Bronfenbrenner's Ecological Systems Model and the Use of Imported Madras Cloth Among the Kalabari

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The father of a Kalabari newborn child in Nigeria ceremoniously delivers a piece of Indian madras cloth to the mother of the child to carry it. This personal emblem of entry into society also marks the individual's departure from life when family mourners dress the corpse for burial. We assess the significance of Kalabari involvement with a material culture item, Indian madras cloth, by placing it in the context of an ecological systems model first outlined and later revised by Urie Bronfenbrenner. Bronfenbrenner's model provides a framework for understanding the significance of material items in the life of a people. Our application of the study of a textile demonstrates the usefulness of the model. We also recommend that the model be extended because individuals in any cultural group exist within a global context of production and trade.

Injiri [Indian madras] holds a special place in Kalabari life as a symbol of a person's journey from the womb to the vault of family and community, then out into the embrace of the world beyond this life—which the Kalabari usually consider to be benign, if not inviting, and certainly not a void or unknown. The opening scene in the drama of life includes a piece of injiri that is ceremoniously delivered to the mother by the father of a newborn child, "for carrying it." This personal emblem of entry into society for that child also becomes the cloth marking his [sic] departure the moment he [sic] arrives at the house as a corpse. (Eicher & Erekosima, 1987, p. 44)

In this article we describe and analyze the use of Indian madras cloth in the life course of the Kalabari of Nigeria by drawing on an ecological systems model developed by Urie Bronfenbrenner (1979, 1989). Bronfenbrenner combines a concern for the development of an

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individual over time in interaction with four ecological systems designated as microsystem, mesosystem, exosystem, and macrosystem.¹ He emphasizes a complex web of interconnecting systems in which the individual participates through the life course, interacting with other individuals and sociocultural systems directly or indirectly. The Bronfenbrenner model is a model of social structure that we believe is valuable for assessing the relative significance of various items of material culture within a society. Although his model was developed to analyze child development, we expand the use of his model beyond an individual to a larger ecological system, that of the Kalabari. By focusing on a textile that has significant use and meaning from birth through death, we see that Bronfenbrenner's model helps to understand the interconnecting systems of Kalabari life.

BRIEF DESCRIPTION OF SETTING

The Kalabari people of Nigeria, one of four eastern delta peoples (Kalabari, Nembe, Okrika, and Ibani) live on islands in the equatorial mangrove swamps of the Niger river (see Figure 1.) Although generally classified in Nigeria as members of the Ijo ethnic group, they call themselves Kalabari, consciously marking a distinctive historical identity that sets them apart from other Ijo. They settled on the island of Elem Ama (also referred to as New Calabar or Old Shipping) around 1000 AD, but overcrowding and both internal and external conflict prompted their migration to other islands in the 1880s, where they have remained.

According to both written and oral history, the Niger delta city-states of the Kalabari and their neighbors have a long, esteemed history in trade with many Africans and non-Africans over several hundred years (Alagoa, 1970, 1972; Barbot, 1746; Dike, 1956/1962; Horton, 1960, 1962, 1969; Jones, 1963; Talbot, 1926, 1932). Their commercial negotiations with Europeans, who came by sea, started with the Portuguese in the 1400s, who sailed round the bulge of West Africa, and continue into the 20th century. Foreign travelers, missionaries, and merchants brought textiles via Europe and England, some of which were manufactured in India (Vogt, 1975).

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Figure 1: Map of Africa showing location of the Kalabari area within Nigeria.
 SOURCE: Courtesy of M. Catherine Daly (1984, p. 26). Reprinted with permission. Map drawn by S. Ruud.

One cloth of particular significance to the Kalabari for perhaps several hundred years is a handwoven cotton of plaid or checked design from India that has various names on various continents: RMH or RMHK in India, Indian madras in the United States and England, *george* in southern Nigeria, and *injiri* or real india among the Kalabari. Throughout this article, we use the term *madras*.² Because every Kalabari individual owns at least one wrapper of madras and family trunks contain madras from deceased ancestors for continued use at celebrations, thousands of yards of madras constitute a significant part of the Kalabari material environment. Their environment ex-

tends, by virtue of Kalabari trade history, past the boundaries of the African shores and into the Indian subcontinent.³

In the 1990s, European intermediaries no longer provide the link between India and Africa for acquisition of madras. West African traders began to import directly from India in the late 1970s, when trade embargoes imposed in Nigeria made the trade of madras via England unprofitable for English companies (Eicher, 1988; Evenson, 1991, 1994). Some Nigerian importers travel to the Indian subcontinent; others obtain their goods by smuggling them across the border from Benin. Bronfenbrenner's model helps us understand why this cloth is so important to the Kalabari, an importance that encourages entrepreneurs to risk being caught for illegal transport of goods across national boundaries and ensures that customers will pay premium prices for these otherwise inexpensive fabrics.

