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**From the Selected Works of David Lancy**

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# Children's work and apprenticeship

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## **CHILDREN'S WORK AND APPRENTICESHIP**

David F. Lancy

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### **INTRODUCTION**

Children appear to be predisposed to learn the skills of their elders, perhaps from a drive to become competent or from the need to be accepted or to fit in, or a combination of these. And elders, in turn, value children and expect them to strive to become useful—often at an early age. The earliest tasks are commonly referred to as chores. David Lancy's *The Anthropology of Childhood: Cherubs, Chattel, Changelings* (Lancy 2008, cited under Surveys), in surveying the relevant literature, advances the notion of a chore "curriculum." The author notes that the tasks that children undertake are often graduated in difficulty and complexity. These built-in levels, or steps, create a kind of curriculum that children can progress through, matching their growing physical and cognitive competence to ever more demanding subtasks. The anthropological literature on children's work is both extensive and elusive. That is because, with the exception of Spittler's *Hirtenarbeit: Die Welt der Kamelhirten und Ziegenhirtinnen* von Timia (Spittler 1998, cited under Animal Husbandry), there is not a single volume devoted exclusively to the subject and relatively few articles or chapters with work as the sole focus. In contrast, every ethnography of childhood and the family, as well as studies of subsistence systems, devotes some attention to the contributions of children and their "education" to the survival skills inherent to the culture. The same cannot be said for published material on the history of childhood, which, as yet, pays little attention to work. A distinction must be made between the chores assigned to children in the household and village and "child labor." See the Oxford Bibliographies Online article *Child Labor* for more information on that subject.

## Surveys and Anthologies

Lancy 2008 is an overview of the anthropology of childhood and includes a chapter on the subject of work and apprenticeship. Lancy 2010 discusses the processes involved in children's learning, including work skills. [Lancy 2012 offers the first broad survey of children's work](#). Zeller 1987 offers a brief survey of children's work in thirteen societies. [Spittler and Bourdillion's 2012 edited collection highlights recent work on children and work in Africa](#).

Lancy, David F. "His First Goat." In *The Anthropology of Childhood: Cherubs, Chattel, Changelings*. By David F. Lancy, 234–271. Cambridge, UK, and New York: Cambridge University Press, 2008.

This chapter synthesizes much of the ethnographic literature available. The book's website includes additional bibliographic entries.

Lancy, David F. "Learning 'From Nobody': The Limited Role of Teaching in Folk Models of Children's Development." *Childhood in the Past* 3.1 (2010): 79–106.

The focus of this article is on the processes involved in children's learning the skills for survival.

[Lancy, D.F. The chore curriculum. In \*African Children at Work: Working and Learning in Growing Up\*. Gerd Spittler and Michael Bourdillion \(Eds\). \(Pp 23-57\). Berlin: Lit Verlag. 2012](#)

[This chapter provides a theory \(the chore curriculum\) that accounts for the processes—psychological, ontological and cultural—underlying children's acquisition of subsistence and craft skills.](#)

[Spittler, Gerd and Bourdillion, Michael eds. \*African Children at Work: Working and Learning in Growing Up\*. Berlin: Lit Verlag. 2012](#)

[The first volume to collect studies of children's work, primarily in Africa. The main theme of the book is that children's work is also the pathway to knowledge and that it must be studied in cultural context. Exploitative forms of children's labor is discussed but is not the primary focus.](#)

Zeller, A. C. "A Role for Women in Hominid Evolution." *Man* 22.3 (1987): 528–557.

Cursory survey of children's work in thirteen societies. Available online for purchase or by subscription.

## PARENTAL ATTITUDES

Almost universally, adults expect children to assist in the household and domestic economy at the earliest possible age. In most cases, parental expectations and children's aspirations coincide. Children attend to the tasks that need doing and practice to improve efficiency. In some cases, children are rewarded for accepting the responsibility of mastering routine chores; more frequently, they are chastised or punished for laxity. Parents also expect children to learn either on their own or with the help of older siblings.

Harkness, et al. 2010 initiated the systematic study of parental views. Studies in Mexico, Mali, Sudan, Kenya, Uganda, Papua New Guinea, Oceania, and the Arctic (Sánchez 2007, Whittemore 1989, Weisner 1989, Evans-Pritchard 1956, Goldschmidt 1976, Barlow 2001, Howard 1970, Guemple 1979) provide a diverse sample of such theories in action.

Barlow, Kathleen. "Working Mothers and the Work of Culture in a Papua New Guinea Society." *Ethos* 29.1 (2001): 78–107.

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In contrast to Goldschmidt 1976, the people of the Murik Lakes emphasize the use of rewards and praise to encourage children to be diligent. Two areas are singled out for discussion: gathering freshwater clams and gardening.

Evans-Pritchard, E. E. *Nuer Religion*. Oxford: Clarendon, 1956.

Evans-Pritchard's classic ethnography pays a great deal of attention to childhood. The Nuer do not acknowledge a child until the child is at least six years old, because "when he tethers the cattle and herds the goats . . . when he cleans the byres and spreads the dung to dry and collects it and carries it to the fire," that child is considered a person (p. 146).

Goldschmidt, Walter. *Culture and Behavior of the Sebei: A Study in Continuity and Adaptation. Contribution to the Studies in Culture and Ecology*. Berkeley: University of California Press, 1976.

In the context of a more general ethnography, the author examines family life. Mothers are concerned that their daughters "learn proper housekeeping so that their husbands will not beat them for neglecting their duties, and so it will not be said that they failed to learn proper behavior from their mother" (p. 259).

Guemple, D. Lee. "Inuit Socialization: A Study of Children as Social Actors in an Eskimo Community." In *Childhood and Adolescence in Canada*. Edited by K. Ishwaran, 39–51. *Interdisciplinary Studies in Family and Marriage*. Toronto and New York: McGraw-Hill Ryerson, 1979.

Inuit children learn their culture—subsistence skills, particularly—without instruction by an adult. There "is remarkably little meddling by older people in this learning process. Parents do not presume to teach their children what they can as easily learn on their own" (p. 50).

Harkness, Sara, Charles M. Super, Moisés Ríos Bermúdez, et al. "Parental Ethnotheories of Children's Learning." In *The Anthropology of Learning in Childhood*. Edited by David F. Lancy, John Bock, and Suzanne Gaskins, 65–81. Walnut Creek, CA: AltaMira, 2010.

Harkness and Super initiated the study of parental ethnotheories and have, along with colleagues, made substantial contributions to the literature. The Kipsigis of western Kenya characterize an intelligent child (ng'om) as respectful, polite, and responsible; "a girl who is ng'om . . . sweeps the house because she knows it should be done. Then she washes dishes, looks for vegetables in the garden, and takes good care of the baby" (p. 67).

Howard, Alan. *Learning to Be Rotuman: Enculturation in the South Pacific*. *Anthropology and Education Series*. New York: Teachers College Press, 1970.

Commenting on the parent as teacher, the author asserts: "In contrast to American parents, who seem to feel that knowledge is something like medicine—it's good for the child and must be crammed down his throat even if he does not like it—Rotuman parents acted as if learning were inevitable because the child wants to learn" (p. 37).

Sánchez, Martha Areli Ramírez. "'Helping at Home': The Concept of Childhood and Work among the Nahuas of Tlaxcala, Mexico." In *Working to Be Someone: Child Focused Research and Practice with Working Children*. Edited by Beatrice Hungerland, Manfred Liebel, Brian Milne, and Anne Wihstutz, 87–95. London and Philadelphia: Jessica Kingsley, 2007.

Study closely parallel with Harkness, et al. 2010, among an Indian population in Mexico. In the village, all children (from the age of three) contribute to the family through work: "Work is something that is shared, that unites people and is dignifying" (p. 91).

