: Changing roles in a museum without walls? In *Modern art, new museums: Contributions to the Bilbao Congress 13-17 September 2004*, 208-212. London: The International Institute for Conservation of Historic and Artistic Works.

- Hummelen, I., N. Menke, D. Petovic, D. Sille, and T. Scholte. 1999. Towards a method for artists' interviews related to conservation problems of modern and contemporary art. In 12th triennial meeting, Lyon, 29 August-3 September 1999: Preprints, 1:312-317. London: James & James (Science Publishers) Ltd.
- Huys, F. A. 2000. "Methodology for the communication with artists." *International Network for the Conservation of Contemporary Art*. http://www.incca.org/artist-participation/296-huysarticlecommunicationwithartist. Accessed August 5, 2010.
- INCCA. International network for the conservation of contemporary art. http://www.incca.org/. Accessed March 26, 2010.
- Johnson, J. S. 2009. "Name change: Should the ICOM-CC Ethnographic Working Group change its name?" *The Ethnographic Conservation Newsletter of the Working Group on Ethnographic Materials of the ICOM Committee for Conservation* 30: 3-5.
- Johnson, J. S., S. Heald, K. McHugh, E. Brown, and M. Kaminitz. 2005. "Practical aspects of consultation with communities." *Journal of the American Institute for Conservation* 44: 203-215.
- Kaminitz, M. A., R. Kentta, and D. M. Bridges. 2005. Decisions on the restoration of a Trobriand yam storehouse: The "decision making model for the conservation and restoration of modern art" applied to an ethnographic object. In 14th Triennial Meeting, The Hague, 12-16 September 2005: Preprints, 120-126. London: James & James.
- Lang, J., A. Middleton, J. Ambers, and T. Higgins. 2005. Radiographic images. In *Radiography of cultural material*, 20-48. 2nd ed. Oxford; Burlington, Mass.: Elsevier/Butterworth Heinemann.
- Laurenson, P. 2001. "Developing strategies for the conservation of installations: Incorporating time-based media with reference to Gary Hill's 'Between Cinema and a Hard Place'." *Journal of the American Institute for Conservation* 40: 259-266.
- \_\_\_\_\_. 2010. Interviewing artists at the Tate Modern. Email correspondence. August 10.
- Levi-Strauss, C. 1963. Structural anthropology. Trans. C. Jacobson and B. G. Schoepf. New York: Basic Books.
- Macedo, R. 2006. "Contemporary art challenges to conservation." International Network for the Conservation of Contemporary Art. http://www.incca.org/resources/36-artists-participation/316-macedo-thesis-2006. Accessed October 2, 2010.
- Malinowski, B. 1950. Argonauts of the Western Pacific: An account of native enterprise and adventure in the archipelagoes of Melanesian New Guinea. New York: E. P. Dutton.
- McHugh, K. 2010. Email correspondence. December 2.
- Middleton, A., and J. Lang. 2005. Radiography: Theory. In *Radiography of cultural material*, 1-19. 2nd ed. Oxford; Burlington, Mass.: Elsevier/Butterworth Heinemann.

Miner, Horace. 1956. "Body ritual among the Nacirema." American Anthropologist 58: 503-507.

- Moerdowo, R. 1973. Ceremonies in Bali. Jakarta: Bhratara Publishers.
- Moffett, D., S. Hornbeck, and S. Mellor. 2002. Common problems in archaeological and ethnographic conservation intersect with the contemporary: Case studies of two African objects. In *13th Triennial Meeting Rio de Janeiro*, 22-27 September 2002, 2:679-684. London: James & James (Science Publishers) Ltd.
- Museum of Fine Arts, Boston. 2008. Lascaux acrylic adhesive 360 HV. CAMEO: Conservation & art material encyclopedia online. http://cameo.mfa.org/materials/index.asp. Accessed July 7, 2011.

. 2009. GORE-TEX. *CAMEO: Conservation & art material encyclopedia online*. http://cameo.mfa.org/materials/index.asp. Accessed July 7, 2011.