SIGNIFICANCE OF MADRAS CLOTH AND ITS RELATIONSHIP TO BRONFENBRENNER'S MODEL

In the early 1900s, Talbot (1932), a colonial officer assigned to the southern Nigerian territory, noted the significance of madras in Kalabari life. He believed the Portuguese brought it into the area where it was adopted by chiefs for their dress.

[Madras] which was first introduced to these regions by the Portuguese, was for many years the finest material obtainable and therefore became the dress of Kalabari chiefs and is still worn on ceremonial occasions. It is also often used to screen juju and sacred images. Such pieces of cloths are family heirlooms, and the older they are, the more valuable they become. As much as £4 is often paid for one, though save for their sentimental value, it is difficult to understand why these old cloths should be rated as much more highly than the modern ones, only slightly coarser in texture and of almost identical patterns—a kind of check or plaid which may be purchased for as many shillings as these cost pounds. Yet, when the property of a late Abonnema chief was being divided out in 1916, the thing which his successor was anxious to obtain above all others was a piece of [madras] . . . discolored by age. So soon as this was taken from the box he stood up and said: "I should like to have that piece for my share of the house property, because it is the one with which I covered the faces of my ancestors at the Nduein Alali [ancestor screen]. (Talbot, 1932, p. 279)

Talbot's (1932) observation has been confirmed by a systematic program of research and analysis of the use of madras and other

imported textiles in Kalabari everyday and ceremonial life as listed in the appendix. Each aspect of the research reveals significant use of madras by Kalabari men and women throughout the life course.⁴

Bronfenbrenner's analysis regarding change can be clearly illustrated in the Kalabari use of madras. For Bronfenbrenner (1989), time and environment emerge as important aspects that must be analyzed together with the person to understand human development. He reports that his research focuses "on developmental changes triggered by life events or experiences that may originate in the external environment or within the organism" (p. 201). He cites the birth of a sibling as a change in the external environment of a person and the onset of puberty as an example of change within the person. "Whatever their origin, the critical feature of such events is that they alter the existing relation between person and environment, thus creating a dynamic that may instigate developmental change" (p. 201).

Specifically, Bronfenbrenner's (1989) four concepts of microsystem, mesosystem, exosystem, and macrosystem capture the complexity of the ecological system within which individuals develop from birth through adulthood to death. Madras, as the most significant textile used in Kalabari life, illustrates his concepts. Application of Bronfenbrenner's model to Kalabari use of madras cloth requires information on use of the cloth. Data must include answers to the following questions: (a) How is the cloth used? (b) Who uses it? (c) How does use affect the life course of the individual? and (d) What social relations connect the several individuals interacting during the occasion? We quote from Bronfenbrenner in regard to each of the four systems, followed by Kalabari examples.

Microsystem

A microsystem is a pattern of activities, roles, and interpersonal relations experienced by [the] developing person in a given face-to-face setting with particular physical and material features, and containing other persons with distinctive characteristics of temperament, personality, and systems of belief. (Bronfenbrenner, 1989, p. 227)

With the birth of her first child, the Kalabari mother has completed the stages of becoming a woman, which are known in Kalabari as *iria*. The *iria* process celebrates the period of transition in the female life course from late childhood through childbirth (Daly, 1984; Iyalla, 1968). The last stage of this process, *iyi-iria*, literally means "seclusion after the delivery of a child," which serves to safeguard the health of

the mother and the baby throughout the postnatal period. Not every woman becomes an *iriabo* (a woman who is secluded after childbirth) because it is an expensive and time-consuming process (Petgrave, 1992, p. 66). For women who choose seclusion, female family members give her and her baby special care and attention. After ritually bathing and massaging the new mother twice a day, her relatives dress her in a special type of madras prescribed for wear during the restorative seclusion period. The madras is called *torusima* (which literally means to spoil, disfigure, disguise, or deface a surface). The fabric is usually a pale yellow, tan, or rust plaid madras, sometimes discolored with age⁵ (Petgrave, 1992, p. 67). At the end of the seclusion period, "[she] is expected to dress in more colorful madras to show off her lovely skin" (Petgrave, 1992, p. 68). Thus, the most important person with whom the child first interacts is constantly dressed in madras during the first few months after birth.