Weisner, Thomas S. "Cultural and Universal Aspects of Social Support for Children: Evidence from the Abaluyia of Kenya." In *Children's Social Networks and Social Supports*. Edited by Deborah Belle, 70–90. Wiley Series on Personality Processes. New York: Wiley, 1989.

Weisner makes a widely applicable observation that, if children want someone older to pay attention and offer assistance, this is most likely to occur as they attempt to carry out a chore or assist in the fields (p. 176).

Whittemore, Robert Dunster. "Child Caregiving and Socialization to the Mandinka Way: Toward an Ethnography of Childhood." PhD diss., University of California, Los Angeles, 1989.

This is a very important study of infancy and early childhood that includes work as a matter of course: "As a young girl explains matter-of-factly, 'you must (work) for your elders. They will bless you.' Implicit in her statement is the acknowledgement of elders' authority over her. . . . She, in turn, exercises such authority . . . over children younger than she" (pp. 173–174).

### **Historical Perspectives**

The historical literature can be divided into two epochs: before c. 1950 (Shahar 1990, Mitterauer and Sieder 1984, Heywood 2001, Lassonde 2005) and after c. 1950 (Ochs and Izquierdo 2009, Bowes and Goodnow 1996, Rheingold 1982, Wihstutz 2007). In the earlier period, parental views closely paralleled the ethnotheories described in anthropology: children are expected to help out by doing chores from an early age. More recently, we see a role reversal, in which children are no longer expected to assist with household maintenance or the domestic economy, and children's chores are now undertaken by parents or hired help.

Bowes, Jennifer M., and Jacqueline J. Goodnow. "Work for Home, School, or Labor Force: The Nature and Sources of Changes in Understanding." *Psychological Bulletin* 119.2 (1996): 300–321.

In the modern middle/upper class, children no longer work. When queried, children treat "the term work as having one meaning only: waged work outside the home. Work is something that one 'goes to' and that is done in exchange for money" (p. 302). Available online for purchase.

Heywood, Colin. *A History of Childhood: Children and Childhood in the West from Medieval to Modern Times*. Cambridge, UK, and Malden, MA: Polity, 2001.

"As late as the nineteenth century, the majority of children . . . were . . . to begin supporting themselves at an early . . . age[;] 7 was an informal turning point when children were generally expected to start helping . . . with the little tasks around the home, the farm or workshop" (p. 37).

Lassonde, Stephen. *Learning to Forget: Schooling and Family Life in New Haven's Working Class, 1870–1940*. New Haven, CT: Yale University Press, 2005.

One study, among many, that documents the resistance to universal schooling, on the basis that children are lost to their parents as workers or wage earners.

Mitterauer, Michael, and Reinhard Sieder. *The European Family: Patriarchy to Partnership from the Middle Ages to the Present*. Translated by Karla Oosterveen and Manfred Hörzinger. Chicago: University of Chicago Press, 1984.

One carries away the message that, among peasants, the parent–child relationship was analogous to employer–employee. Emotional ties were weak, and the child's obligation to obey and assist the parent was stronger than the parent's obligation to nurture and bring up the child (p. 100).

Ochs, Elinor, and Carolina Izquierdo. "Responsibility in Childhood: Three Developmental Trajectories." *Ethos* 37.4 (2009): 391–413.

In dramatic contrast to the ethos of the village, this study describes chore assignments in middle-class American families. Here, parents struggle to get children to take responsibility for their own self-care, let alone care for the family and household. A common scenario shows the parent serving the child, valet-like or pleading with the child to cooperate in the completion of a chore. Available online for purchase or by subscription.

Rheingold, Harriet L. "Little Children's Participation in the Work of Adults, a Nascent Prosocial Behavior." *Child Development* 53.1 (1982): 114–125.

A laboratory study done in the United States that demonstrates the willingness and capability of children as young as eighteen months to help out and take on chores. Parents acknowledged, however, that they do not permit their young children to become involved in household maintenance. Available online for purchase or by subscription.

Shahar, Shulamith. *Childhood in the Middle Ages*. London and New York: Routledge, 1990.

Peasant children observe parents at work and help by running errands, tending animals, and harvesting food from a young age: "They acquired their various skills in the course of work beside adults and under their guidance" (p. 243).

Wihstutz, Anne. "The Significance of Care and Domestic Work to Children: A German Portrayal." In *Working to Be Someone: Child Focused Research and Practice with Working Children*. Edited by Beatrice Hungerland, Manfred Liebel, Brian Milne, and Anne Wihstutz, 77–86. London and Philadelphia: Jessica Kingsley, 2007.

Study of families in Germany. Middle-class German parents do not expect children to do household work, and the children do not volunteer. Contrast immigrant families: "With us Africans it is tradition that you help doing the shopping and the household chores. It means showing respect to your parents" (p. 82).

## **RUNNING ERRANDS AND MARKETING**

Often the very first chore assigned to children is to send them on errands. Delivering messages and presents (and bringing back gossip!) segues easily into marketing. The "errand" curriculum incorporates many "grades," from carrying messages (at age five); to fetching firewood and water; to marketing produce, hard bargaining, and making change for customers (by age eleven). Boys, whose virtue is less vulnerable, may be preferred over girls for many errands and as market stall operators. The articles highlighted provide a representative sample of cases in which children's errand running/marketing is described in detail. Locations cover Guatemala, Liberia, Cote d'Ivoire, Kenya, Venezuela, Tanzania, Ghana, Nigeria, and Mexico (Nerlove, et al. 1974; Lancy 1996; Gottlieb 2000; Wenger 1989; Ruddle and Chesterfield 1977; Raum 1997; Clark 1994; Schildkrout 2008; Paradise and Rogoff 2009).

Clark, Gracia. *Onions Are My Husband: Survival and Accumulation by West African Market Women*. Chicago: University of Chicago Press, 1994.

Children are not always merely pawns of those older; they may themselves "initiate . . . errand-running relationships in order to establish relationships with neighbors, more distant kin, or influential adults such as schoolteachers that may prove beneficial" (p. 367).

Gottlieb, Alma. "Luring Your Child into This Life: A Beng Path for Infant Care." In *A World of Babies: Imagined Childcare Guides for Seven Societies*. Edited by Judy S. DeLoache and Alma Gottlieb, 55–90. Cambridge, UK, and New York: Cambridge University Press, 2000.

The Beng make the point that it is best to establish the child's subservient status early: "Remember that in our language, one word for 'child' really means 'little slave.' As soon as the little one can walk confidently, don't hesitate to send your child on errands in your . . . neighborhood" (p. 87).

Lancy, David F. "Children's Work." In *Playing on the Mother-Ground: Cultural Routines for Children's Development*. By David F. Lancy, 144–162. Culture and Human Development. New York: Guilford, 1996.

This chapter describes children's work in a Kpelle village, with particular attention to errand running. Children are favored as mobile messengers and traders because adolescents or adults seen in close proximity to neighbors' houses might be suspected of adultery, theft, or witchcraft.

Nerlove, Sarah B., John M. Roberts, Robert E. Klein, Charles Yarbrough, and Jean-Pierre Habicht. "Natural Indicators of Cognitive Development: An Observational Study of Rural Guatemalan Children." *Ethos* 2.3 (1974): 265–295.

A good example of the curricular nature of chores. Available online for purchase or by subscription.

Paradise, Ruth, and Barbara Rogoff. "Side by Side: Learning by Observing and Pitching In." *Ethos* 37.1 (2009): 102–138.

Detailed description of a girl emulating her mother's behavior and learning the skills needed to market produce. Available online for purchase or by subscription.

Raum, Otto F. *Chaga Childhood: A Description of Indigenous Education in an East African Tribe*. Classics in African Anthropology. Hamburg, Germany: Lit, 1997.

Parents can be quite strategic in sending children to deliver food and presents to potential caretakers: "Children . . . take . . . cooked food to their grandparents. . . . One sees little troops of children carrying pots and moving hither and thither throughout the country. They are taking supplies to their relatives" (p. 197). Originally published in 1940 (Oxford: Oxford University Press).