- Netherlands Institute for Cultural Heritage/Foundation for the Conservation of Modern Art, Amsterdam. 1999. Concept scenario: Artists' interviews. http://www.sbmk.nl/uploads/concept-scenario.pdf. Accessed August 21, 2010.
- Odegaard, N. 1995. "Artists' intent: Material culture studies and conservation." *Journal of the American Institute for Conservation* 34: 187-193.
- Oxford Dictionaries. 2011. Ethnography. http://oxforddictionaries.com/definition/ethnography?region=us. Accessed August 20, 2011.
- Peabody Museum of Archaeology and Ethnology. 2009. Heads and tales: Adornments from Africa. http://www.peabody.harvard.edu/node/546. Accessed May 28, 2011.
- Perumal, P. 2004. Conservation of palmleaf manuscripts. In *Studies in art and archaeological conservation*, 1-8. Delhi: Agam Kala Prakashan.
- Pilcher, W. W. 1978. The Portland longshoremen: A dispersed urban community. In Urban anthropology in the United States: Four cases: Chicano prisoners, Black families in Chicago, Portland longshoremen, Fun city, ed. G. Spindler and L. Spindler, 271-404. New York: Holt, Rinehart, and Winston.
- Price, S. 2001. Primitive art in civilized places. 2nd ed. Chicago and London: University of Chicago Press.
- Pullen, D., B. Otterbeck, and P. Laurenson. 2005. Electronic media: Rethinking the conservator's role. In Modern art: Who cares?: An interdisciplinary research project and an international symposium on the conservation of modern and contemporary art, ed. I. Hummelen and D. Sille, 300-307. London: Archetype.
- Ramseyer, U. 1986. The art and culture of Bali. Singapore: Oxford University Press.
- Ricklefs, M. C. 1993. A history of modern Indonesia since c. 1300. 2nd ed. Standford: Stanford University Press.
- Roberts, L. 2010. "Exhibit features weavers' stories." University of California, Los Angeles Daily Bruin, August 26, sec. Arts and Entertainment. http://www.dailybruin.com/index.php/article/2010/08/exhibit\_features\_weavers\_stories. Accessed February 20, 2011.
- Rosenberger, C. 2010. Artist interviews at the Center for the Technical Study of Modern Art, Harvard Art Museum. Phone Conversation. August 10.
- Sah, A. 2002. "Palm leaf manuscripts of the world: Material, technology and conservation." *Reviews in Conservation* 3: 15-24.
- Said, E. W. 1985. Orientalism. Harmondsworth: Penguin.
- Sastrapradja, S. 1987. *Palms of Indonesia: The English translation of Palem Indonesia*. Queensland, Australia: Palm and Cycad Society of Australia.
- Schneider, A., and C. Wright. 2006. The challenge of practice. In *Contemporary art and anthropology*, 1-29. Oxford; New York: Berg.

- Sille, D. 2005. Introduction to the project. In Modern art: Who cares?: An interdisciplinary research project and an international symposium on the conservation of modern and contemporary art, ed. I. Hummelen and D. Sille, 14-19. London: Archetype.
- Smithsonian National Museum of Natural History. 2010. Search NMNH collections. http://collections.nmnh.si.edu/search/anth/. Accessed June 9, 2011.
- Spradley, J. P., and M. A. Rynkiewich. 1975. The Nacirema: A neglected culture. In *The Nacirema: Readings on American culture*, 1-5. Boston and Toronto: Little, Brown and Company.
- van Straaten, E. 2005. Foreward. In Modern art: Who cares?: An interdisciplinary research project and an international symposium on the conservation of modern and contemporary art, ed. I. Hummelen and D. Sille, 8. London: Archetype.
- Stuart-Fox, D. J. 1974. The art of the Balinese offering. Yogyakarta: Penerbitan Yayasan Kanisius.

Tate Modern. 2009. Tate research: Interviews with artists.

http://www.tate.org.uk/research/tateresearch/majorprojects/interviews.htm. Accessed April 5, 2010. \_\_\_\_\_\_. 2010. Artist interviews at Tate. August 10.

- Timms, P. 2004. What's Wrong with Contemporary Art? Sydney: University of South Wales Press Ltd.
- Tomlinson, P. B. 1960. "Seedling leaves in palms and their morphological significance." *Journal of the Arnold Arboretum* 41: 414-428.

——. 1961. Anatomy of the monocotyledons: Palmae. Vol. 2. Oxford: Clarendon Press.

- UCLA Office of Human Research Protection Program. OHRPP: UCLA Office of Human Research Protection Program. http://ohrpp.research.ucla.edu/. Accessed August 27, 2011.
- Wharton, G. 2002. Conserving the Kamehameha I monument in Hawai'i: A case study in public conservation. In *13th Triennial Meeting, Rio de Janeiro, 22-27 September 2002: Preprints*, ed. R. Vontobel, 203-208. London: James & James.
- Wright, R. K. 1983. Anonymous attributions: A tribute to a mid-nineteenth century Haida Argillite pipe carver, the Master of the Long Fingers. In *The box of daylight: Northwest coast Indian art*, ed. B. Holm, 139-142. Seattle: Seattle Art Museum and University of Washington Press.