The newborn child, too, is touched by madras when the cloth is placed within the baby carrier in which the newborn sleeps and is moved about (see Figure 2). To our knowledge, no formal activities take place when women, who help the mother care for the baby, place the madras inside the baby carrier before the baby is laid on it. Thereafter, whenever a cloth of madras surrounds the individual at any age, its wearing or use indicates identification as Kalabari. In all subsequent microsystem events, the child, and later adult, can and will wear madras both for informal and formal wear. Each such event, irrespective of broader linkages, constitutes a microsystem event for each Kalabari wearer of madras. This use of madras for important purposes is taken for granted by the Kalabari.

Mesosystem

The *mesosystem* comprises the linkages and processes taking place between two or more settings containing the developing person (e.g., the relations between home and school, school and work place, etc.). In other words, a mesosystem is a system of microsystems. (Bronfenbrenner, 1989, p. 227)

The naming ceremony, in contrast to the use of madras for the baby after birth, forms mesosystem linkages in a semiformal event. Family and friends gather with the mother, father, and child. Gifts of cash are given to the mother; family members and intimate friends bestow a variety of names on the child. Only the father gives a gift of madras. The father becomes central when he presents Indian madras to the

Figure 2: A piece of madras cloth surrounds a newborn in its carrier.

NOTE: Photo by Joanne B. Eicher.

mother for the baby at the naming ceremony. The ceremonial interaction makes visible a significant mesosystem linkage; the newborn baby is identified and recognized by its two parents and the Kalabari community. At this time, the father formally assigns a name, which he has chosen with great consideration.

The 2-yard piece of madras given to the baby at the naming ceremony serves the purpose of socializing the baby into the family. The specific length used also makes the presentation significant. A 2-yard piece ordinarily remains when 6 yards are cut from an 8-yard piece to make a woman's "up-and-down" wrapper set, which consists of two pieces, a bottom wrapper reaching from waist to ankle and a

top one placed over it that reaches from the waist to below the knee. These 2-yard pieces are stored away in family cloth boxes to be used later in several ways: as head ties for women's specific ensembles, as wrappers reserved for use by male members of the family, or as gift items when female members of the family choose the cloth for the father to present to the newborn baby. In the last case, the cloth becomes the center of a triangular social process involving a woman, a man, and their child. The meaning given the cloth differs among the three, as the meaning changes with the social identity of the owner. The gift of madras declares that the child is Kalabari, born of the union between the mother and the man declaring himself as the father at the ceremony (Petgrave, 1992, p. 63).

As the cloth is given, the baby becomes formally incorporated into the family. Sometimes, the 2-yard piece of Indian madras is a named pattern, which means that it has been identified with a particular family and now carries the name of the first trader who brought it into the community (Petgrave, 1992, p. 54). When the cloth is thus named, the process symbolically announces that the baby shares a culturally recognized bond not only with the father but also with the ancestor who initially acquired the textile, the one after whom the textile is named. Often, a named madras is prized and valued most for presentation to a mother to carry the baby, because such cloth embodies family, lineage, or clan history. Madras used in this way, therefore, links the present microsystem and mesosystem of the child with past microsystems.

Thus, presentation of the madras associates the worth and value attached both to the cloth and to the child. The best material gift of the environment (this cloth) is offered to the best gift of nature (the child). According to one Kalabari informant,

The injiri [madras] cloth was the first cloth that came to Elem-Ama. It had high value. A child is the greatest thing a man can ever have, and materially speaking, the injiri is the greatest treasure a man can ever possess, at the early times. So, traditionally a man's happiness at the birth of a baby is measured by the presentation of a most cherished material gift—a piece of injiri—to the cherished child. This will be used to carry the baby, until much later when it will be removed and kept in the box, and brought out again at puberty for the child to wrap in. (Petgrave, 1992, p. 62)

The gift of madras to the baby marks a mesosystem linkage: Members of two lineages unite in the procreation of the child. The child, as a result, can claim rights to financial support vis-à-vis the father.