Ruddle, Kenneth, and Ray Chesterfield. *Education for Traditional Food Procurement in the Orinoco Delta*. Ibero-Americana 53. Berkeley: University of California Press, 1977.

An illustrative case from South America: "Between eighteen and thirty months of age, depending on its physical ability, the child begins to act independently as a messenger. . . . Seven - or eight-year-olds fetch water in the morning, enough for the whole day. Each afternoon they must collect one day's supply of firewood" (p. 31).

Schildkrout, Enid. "Children's Roles: The Young Traders of Northern Nigeria." In *Conformity and Conflict: Readings in Cultural Anthropology*. 13th ed. Edited by James P. Spradley and David W. McCurdy, 221–228. Boston: Allyn & Bacon, 2008.

Because of restrictions on women appearing in public, children act as agents for their mothers in running errands and conducting marketing transactions.

Wenger, Martha. "Work, Play, and Social Relationships among Children in a Giriama Community." In *Children's Social Networks and Social Supports*. Edited by Deborah Belle, 91–115. Wiley Series on Personality Processes. New York: Wiley, 1989.

An ethnographic study of children's work, with an emphasis on the early years. Giriama mothers acknowledge that assigning chores, especially errands, conditions children to become good workers: "A mother who does not expect her children to help is remiss, even neglectful" (p. 93).

## CHILD CARE

Anthropologists had consistently observed that much of the care of the very young is in the hands of somewhat older siblings, but Weisner and Gallimore 1977 brought this truth to a broader audience. "Sib-care" has become an important part of the anthropology of childhood. Representative descriptions of sib-care are provided from Sulawesi, Mexico, Kenya, Papua New Guinea, the Marquesas, Afghanistan, Central Africa, and Burkina Faso (Broch 1990; Maynard and Tovote 2010; Harkness and Super 1991; Sorenson 1976; Martini and Kirkpatrick 1981; Casimir 2010; Ivey Henry, et al. 2005; Riesman 1992).

Broch, Harald Beyer. *Growing Up Agreeably: Bonerate Childhood Observed*. Honolulu: University of Hawaii Press, 1990.

In this excellent ethnography of childhood, Broch makes an observation that is frequently echoed in the literature: "Bonerate children have little need or desire to play with dolls or to play mother, father, and child because they are integrated into many daily household chores including looking after babies and toddlers" (p. 110).

Casimir, Michael J. *Growing Up in a Pastoral Society: Socialisation among Pashtu Nomads in Western Afghanistan*. Kölner ethnologische Beiträge 33. Cologne: Druck & Bindung, 2010.

Discusses the importance of sib-care in pastoralist society.

Harkness, Sara, and Charles M. Super. "East Africa." In *Children in Historical and Comparative Perspective: An International Handbook and Research Guide*. Edited by Joseph M. Hawes and N. Ray Hiner, 217–239. New York: Greenwood, 1991.

Among the Kipsigis of Kenya: "Child nurses are expected not only to carry the baby around, but also to play with it, sing lullabies to it, feed it porridge if the mother is unavailable, and help the baby in learning to talk and walk" (p. 227).

Ivey Henry, Paula, Gilda A. Morelli, and Edward Z. Tronick. "Child Caretakers among Efe Foragers of the Ituri Forest." In *Hunter-Gatherer Childhoods: Evolutionary, Developmental, and Cultural Perspectives*. Edited by Barry S. Hewlett and Michael E. Lamb, 191–213. New Brunswick, NJ: Aldine Transaction, 2005.

Sib-care in a forest-foraging society (p. 200).

Martini, Mary, and John Kirkpatrick. "Early Interaction in the Marquesas Islands." In *Culture and Early Interactions*. Edited by Tiffany M. Field, Anita M. Sostek, Peter Vietze, and P. Herbert Leiderman, 189–213. *Child Psychology*. Hillsdale, NJ: Lawrence Erlbaum, 1981.

The primary focus of the study is on sib-care and the role of the play-group in the lives of young Marquesans. Because Marquesan playgroups range further afield, unlike the Maya, the wishes and moods of young charges may be ignored.

Maynard, Ashley E., and Katrin E. Tovote. "Learning from Other Children." In *The Anthropology of Learning in Childhood*. Edited by David F. Lancy, John Bock, and Suzanne Gaskins, 181–205. Walnut Creek, CA: AltaMira, 2010.

Survey of children being cared for and learning from older siblings.



Riesman, Paul. *First Find Yourself a Good Mother: The Construction of Self in Two African Communities*. New Brunswick, NJ: Rutgers University Press, 1992.

In this study of child care, the author notes the importance of sib-care by girls as training for motherhood (p. 111).

Sorenson, E. Richard. *The Edge of the Forest: Land, Childhood, and Change in a New Guinea Protoagricultural Society*. Washington, DC: Smithsonian Institution, 1976.

This is a very thorough study of childhood in the Eastern Highlands and one of the few detailed descriptions of sib-care (pp. 180, 187).

Weisner, Thomas S., and Ronald Gallimore. "My Brother's Keeper: Child and Sibling Caretaking." *Current Anthropology* 18.2 (1977): 169–190.

Landmark study highlighting the importance of sib-care. Available online for purchase or by subscription.

## **FORAGING**

Foraging is a form of subsistence in which the community depends on wild resources, including trapped, fished, or hunted meat; edible and medicinal plants; and plant material, for shelter and clothing. In one of the earliest and most thorough studies of (Ju'Hoansi) foraging (hunting and gathering), the physical and intellectual challenges of successful foraging kept children at home in camp until they were into their teen years (Hames and Draper 2004). This first section focuses on children gathering plant material among the Hadza in Tanzania (Blurton-Jones, et al. 1997; Marlowe 2010), several groups in Botswana (Bock 2002), the Maya in Belize (Zarger and Stepp 2004), and the Bakkarwal of India (Rao 2006).

Blurton-Jones, Nicholas G., Kirsten Hawkes, and James F. O'Connell. "Why Do Hadza Children Forage?" In *Uniting Psychology and Biology: Integrative Perspectives on Human Development*. Edited by Nancy L. Segal, Glenn E. Weisfeld, and Carol C. Weisfeld, 279–313. Washington, DC: American Psychological Association, 1997.

In contrast to the Ju'Hoansi, Hadza children are able to acquire calories from gathering (baobab fruit) and hunting (small game) from as young as four.

Bock, John. "Learning, Life History, and Productivity: Children's Lives in the Okavango Delta, Botswana." *Human Nature* 13.2 (2002): 161–197.

Bock has done several quantitative studies to assess the productivity of children in differing subsistence systems.

Hames, Raymond, and Patricia Draper. "Women's Work, Child Care, and Helpers-at-the-Nest in a Hunter-Gatherer Society." *Human Nature* 15.4 (2004): 319–341.

Surveys literature showing that, in some foraging societies, children contribute little to subsistence (pp. 325, 334).

Marlowe, Frank W. *The Hadza: Hunter-Gatherers of Tanzania*. *Origins of Human Behavior and Culture* 3. Berkeley: University of California Press, 2010.

Although this work is quite broad, Marlowe's particular interest is childhood and foraging skills. The Hadza are noteworthy, especially among foragers, for the early onset of self-provisioning through foraging (pp. 153–158).

Rao, Aparna. "The Acquisition of Manners, Morals and Knowledge: Growing into and out of Bakkarwal Society." In *The Education of Nomadic Peoples: Current Issues, Future Prospects*. Edited by Caroline Dyer, 53–76. New York: Berghahn, 2006.

Discussion of children's acquiring ethnobotanical knowledge (p. 58).

Zarger, Rebecca K., and John R. Stepp. "Persistence of Botanical Knowledge among Tzeltal Maya Children." *Current Anthropology* 45.3 (2004): 413–418.

Reviews several studies demonstrating Mayan children's "precocity" in learning salient aspects of ethnobotany. That is, without instruction or even much encouragement by adults, children, foraging in groups, effectively identify and gather a range of useful plants. Available online for purchase or by subscription.

## Hunting

Hunting is perhaps the most challenging skill set for a child to acquire (MacDonald 2007). Detailed cases are provided here from Australia, Paraguay, Brazil, Borneo, and North America (Bird and Bird 2005, Hill and Hurtado 1996, Peters 1998, Puri 2005, Goodwin 1942).

Bird, Douglas W., and Rebecca Bliege Bird. "Martu Children's Hunting Strategies in the Western Desert, Australia." In *Hunter-Gatherer Childhoods: Evolutionary, Developmental, and Cultural Perspectives*. Edited by Barry S. Hewlett and Michael E. Lamb, 129–146. New Brunswick, NJ: Aldine Transaction, 2005.

Young Martu hunters acquire much of their own food, particularly by capturing goanna lizards (pp. 135, 142).

Goodwin, Grenville. *The Social Organization of the Western Apache*. University of Chicago Publications in Anthropology: Ethnological Series. Chicago: University of Chicago Press, 1942.

Description of the stages in becoming a competent hunter (p. 475).

Hill, Kim, and A. Magdalena Hurtado. *Ache Life History: The Ecology and Demography of a Foraging People*. Foundations of Human Behavior. New York: Aldine de Gruyter, 1996.

Children forage for edible fruits, larvae, and small animals from an early age, but usually within hearing of their mothers (p. 222). Boys play at hunting, but they will be well into their teens before they can reliably obtain game and into their twenties before reaching full competence (p. 223).

MacDonald, Katharine. "Cross-Cultural Comparison of Learning in Human Hunting: Implications for Life History Evolution." *Human Nature* 18.4 (2007): 386–402.

Quite comprehensive survey of the literature.

Peters, John F. *Life among the Yanomami: The Story of Change among the Xilixana on the Mucajai River in Brazil*. Peterborough, Canada: Broadview, 1998.

Learning to hunt (pp. 90–91).

Puri, Rajindra K. *Deadly Dances in the Bornean Rainforest: Hunting Knowledge of the Penan Benalui*. Verhandelingen van het Koninklijk Instituut voor Taal-, Land- en Volkenkunde 222. Leiden, The Netherlands: KITLV, 2005.

Some discussion of how children learn to hunt (pp. 233–236, 280, 282).

## Maritime Foraging

This area of the ethnographic record contains some of the most thorough studies of children's skill acquisition, including studies from the Torres Straits (Bird and Bird 2002a, Bird and Bird 2002b), Micronesia (Johannes 1991), Samoa (Odden and Rochat 2004), and Japan (Hill and Plath 1998).

Bird, Douglas W., and Rebecca Bliege Bird. "Children on the Reef: Slow Learning or Strategic Foraging?" *Human Nature* 13.2 (2002a): 269–297.

Study of children foraging on the reefs in the Torres Islands.

Bird, Rebecca Bliege, and Douglas W. Bird. "Constraints of Knowing or Constraints of Growing? Fishing and Collection by the Children of Mer." *Human Nature* 13.2 (2002b): 239–267.

This article delineates with great precision the development of marine foraging skills among children on Mer Island. Children learn the reef ecology and how to take advantage of it from a very young age and without any direct instruction. Six-year-olds are already quite proficient. Available online for purchase or by subscription.

Hill, Jacqueline F., and David W. Plath. "Moneyed Knowledge: How Women Become Commercial Shellfish Divers." Paper presented at a conference held in Pittsburgh, 22–25 April 1993. In *Learning in Likely Places: Varieties of Apprenticeship in Japan*. Edited by John Singleton, 211–225. *Learning in Doing: Social, Cognitive, and Computational Perspectives*. Cambridge, UK, and New York: Cambridge University Press, 1998.

Divers learn largely on their own; one mentions specifically being rebuffed as she attempted to attach herself to her mother as a novice. One can gather shellfish effectively after only a season or two; however, "[i]t takes at least a decade to absorb the full corpus of moneyed knowledge about the reef environment and its inhabitants" (p. 218).

Johannes, R. E. *Words of the Lagoon: Fishing and Marine Lore in the Palau District of Micronesia*. Berkeley: University of California Press, 1991.

The author describes in some detail the development of a fisher. Characteristically, boys are prevented from using costly tools (bone fishhooks, in this case) until they have reached a certain level of skill and maturity (pp. 88–89).

Odden, Harold, and Philippe Rochat. "Observational Learning and Enculturation." *Educational and Child Psychology* 21.2 (2004): 39–50.

Study of observational learning on Samoa in three areas, including learning to fish (p. 45). The authors found that children learned fishing through observation and practice, with no evidence of teaching by an adult.

### **ANIMAL HUSBANDRY**

Children are heavily involved in the care of livestock. Commonly, a child will be given a single, young animal as a kind of pet. Also, we see a graded curriculum, from a small, easily managed animal to a larger animal or flock. A representative sample of cases is provided from the Solomons, Papua New Guinea, Tanzania, Ghana, Niger, Malawi, and Sudan (Hogbin 1964, Whiting 1941, Raum 1997, Fortes 1970, Spittler 1998, Read 1960, Katz 2004).

Fortes, Meyer. "Social and Psychological Aspects of Education in Taleland." In *From Child to Adult: Studies in the Anthropology of Education*. Edited by John Middleton, 14–74. *American Museum Sourcebooks in Anthropology*. Garden City, NY: Natural History Press, 1970.

Fortes was one of the first anthropologists to view children's acquisition of adult skills and ideas as "education": "Every small Talensi boy of six to seven years and upwards has a passionate desire to own a hen" (p. 20). Originally published in 1938.

Hogbin, H. Ian. *A Guadalcanal Society: The Kaoka Speakers*. Case Studies in Cultural Anthropology. New York: Holt, Rinehart and Winston, 1964.

Young boys given a pig to care for (p. 39).

Katz, Cindi. *Growing Up Global: Economic Restructuring and Children's Everyday Lives*. Minneapolis: University of Minnesota Press, 2004.

Boys, particularly, are able to combine their duties as shepherd with vigorous play with friends: "Saddiq and Mohamed let the animals graze, joining two friends who had met them along the way to play shedduck, a game in which players hop holding one leg behind them, madly attempting to knock down their opponents while remaining standing" (p. 6).

Raum, Otto F. *Chaga Childhood: A Description of Indigenous Education in an East African Tribe*. Classics in African Anthropology. Hamburg, Germany: Lit, 1997.

Very thorough study of the "cattle curriculum." Originally published in 1940 (Oxford: Oxford University Press).

Read, Margaret. *Children of Their Fathers: Growing Up among the Ngani of Nyasaland*. New Haven, CT: Yale University Press, 1960.

A child-centered ethnography of the Ngoni, Bantu pastoralists. Ngoni boys work their way up from tending a goat, to a calf, to sheep, to a cow, to multiple cattle—all the while observing and discussing cattle with older brothers. The "cow curriculum" is quite extensive (p. 133).

Spittler, Gerd. *Hirtenarbeit: Die Welt der Kamelhirten und Ziegenhirtinnen von Timia*. Studien zur kulturkunde 111. Cologne: Rüdiger Köppe, 1998.

An extremely comprehensive study of children's work. Among the Touareg, girls and boys are responsible for the care of goats, and boys will transition to the more demanding care of camels. The long process of becoming a camel caravaner is described in precise detail, revealing the multistep character of the learning process.

Whiting, John W. M. *Becoming a Kwoma: Teaching and Learning in a New Guinea Tribe*. New Haven, CT: Yale University Press, 1941.