If at a later date, the father celebrates the most prestigious form of marriage, called *iya*, with the mother of his child by transferring property to her, his rights in the child increase. An *iya* ceremony includes a grand public celebration with the use of madras cloth. The prestige of the couple rises and the offspring gain more rights in the father's lineage. Thus, an *iya* marriage also constitutes a mesosystem event for their offspring and involves the presentation of madras from the husband to the wife.

Exosystem

The *exosystem* encompasses the linkage and processes taking place between two or more settings, at least one of which does not ordinarily contain the developing person, but in which events occur that influence processes within the immediate setting that does contain that person (e.g., for a child, the relation between the home and the parent's work place; for a parent, the relation between the school and the neighborhood group). (Bronfenbrenner, 1989, p. 227)

Toward the end of seclusion following the birth of a child, the new mother graduates from wearing the casual tan or faded madras to bright and cheerful patterns of red and indigo madras for everyday wear. Both the complete seclusion ensembles of tan and the transition ensembles of brighter colored cloth indicate the social and economic status of the woman's family, as well as her changing role from daughter and wife to parturient mother. The ability of the woman's family to provide the appropriate madras and the prescribed jewelry for the occasion documents the wealth of her family. A sense of wealth and associated pride mark the thanksgiving ceremonies for the families of both the father and the mother of the child, even where the families are relatively poor, as they stand together in support of the mother who brought the child, such a precious gift, to both the families.

The seclusion period is brought to a close with the ceremony of the new mother dressing up in special outfits to present herself to the community by parading to the homes of her own and her husband's relatives. The textiles used to dress the new mother are drawn from her family's cloth boxes (Daly, 1984, p. 96). Any mother going through *iria* parades through the community in a series of outfits. Her ensembles expose the legs and lower thighs of the woman, highlighting physical attributes culturally defined as sexually attractive and related to her role as a fecund member of the community at the child-bearing stage of her life.

For the final stage of presentation, the mother dresses in a gorgeous traditional outfit that identifies her as a mature woman (see Figures 3 and 4.) This ensemble features rich accessories and textiles on the outside, such as coral and gold jewelry and velvet and silk wrappers. However, a wrapper of madras is always worn underneath the outer wrapper to fill out the woman's middle and accentuate her fertility. If she is Christian, the mother parades to Sunday church services in her velvet or silk ensemble to give thanks for her safe delivery and for the sound health of her baby. On reaching the church, a piece of madras carried by her attendant is used to cover her legs and thighs when she sits in the church for the sake of propriety and modesty.⁶ Both Christian and non-Christian mothers return to their husbands' house and resume a normal pattern of activities after completing their presentation to the community.

The *iriabo* parading herself to the community illustrates an exosystem event vis-à-vis the newborn child. The child, though not put on parade with the mother, is identified and raised as a Kalabari. In addition, a Christian is brought under the umbrella of the educational and social services that the Christian community provides to its members.

Macrosystem

The *macrosystem* consists of the overarching pattern of microsystem, macrosystem, and exosystems characteristic of a given culture, subculture, or other broader social context, with particular reference to the developmentally instigative belief systems, resources, hazards, life styles, opportunity structures, life course options, and patterns of social interchange that are embedded in each of these systems. The macrosystem may be thought of as a societal blueprint for a particular culture, subculture, or other broader social context. (Bronfenbrenner, 1989, p. 228)

Madras is used extensively in a full week of funeral⁷ celebration events for a deceased elder and demonstrates macrosystem linkages. Madras ensembles on both the living and the dead differentiate gender and symbolize status. The wearing of specific ensembles that incorporate madras cloth also indicates the relationships of all members in the surrounding community to the deceased individual. Designation of relationships through wearing madras refers to both the living, the deceased, and the ancestors.

Figure 3: The new mother, arriving at the gate of the church, is elegantly dressed in a highly embellished hat, a blouse, a silk wrapper worn in the *irlabo* manner, and much gold and coral jewelry. Beneath this wrapper, she wears madras which shows at the waist. Her attendant carries a folded madras wrapper for the *irlabo* to cover her knees when she sits in church.