This is an early and extremely important ethnography of childhood. Boys are given a piglet to raise (p. 47).

## **AGRICULTURAL WORK**

Agriculture provides a wide variety of niches that can be exploited by children; hence, they can make a contribution from an early age, even if it is just picking up fruits that older, more experienced pickers have dropped. It is also true that most skills required are rudimentary and that productivity will improve reliably as the child matures physically. This section offers a sample of ethnographic descriptions of children engaged in agricultural work in Papua New Guinea (Lancy 1983, Sorenson 1976, Hogbin 1970, Whiting 1941, Fajans 1997), the Solomons (Watson-Gegeo and Gegeo 2001), and Mali (Polak 1993).

Fajans, Jane. *They Make Themselves: Work and Play among the Baining of Papua New Guinea*. Chicago: University of Chicago Press, 1997.

The Baining discourage play and, instead, direct children's attention to gardening (p. 92).

Hogbin, H. Ian. "A New Guinea Childhood: From Weaning Till the Eighth Year in Wogeo." In *From Child to Adult: Studies in the Anthropology of Education*. Edited by John Middleton, 134–162. American Museum Sourcebooks in Anthropology. Garden City, NY: Natural History Press, 1970.

The Wogeo are more proactive, assigning a garden plot to a three-year-old. Even though the child is still too young to be responsible, he or she is to learn a sense of ownership and responsibility for food production (pp. 139–140). Originally published in 1938.

Lancy, David F. *Cross-Cultural Studies in Cognition and Mathematics*. New York: Academic Press, 1983.

Like Fortes (see Fortes 1970, cited under Animal Husbandry), Lancy treats children's acquisition of adult skills in the village as analogous to education. In this multisite comparative study, he demonstrates the enormous cross-cultural variability in the complexity and length of this "indigenous education." The contrast between swidden horticultural societies in the Highlands and coastal maritime forager/traders is particularly dramatic (pp. 121–122).

Polak, Barbara. "Little Peasants: On the Importance of Reliability in Child Labour." In *Le travail en Afrique noire: Représentations et pratiques à l'époque contemporaine*. Edited by Hélène D'Almeida-Topor, Monique Lakroum, and Gerd Spittler, 125–136. Paris: Karthala, 1993.

The author describes Bamana children aged three, five, and eleven and their work in the bean fields. This very detailed ethnography illustrates the curricular, or developmental, character of children's work. We see how the nature of the task varies with the age and competence level of the child and how slightly older children serve as role models and guides for their younger siblings (pp. 129–132).

Sorenson, E. Richard. *The Edge of the Forest: Land, Childhood, and Change in a New Guinea Protoagricultural Society*. Washington, DC: Smithsonian Institution, 1976.

"Girls were not instructed in the art of gardening. Rather, while they were young, they began to play about the garden, often modeling their activities on those of their older associates. Eventually, this initially nonproductive (and, often, even destructive) activity began more and more to resemble the productive activity that sustained gardening as the basis of the Fore way of life" (p. 200).

Watson-Gegeo, Karen Ann, and David Welchman Gegeo. "'That's What Children Do': Perspectives on Work and Play in Kwara'ae." Paper presented at the 27th Annual Meeting of the Association for the Study of Play, San Diego, CA, 21–25 February 2001.

High population density has strained carrying capacity, so children are expected to "pay back" the resources they consume starting at three. A lengthy catalogue of child-appropriate chores is cross-referenced to the typical age of the child worker. An eleven-year-old girl is expected to be fully capable of managing both household and gardens.

Whiting, John W. M. *Becoming a Kwoma: Teaching and Learning in a New Guinea Tribe*. New Haven, CT: Yale University Press, 1941.

The Kwoma also set aside space for the child's garden (p. 46).

### **Economic Value**

Several careful quantitative studies have demonstrated that, by their mid-teens, children in agricultural societies actually "pay back" the resources their parents have invested in their care (Nag, et al. 1978,

Cain 1977, Reynolds 1991, Kramer 2002, Kramer 2005). These studies also explore the trade-offs between putting a child in school versus having them work in the garden (Skoufias 1994).

Cain, Meade T. "The Economic Activities of Children in a Village in Bangladesh." *Population and Development Review* 3.3 (1977): 201–227.

In this study from rural Bangladesh, the break-even point is twelve, and, by fifteen, children have produced more than they consumed in their first twelve years. Available online for purchase or by subscription.

Kramer, Karen L. "Variation in Juvenile Dependence: Helping Behavior among Maya Children." *Human Nature* 13.2 (2002): 299–325.

In a Mayan farming community, children begin working in agriculture at an early age at tasks requiring minimal preparation, and by fifteen (girls) or seventeen (boys), their contribution exceeds their cost (p. 312). Available online for purchase or by subscription.

Kramer, Karen L. *Maya Children: Helpers at the Farm*. Cambridge, MA: Harvard University Press, 2005.

Kramer and colleagues compare the Maya to South American forest foragers. Mayan children achieve net production about five years earlier, suggesting that foraging skills take longer to acquire (p. 135).

Nag, Moni, Benjamin N. F. White, and R. Creighton Peet. "An Anthropological Approach to the Study of the Economic Value of Children in Java and Nepal." *Current Anthropology* 19.2 (1978): 293–306.

Discusses the returns provided from investments in children. Quantitative data taken from studies in Nepal and Java. Available online for purchase or by subscription.

Reynolds, Pamela. *Dance, Civet Cat: Child Labour in the Zambezi Valley*. Athens, OH: Ohio University Press, 1991.

Comprehensive study including both quantitative analysis and ethnographic insights on children's work among the Tonga in the Zambezi Valley. Children's work consisted of child care and farming, primarily. The author also notes a wide disparity in leisure time by gender-favoring males.

Skoufias, Emmanuel. "Market Wages, Family Composition and the Time Allocation of Children in Agricultural Households." *Journal of Developmental Studies* 30.2 (1994): 335–360.

This study, like others in this section, measures trade-offs in the allocation of chores versus schooling. Girls are more likely to be working; boys are more likely to be in school. Families with greater resources are more likely to send boys and girls to school. Girls' work is primarily domestic, boys' agricultural.

## **HISTORICAL PERSPECTIVES**

Looking at the past, we see parallels between the historical and ethnographic records. Life for rural children throughout history has been entirely comparable to the village children studied by anthropologists. Occasionally, circumstances occur that alter the pattern, at least for a time. In the aftermath of warfare (and during the contemporary AIDS epidemic in Africa), the absence of men drives up children's participation in subsistence. In the settlement of the western United States, children "ramped up" their contribution to the domestic economy in response to the heightened labor demands of the frontier (West 1992).

West, Elliott. "Children on the Plains Frontier." In *Small Worlds: Children and Adolescents in America, 1850–1950*. Edited by Elliot West and Paula Petrik, 26–41. Lawrence: University Press of Kansas, 1992.

In the settlement of the western United States, children fulfilled many functions that, in the early 21st century, we would consider adult work: "Children, in fact, generally labored at a wider variety of tasks than either mothers or fathers. They were in that sense the most accomplished and versatile workers of the farming frontier" (p. 30).

## **GENDER**

This is one of the most thoroughly studied aspects of children's work. Several generalizations can be made: that children's work, like that of adults, is "gendered", that girls transition from play to work earlier than boys, and that, whereas girls typically work in the shadow of their mothers, boys' work takes them away from the household, keeping in the company of peers. In this section, three broad surveys are listed (Edwards 2005, Ember 1973, Blair 1992) as well as detailed case studies from Kenya (Wenger 1989), India (Nieuwenhuys 1994), Borneo (Nicolaisen 1988), North America (Schlegel 1973), and Mexico (Lipsett-Rivera 2002) and of Latin migrants to the United States (Orellana 2001).

Blair, Sampson Lee. "The Sex-Typing of Children's Household Labor: Parental Influence on Daughters' and Sons' Housework." *Youth and Society* 24.2 (1992): 178–203.

Modern evidence of sex typing in chore assignments. Available online for purchase or by subscription.

Edwards, Carolyn Pope. "Children's Play in Cross-Cultural Perspective: A New Look at the Six Culture Study." In *Play: An Interdisciplinary Synthesis*. Edited by F. F. McMahon, Donald E. Lytle, and Brian Sutton-Smith, 81–96. *Play and Culture Studies* 6. Lanham, MD: University Press of America, 2005.

From a field survey of twelve societies: "Boys spend relatively more of their time playing. These sex differences are seen from age three onwards" (p. 87).

Ember, Carol R. "Feminine Task Assignment and the Social Behavior of Boys." *Ethos* 1.4 (1973): 424–439.

"Sib-care" is preferentially carried out by sisters; boys contribute in the absence of a suitable female sibling.

Lipsett-Rivera, Sonya. "Model Children and Models for Children in Early Mexico." In *Minor Omissions: Children in Latin American History and Society*. Edited by Tobias Hecht, 52–71. *Living in Latin America*. Madison: University of Wisconsin Press, 2002.

"Midwives greeted a baby boy with war cries, separated him immediately from his mother to indicate his future as a warrior, and gave his umbilical cord to an experienced soldier for burial far from home. In the first weeks of the boy's life, priests pierced his lower lip to prepare him for the warrior's lip plug. . . . Gifts presented to newborns at their naming ceremony had symbolic importance: for girls, a broom and a spindle, for boys, weapons" (pp. 55–56).

Nicolaisen, Ida. "Concepts in Learning among the Punan Bah of Sarawak." In *Acquiring Culture: Cross-Cultural Studies in Child Development*. Edited by Gustav Jahoda and I. M. Lewis, 193–221. London and New York: Croom Helm, 1988.

"Children feel ashamed to engage in work of the other sex, and are often most particular about gender behaviors. My findings indicate that boys demonstrate this more passionately than girls" (p. 216).

Nieuwenhuys, Olga. *Children's Lifeworlds: Gender, Welfare and Labour in the Developing World*. London and New York: Routledge, 1994.

"Female tasks such as cooking and washing children's clothes cannot be performed by a male without incurring the risk of ridicule. . . . Male tasks such as receiving guests and visitors, asking for loans and searching for wage work outside the immediate vicinity of the home, conversely, cannot be performed by females without the entire family losing face" (p. 69).

Orellana, Marjorie Faulstich. "The Work Kids Do: Mexican and Central American Immigrant Children's Contributions to Households and Schools in California." *Harvard Educational Review* 71.3 (2001): 366–389.

As in the village, girls are useful to their families at an earlier age than boys.

Schlegel, Alice. "The Adolescent Socialization of the Hopi Girl." *Ethnology* 12.4 (1973): 449–462.

Discussion of work assignments and gender. Available online for purchase or by subscription.

Wenger, Martha. "Work, Play, and Social Relationships among Children in a Giriama Community." In *Children's Social Networks and Social Supports*. Edited by Deborah Belle, 91–115. Wiley Series on Personality Processes. New York: Wiley, 1989.

Discussion of boy's aversion to feminine chores (p. 100).

### **CRAFTS AND APPRENTICESHIP**

Unlike subsistence skills, the acquisition of craft skills, such as pottery and weaving, is not always universal. Not every child or even the majority are expected to learn a craft. Crafts are not viewed as strictly utilitarian. A certain power or aura is associated with mastery, and often there is a significant body of "lore" or magic attached to the craft. In many cases, the aspirant craftsperson must pay for the privilege of working in the shadow of an expert. Some crafts are perceived as relatively easy to master, whereas others require a lengthy apprenticeship. The novice must perform menial work for an extended period. Formal education in craftsmanship may lead to rigid replication of customary patterns, whereas more informal transmission may promote experimentation and innovation by the novice. However, learning crafts shares many attributes of the chore curriculum. Learners are expected to rely mostly on the observation and replication of skills rather than instruction. Punishment for "laziness" or incompetence is also more likely than praise. This section will examine children's work in the context of informal learning and should be read in conjunction with the article Education.

### **Surveys and Anthologies**

[The first comprehensive survey of apprenticeship in the ethnographic record has been recently published \(Lancy 2012\)](#). There have been three [earlier](#) attempts to review the literature on crafts and apprenticeship and to draw out generalizations (Lancy 1996, Lancy 2008, DeCoker 1998). Four anthologies exist, three dealing with anthropology (Coy 1989; Stark, et al. 2008; Singleton 1998) and one with history (De Munck, et al. 2007).

Coy, Michael W., ed. *Apprenticeship: From Theory to Method and Back Again*. SUNY Series in the Anthropology of Work. Albany: State University of New York Press, 1989.

A very wide-ranging set of papers, particularly strong in ethnographic descriptions of West African crafts.

DeCoker, Gary. "Seven Characteristics of a Traditional Japanese Approach to Learning." Paper presented at a conference held in Pittsburgh, 22–25 April 1993. In *Learning in Likely Places: Varieties of*



Apprenticeship in Japan. Edited by John Singleton, 68–84. *Learning in Doing: Social, Cognitive, and Computational Perspectives*. Cambridge, UK, and New York: Cambridge University Press, 1998.

At least five of the seven characteristics would be true of most apprenticeship models.

De Munck, Bert, Steven L. Kaplan, and Hugo Soly, eds. *Learning on the Shop Floor: Historical Perspectives on Apprenticeship*. *International Studies in Social History* 12. New York: Berghahn, 2007.

A range of cases from Europe, including silk weaving and purse making in 19th-century Vienna and cabinetmaking in 16th-century London.

Lancy, David F. "Apprenticeship and Bush School as Formal Education." *Playing on the Mother-Ground: Cultural Routines for Children's Development*. By David F. Lancy, 163–178. *Culture and Human Development*. New York: Guilford, 1996.

This chapter synthesizes much of the ethnographic literature available [at the time](#).

Lancy, David F. "His First Goat." *The Anthropology of Childhood: Cherubs, Chattel, Changelings*. By David F. Lancy, 234–271. Cambridge, UK, and New York: Cambridge University Press, 2008.

This chapter surveys, in separate sections, ethnographic studies of craft learning and the more formal apprenticeship. The book's website includes additional bibliographic entries.

[Lancy, D.F. "First You Must Master Pain:" The Nature and Purpose of Apprenticeship](#) *Society for the Anthropology of Work Review*. 33 (2): 113-126. 2012

[The review and analysis suggests that the pedagogy of the apprenticeship matches the informal pattern found in craft learning generally. What distinguishes the apprenticeship is the need to deal with sociological issues of social rank and wealth. There is a lengthy reference list.](#)

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Singleton, John, ed. *Learning in Likely Places: Varieties of Apprenticeship in Japan*. Papers presented at a conference held in Pittsburgh, 22–25 April 1993. *Learning in Doing: Social, Cognitive, and Computational Perspectives*. Cambridge, UK, and New York: Cambridge University Press, 1998.

This volume follows from an international conference Singleton organized at the University of Pittsburgh in 1993. Although originally focused on apprenticeship, the scope expanded to include other settings and situations in which cultural patterns interacted with human learning.

Stark, Miriam T., Brenda J. Bowser, and Lee Horne, eds. *Cultural Transmission and Material Culture: Breaking Down Boundaries*. Tucson: University of Arizona Press, 2008.

A fine collection of reports on the transmission of skills, particularly handicrafts. The primary method employed by the authors is ethnoarchaeology.

### Pottery

The literature on children learning pottery making is extremely diverse, ranging from archaeology (Crown 2002) to ethnoarchaeology (Bowser and Patton 2008) and to case studies in contemporary societies, including Japan (Singleton 1989), Niger (Gosselain 2008), Cameroon (Wallaert–Pêtre 2001, Wallaert 2008), Brazil (Silva 2008), [Côte d'Ivoire \(Köhler 2012\)](#) and Ecuador (Bowser and Patton 2008).