NOTE: Photo by Joanne B. Eicher.

Dressing the Corpse and Beds of State

Members of the family and community hope that the departed one, as an ancestor, will view the living with beneficence. To help ensure this, the deceased is sent off to join the ancestors amidst pomp, ceremony, and much madras cloth. The deceased may be dressed in madras with distinctions of gender and age observed. In life as in death, the madras gown called *ebu* is meant only for males of old age

Figure 4: The *irlabo*, in preparation for sitting in church, wraps a madras wrapper over the silk cloth and coral beads on her lower body to cover her thighs and legs for modesty.

NOTE: Photo by Joanne B. Eicher.

and high distinction⁸ (see Figure 5). This is paralleled by the use of dark indigo *pelete-bite*, cloth transformed through cutting and removal of threads in elaborate designs,⁹ for the decoration of the bed of state of a deceased female of old age and high distinction (Renne, 1985).

Although the madras cloth that first ushers the newborn child into Kalabari society may identify the family of the child's father, madras use associated with the corpse at funerals marks status achieved by the individual within the larger society. The differentiation that occurs at death is a function of the passage of time in the lifetime of the individual.

Figure 5: Dressed in a madras *ebun* gown, the deceased lies in his coffin, the sides of which have been opened to lie flat on the cloth-embellished bed of state.

NOTE: Photo by Joanne B. Eicher.

Madras adorns the walls and the bed of state in the innermost room where the deceased first lies in the home. Madras cloth, whether obtained years ago in the vigorous trading days of the Kalabari and kept with pride by members of the extended family or purchased recently by a family of new wealth, is essential to the successful and appropriate celebration of a funeral. The older types of madras, along with precious garments and accessories, are kept for family use in boxes stored in a special storage room by the eldest woman within an extended family.

Dressing the Mourners

Whether new or old, these pieces of madras will also be used to dress the family members of the deceased at events during the week of the funeral celebration. The cloth removed from the beds of state after the burial of the deceased will be worn by family mourners at subsequent events in the funeral celebration. Mourners from the larger community will also draw on the cloth boxes of their own families to dress for these events. Various ensembles of madras are considered appropriate for both male and female mourners of the deceased's family. *Pelete-bite*, particularly the dark-colored type, is often worn by immediate family members of the deceased for funeral celebration, indicative of the high esteem in which Kalabari hold this most valued form of Indian madras.

For example, *pelete-bite* is worn by female mourners on the 1st day of a funeral celebration of either a male or female elder as they escort the corpse from the mortuary to the family house. For this same event, male mourners from the immediate family usually dress in a long white shirt and a black or indigo madras wrapper. Wearing *pelete-bite* at funerals identifies the person as an immediate family member of the deceased (Renne, 1985), as such fabric in general emphasizes kinship ties (Erekosima, 1979). At funerals, the *pelete-bite* is equated and correlated to the funeral event, which transforms an earthly matter into a spiritual one. The wearing of black *pelete-bite* during funeral observances emphasizes the somberness of the occasion, whereas the variations of the type worn reflect the differences in economic status among extended family members (Renne, 1985).

On the last day of the funeral celebration week, a parade through the community is held. Mourners follow one after the other according to their relationship to the deceased. Dress is coordinated to communicate relationship to the deceased. All the women in the immediate family lead the parade dressed in bright red madras cloth. The male members of the immediate family wear a range of ensembles that may include madras wrappers.

The multiple acts of lending, borrowing, using, wearing, returning, and storing the madras cloth, which accompany preparation of the viewing rooms and beds of state and dressing the corpse and mourners, activate a multitude of interconnecting social relationships in a grand week of bustle and celebration. The events comprising a funeral celebration offer opportunities to illustrate an individual's place within the Kalabari ecological system. The funeral celebrations make

visible, through the use of madras and other imported cloths, many of the important social structures of Kalabari society.