Bowser, Brenda J., and John Q. Patton. "Learning and Transmission of Pottery Style: Women's Life Histories and Communities of Practice in the Ecuadorian Amazon." In *Cultural Transmission and Material Culture: Breaking Down Boundaries*. Edited by Miriam T. Stark, Brenda J. Bowser, and Lee Horne, 105–129. Tucson: University of Arizona Press, 2008.

A particularly dynamic study in that the authors trace the pathway of knowledge transmission—mothers are the primary models but not the only ones—as well as the stages and outcomes; that is, they provide a great deal of insight into the process whereby young potters adopt novel styles.

Crown, Patricia L. "Learning and Teaching in the Prehispanic American Southwest." Paper presented at a symposium organized for the Society for American Archaeology, Philadelphia, April 2000. In *Children in the Prehistoric Puebloan Southwest*. Edited by Kathryn A. Kamp, 108–124. Salt Lake City: University of Utah Press, 2002.

Survey of pottery-making societies, with attention given to acquisition of the skill. In roughly half the sample, children learned without any explicit instruction. Second study examined ceramics in museum collections, using fingerprint marks and evidence of undeveloped craftsmanship to identify child-made pots; 70 percent showed no sign of adult involvement.

Gosselain, Olivier P. "Mother Bella Was Not a Bella: Inherited and Transformed Traditions in Southwestern Niger." In *Cultural Transmission and Material Culture: Breaking Down Boundaries*. Edited by Miriam T. Stark, Brenda J. Bowser, and Lee Horne, 150–177. Tucson: University of Arizona Press, 2008.

Excellent treatment of the issue of motivation and talent, a frequent subject during interviews. As in many other societies, the Bella take care not to waste time or materials on an unpromising pupil (p. 160).

[Köhler, Iris. 2012. Learning and Children's Work in a Pottery Making Environment in Northern Côte d'Ivoire. In: African Children at Work: Working and Learning in Growing Up. Edited by Gerd Spittler and Michael Bourdillion, 113–142. Berlin: Lit Verlag.](#)

[A wonderful study of informal acquisition of pottery making. Stresses the importance of the child's motivation and persistence.](#)

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Silva, Fabíola Andréa. "Ceramic Technology of the Asurini do Xingu, Brazil: An Ethnoarchaeological Study of Artifact Variability." *Journal of Archaeological Method and Theory* 15.3 (2008): 217–265.

Good explication of the "miniature" stage in craft acquisition, a common practice in which children are encouraged to assay miniature versions of the adult product (p. 235).

Singleton, John. "Japanese Folkcraft Pottery Apprenticeship: Cultural Patterns of an Educational Institution." In *Apprenticeship: From Theory to Method and Back Again*. Edited by Michael W. Coy, 13–30. SUNY Series in the Anthropology of Work. Albany: State University of New York Press, 1989.

An in-depth ethnographic study of traditional craft pottery apprenticeship in Japan: "One Japanese term for apprenticeship is *minari*, literally one who learns by observation" (p. 14).

Further: "When an apprentice presumes to ask the master a question, he will be asked why he has not been watching the potter at work, or the answer would be obvious" (p. 26).

Wallaert, Hélène. "The Way of the Potter's Mother: Apprenticeship Strategies among Dii Potters from Cameroon, West Africa." In *Cultural Transmission and Material Culture: Breaking Down Boundaries*. Edited by Miriam T. Stark, Brenda J. Bowser, and Lee Horne, 178–198. Tucson: University of Arizona Press, 2008.

A very complete breakdown of the developmental process, with age/task complexity levels carefully delineated (pp. 188–192).

Wallaert-Pêtre, Héléne. "Learning How to Make the Right Pots: Apprenticeship Strategies and Material Culture, a Case Study in Handmade Pottery from Cameroon." In Special Issue: Learning and Craft Production. Edited by C. Jill Minar and Patricia Crown. *Journal of Anthropological Research* 57.4 (2001): 471-493.

A very rare case in which daughters undergo a formal apprenticeship with their mothers. Characteristically the mother as "master" treats her novice daughter quite harshly. Available online for purchase or by subscription.

### **Blacksmithing**

The blacksmith studies (Coy 1989, McNaughton 1988, Lancy 1980, Obidi 1995) are all from Africa, largely because of the importance of the blacksmith as both craftsperson and ritual specialist.

Coy, Michael W. "Being What We Pretend to Be: The Usefulness of Apprenticeship as a Field Method." In *Apprenticeship: From Theory to Method and Back Again*. Edited by Michael W. Coy, 115-135. SUNY Series in the Anthropology of Work. Albany: State University of New York Press, 1989.

Coy describes the blacksmith apprenticeship in the village of Kuikui, in the Kerio Valley of Kenya. It is normal to pay for the privilege, and one does not apprentice to one's father. Direct instruction was rare, such as the smith's occasionally calling attention to something the apprentice was doing ("now this is the difficult part") or angrily berating him when he did something wrong (p. 120).

Lancy, David F. "Becoming a Blacksmith in Gbarngasuakwelle." *Anthropology and Education Quarterly* 11.4 (1980): 266-274.

Study of children incorporating their observations of the village blacksmith's compounds and forge into their make-believe play. Discussion of the blacksmith apprenticeship. Available online for purchase or by subscription.

McNaughton, Patrick R. *The Mande Blacksmiths: Knowledge, Power, and Art in West Africa. Traditional Arts of Africa*. Bloomington: Indiana University Press, 1988.

In West Africa the blacksmith is often also a shaman, so there is a division between the transparent metalworking skills of the smith and the opaque political, religious, and medical knowledge. The apprentice spends years doing uncomfortable menial work, such as operating the bellows. The master lets the novice learn by trial and error, rarely corrects, and almost never actively instructs.

Obidi, S. S. "Skill Acquisition through Indigenous Apprenticeship: A Case Study of the Yoruba Blacksmith in Nigeria." *Comparative Education* 31.3 (1995): 369-383.

Description of the process of becoming a blacksmith among the Yoruba.

### **Weaving/Textiles**

Weaving is a rich source of material for comparative purposes because there is literature from a broad cross section of societies, such as the Hausa (Deafenbaugh 1989), Tukolor (Dilley 1989), Navajo (Reichard 1997), Gonja (Goody 2006), and Telefol (MacKenzie 1991), and includes both male and female apprenticeship (Aronson 1989, Greenfield 2004) and learning arrangements ranging from formal (Tanon 1994) to informal (Bolin 2006).

Aronson, Lisa. "To Weave or Not to Weave: Apprenticeship Rules among the Akwete Igbo of Nigeria and the Baule of the Ivory Coast." In *Apprenticeship: From Theory to Method and Back Again*. Edited by

Michael W. Coy, 149–162. *SUNY Series in the Anthropology of Work*. Albany: State University of New York Press, 1989.

Weaving is women's work, and if men attempt to learn to weave, they'll be cursed with "impotency or death" (p. 151). Because all women are expected to learn to weave, "by age three, girls are seen playing at weaving on upturned stools in a way that indicates they have mastered the basic gestures" (p. 151).

Bolin, Inge. *Growing Up in a Culture of Respect: Child Rearing in Highland Peru*. Austin: University of Texas Press, 2006.

The author observed girls gradually "picking up" the skills of a weaver, without instruction (pp. 99–103).

Deafenbaugh, Linda. "Hausa Weaving: Surviving Amid the Paradoxes." In *Apprenticeship: From Theory to Method and Back Again*. Edited by Michael W. Coy, 163–179. *SUNY Series in the Anthropology of Work*. Albany: State University of New York Press, 1989.