EXTENDING THE BRONFENBRENNER MODEL

Though initially developed to understand child development, Bronfenbrenner's ecosystem model is also a valuable tool for assessing the significance of an item of material culture to a society. The preceding analysis demonstrates that Kalabari use of madras cloth celebrates and affirms links within a complex web of social relations. These links connect the Kalabari individual to persons in their immediate sphere of social interaction, as well as to Kalabari persons outside this sphere. The wearing of madras at funerals serves as part of a blueprint of the Kalabari social world, as viewed from the perspective of the deceased individual at the celebration of his or her funeral.

Bronfenbrenner's model helps construct a complex picture of human sociocultural life that illuminates the importance of madras to the Kalabari people. Madras cloth also connects individuals to persons in Kalabari society with whom they have little or no face-to-face contact, as each Kalabari recognizes other Kalabari wearing madras. Named madras cloths connect Kalabari individuals to their ancestors in the historic past and to the generations that will follow them in the family in the future. Ultimately, use of madras connects Kalabari individuals to overarching cultural beliefs and the Kalabari world view.

We propose that Bronfenbrenner's model may serve admirably in a wider range of academic studies. In particular, the study of items of material culture in their social context of use may benefit from the application of his model to their analysis. Tracing the use of a material item through an idealized and unvarying list of life course rituals is unidimensional. The ecological model, in contrast, aids in the discovery of the role of material culture items in signifying, celebrating, or affirming complex connections between various arenas within the sociocultural life of a people. By using Bronfenbrenner's model to analyze textiles and other items of material culture and their use in other societies, we may uncover a set of interconnecting relationships that are otherwise obscure.

Our application of the Bronfenbrenner model to the study of a textile contributes to an understanding and further extension of the

model. The study of material culture artifacts links present microsystems of the individual to settings of earlier and future ages in which the individual has no direct (i.e., face-to-face) participation. Because the madras cloth is handed down through the family across generations, material culture items remain from one generation to the next and link contemporary microsystems to those of the past, extending mesosystem and exosystem linkages forward and backward in time.

Madras, used throughout the life course of a Kalabari individual, ties any one Kalabari to another and is so critical in the structure of relationships among Kalabari people that smuggling cloth and paying high prices have become common acts. Application of Bronfenbrenner's model to analysis of how the Kalabari use madras reveals the vital importance of the cloth to Kalabari society. By implication, the social relations connecting the Kalabari consumers of madras to Indian producers are also extremely vital to the Kalabari.

Recognition of exporter-importer links forces an extension of Bronfenbrenner's model, for he proposes that the macrosystem, synonymous with ethnic boundaries, is the highest network of social relations through which a Kalabari individual's life can be affected. To the contrary, trading networks supplying the valued cloth lie beyond the macrosystem, yet their failure can deprive an individual of those fabric symbols necessary to a successful living of Kalabari life. Our study of the use of madras by the Kalabari, therefore, requires the creation of another level within his ecosystem model—a level of global structural relations.

APPENDIX

Descriptions of Kalabari Life Course Events

Among the Kalabari, focus on children after the event of birth is minimal; childhood is treated as a period of preparation for becoming an adult. Emphasis in Kalabari life is on adulthood. The importance of being an adult is indicated by Kalabari language, which signifies the importance of being an adult by calling children either *erebotubo*, meaning little woman, or *oyibotubo*, meaning little man. This focus on adults was no doubt necessitated by the slave trade rivalries and threats of the 18th century.

Daly (1984), Iyalla (1968), and Petgrave (1992) analyzed the forms of dress associated with the stages of development, called *iria*, of a Kalabari female from early childhood into socially recognized adulthood, which is reached,

(continued)

APPENDIX Continued

ideally, after the birth of a woman's first child. Madras figures prominently throughout prenatal and postnatal observances and celebrations. Daly (1987) analyzes the additional appearance of *iriabo* (a woman who is secluded after childbirth) at funerals.

Madras is featured at the naming ceremony for a newborn when the father presents a piece of the cloth to the mother for carrying the child (Petgrave, 1992).

Erekosima (1989, 1991) analyzed the forms of dress associated with various status positions of males in Kalabari society; madras is worn as part of specified ensembles in every male status position. Michelman (1992) and Michelman and Eicher (1995) researched the dress of women's club members for club functions; matching madras wrappers have traditionally been selected by club women for dress at club functions or participation in events in the larger community.

Horton (1963, 1966) has described various aspects of Kalabari religious life, documenting in photographs, if not always in text, the use of madras cloth to dress members of the men's dance society, religious specialists, and lay participants in ceremonies. Eicher (1993, 1994), Eicher and Erekosima (1992), and Madume (1976) specifically researched the wearing of madras by men in the masquerade. Eicher (1989) reported on use of madras in dress specified for the chieftaincy.

Eicher and Erekosima (1987, 1989, 1996) and Erekosima (1989) reported the use of madras in the celebration of funerals to dress the corpse, the beds of state on which the corpse is laid, and mourners within the family and the community.

Petgrave (1992) organized the findings of the rich body of research on Kalabari dress to focus on the place of madras through the life course of the Kalabari. The social and historical background of the Kalabari has been summarized in Erekosima and Eicher (1981, 1994); Daly, Eicher, and Erekosima (1986); Eicher and Erekosima (1987, 1989, 1993); Erekosima (1989); and Petgrave (1992).

NOTES

1. Bronfenbrenner's work was influenced by that of Kurt Lewin (1935, p. 73), especially a formula that Bronfenbrenner reworked with t as the time at which a developmental outcome is observed and $t-p$ as the period or periods during which the joint forces from the person and the environment were operating to produce the outcome. The process producing developmental change is not instantaneous, but one that takes place over time and can change over time. This means that the processes that operate as an individual ages will not necessarily be the same as those that took place earlier (Bronfenbrenner, 1989, p. 190).

2. We use the word *madras* for a group of closely related cloths still woven in the 1990s in the states of Tamil Nadu and Andhra Pradesh, in southern India, for export. The names RMH and RMHK, or real madras handkerchief, were developed by Indian exporters to distinguish the Indian handloomed product from copies made in English textile mills. For further information on the history of these terms, see Evenson (1991, 1994). For a discussion of the names *george* and *injiri*, see Eicher and Erekosima (1996). Real india has been used by the Kalabari to characterize the product woven by hand in India and dyed with indigo, which has a distinct odor.

3. The Kalabari, as traders, had access to a wide variety of textiles from beyond their immediate communities. These included handwoven cotton textiles from the Igbo to their immediate north, from the Yoruba to their west, and from the Ewe in what is now Ghana. Trade textiles beyond Africa include printed woolens from England, silks, velvets, and heavy striped cottons from India, along with Indian madras. Although all of these textiles are used within specific contexts for Kalabari life events, only madras is used at all stages of the life course.

4. Petgrave (1992) synthesized and added to previous research on the use of madras in Kalabari life. She was raised and lived in Kalabari communities until 1989, when she began her graduate education in the United States. Her father's family, Bob-Manuel, comes from one of the four major groups on the Kalabari island of Abonnema and her paternal grandmother, Fanny Bob-Manuel, was prominent for being the first Western-educated Kalabari woman.

5. Older pieces of madras are highly esteemed and valued more than new pieces, even when faded and torn, because the age of the textiles indicates the family's long history of successful involvement in trade.

6. Women dressed in the *iria* ensemble also cover their legs with a madras wrapper when seated at non-Christian events for the same reason of modesty.

7. The significance of most Kalabari traditional cloths becomes more prominent at death as a result of two interpretations of death in the Kalabari cosmology as discussed by Horton (1970) and Eicher and Erekosima (1987, 1996).

8. The *ebu* is a cut-and-sewn gown constructed of madras cloth that is generally worn only by chiefs. An exception is made for male chief mourners who, though young, may wear this gown or others usually reserved for chiefs. Use of the *ebu* and chiefly attire to dress a chief mourner, whether young or old, is consistent with the purpose of distinguishing important male persons at public occasions. When the *ebu* ensemble is worn outside the funeral context by a nonchief, the wearer is levied a heavy fine by the council of chiefs or is stripped publicly (Erekosima, 1989).

9. The Kalabari practice a distinctive textile art form that they call *pelete-bite*, meaning cut-thread cloth. *Pelete-krukubite* is a specific, dark indigo, highly esteemed version of the generally esteemed *pelete-bite*. Out of a base cloth of madras or other checked cloth, Kalabari women select, cut, and pull threads to create a lace-like design in the cloth. For further description of the general significance, specific forms, and production of *pelete-bite*, see Eicher and Erekosima (1982) and Eicher, Erekosima, and Liedholm (1982).

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