This ethnography is particularly thorough in showing how the craft is broken down into components and the way in which the apprentice is restrained or encouraged to essay a new skill: "The structure of an apprenticeship is very rigid and conservative. The apprentice is not expected to innovate, alter, change, or improve on anything. He is to copy the master's techniques . . . exactly" (p. 173).

Dilley, R. M. "Secrets and Skills: Apprenticeship among Tukolor Weavers." In *Apprenticeship from Theory to Method and Back Again*. Edited by Michael W. Coy, 181–198. *SUNY Series in the Anthropology of Work*. Albany: State University of New York Press, 1989.

Boys initially play at weaving or play with lengths of cloth and then gradually begin helping with easy tasks, like bobbin winding. Fathers may "prefer that another weaver should train their sons after they have acquired some basic skills during childhood, since they feel that they will not exert enough discipline in training" (p. 188).

Goody, Ester N. "Dynamics of the Emergence of Sociocultural Institutional Practices." In *Technology, Literacy and the Evolution of Society: Implications of the Work of Jack Goody*. Edited by David R. Olson and Michael Cole, 241–264. Mahwah, NJ: Lawrence Erlbaum, 2006.

Gonja (Ghana) weavers do not learn from their fathers because sons are too familiar with their fathers to show sufficient respect and fathers are too attached to exert adequate discipline (p. 254).

Greenfield, Patricia Marks. *Weaving Generations Together: Evolving Creativity among the Maya of Chiapas*. Santa Fe, NM: School of American Research, 2004.

Comprehensive, fully illustrated account of a long-term study of skill acquisition in the village. A rare case in which the skill acquisition process is studied.

MacKenzie, Maureen Anne. *Androgynous Objects: String Bags and Gender in Central New Guinea*. *Studies in Anthropology and History* 2. Chur, Switzerland, and Philadelphia: Harwood Academic, 1991.

Extended coverage of process whereby a girl learns to create the ubiquitous bilum, or net bag (pp. 100–106). All girls are expected to learn to make the simpler kinds of bags through observing their mothers.

Reichard, Gladys A. *Spider Woman: A Story of Navajo Weavers and Chanters*. Albuquerque: University of New Mexico Press, 1997.

Discussion of aspirant novice weaver repulsed by her mother, yet persisting and becoming a competent weaver nonetheless (pp. 38–41). Originally published in 1934 (New York: Macmillan).

Tanon, Fabienne. *A Cultural View on Planning: The Case of Weaving in Ivory Coast*. Cross-Cultural Psychology Monographs 4. Tilburg, The Netherlands: Tilburg University Press, 1994.

An extremely thorough ethnography of males learning to weave.

### **Woodworking**

There are, unfortunately, only a few cases of youth learning woodworking from Venezuela (Wilbert 1976), Polynesia (Borofsky 1987), Micronesia (Gladwin 1970), and Amazonia (Chernela 2008).

Borofsky, Robert. *Making History: Pukapukan and Anthropological Constructions of Knowledge*. Cambridge, UK, and New York: Cambridge University Press, 1987.

Author makes the point that overt teaching by an expert implies an unwelcome status differential, so experts and learners must be discreet. Case discussed is canoe making and repair (pp. 74–75).

Chernela, Janet. "Translating Ideologies: Tangible Meaning and Spatial Politics in the Northwest Amazon of Brazil." In *Cultural Transmission and Material Culture: Breaking Down Boundaries*. Edited by Miriam T. Stark, Brenda J. Bowser, and Lee Horne, 130–149. Tucson: University of Arizona Press, 2008.

All males are expected to learn to make grater boards from their fathers, in part because of the object's great symbolic and exchange value.

Gladwin, Thomas. *East Is a Big Bird: Navigation and Logic on Puluwat Atoll*. Cambridge, MA: Harvard University Press, 1970.

The inhabitants of this remote atoll rely on large, oceanic outrigger vessels to travel great distances to other islands. Chapter 3 describes these canoes and the apprenticeship process that transmits knowledge of their construction to the next generation.

Wilbert, Johannes. "To Become a Maker of Canoes: An Essay in Warao Enculturation." In *Enculturation in Latin America: An Anthology*. Edited by Johannes Wilbert, 303–358. UCLA Latin American Studies 37. Los Angeles: University of California, 1976.

The canoe is essential to the Warao way of life, and every male is expected to become a canoe maker. Fathers pay attention to their sons' ripening skill but do not actively instruct, except at critical barriers in the learning process: "There is not much verbal instruction between father and son, but the father . . . does teach him how to overcome the pain in his wrist from working with the adze" (p. 323).

### **Priest or Shaman**

There is considerable variability in this category, ranging from traditional apprenticeship (Bledsoe and Robey 1986, Reichel-Dolmatoff 1976) to ordeals or other tests that reveal one's potential as a medium (Reynolds 1996, Katz 1981).

Bledsoe, Caroline H., and Kenneth M. Robey. "Arabic Literacy and Secrecy among the Mende of Sierra Leone." *Man* 21.2 (1986): 202–226.

Although the rewards of becoming literate in Arabic and an expert in the Qur'an and associated esoteric knowledge can be great, the majority of "students," or apprentices, never realize those benefits. The apprenticeship is freely described as "slavery" in which knowledge is only valued if acquired through much suffering. Available online for purchase or by subscription.

Katz, Richard. "Education as Transformation: Becoming a Healer among the !Kung and the Fijians." *Harvard Education Review* 51.1 (1981): 57–78.

Comparative study, but common to both cultures is the ability of the child to enter a trance or altered state of consciousness. Also notes that "long before people try seriously to become healers, they play at !kia-healing" (p. 62).

Reichel-Dolmatoff, Gerardo. "Training for the Priesthood among the Kogi of Columbia." In *Enculturation in Latin America: An Anthology*. Edited by Johannes Wilbert, 265–288. UCLA Latin American Studies 37. Los Angeles: University of California, 1976.

Kogi children are examined at birth for signs of their potential to become priests. The future priest receives a special education from birth and indeed is transferred to the home of the máma, who will become his mentor. The apprenticeship is long and grueling.

Reynolds, Pamela. *Traditional Healers and Childhood in Zimbabwe*. Athens, OH: Ohio University Press, 1996.

Becoming a healer is a long, gradual, and quite informal process. Children with some evident "gift" are attached to an older healer—often a grandparent—to shadow them as they collect and use medicinal plants.

### **Miscellaneous**

This last category includes some interesting apprenticeships that do not fit neatly elsewhere. These include learning to become a tailor (Lave 1990), minaret builder (Marchand 2001), book illustrator and scroll painter (Jordan 1998), long-distance navigator (Gladwin 1970), and traveling minstrel (Tang 2006).

Gladwin, Thomas. *East Is a Big Bird: Navigation and Logic on Puluwat Atoll*. Cambridge, MA: Harvard University Press, 1970.

The primary topic of this ethnography is the nature of long-distance navigation as a body of knowledge and skills and the process of becoming a navigator.

Jordan, Brenda G. "Education in the Kanō School in Nineteenth-Century Japan: Questions about the Copybook Method." Paper presented at a conference held in Pittsburgh, 22–25 April 1993. In *Learning in Likely Places: Varieties of Apprenticeship in Japan*. Edited by John Singleton, 45–67. *Learning in Doing: Social, Cognitive, and Computational Perspectives*. Cambridge, UK, and New York: Cambridge University Press, 1998.

The process is quite similar to other apprenticeships, with the addition of a "copybook": "When a student had practiced a model many times, he would make a clean copy and take it to the master for his evaluation. After receiving the teacher's permission, the student was then allowed to proceed to the next item. . . . In this way, the mohon (copybook) made up of teacher-approved copies was created" (p. 46).

Lave, Jean. "The Culture of Acquisition and the Practice of Understanding." In *Cultural Psychology: Essays on Comparative Human Development*. Edited by James W. Stigler, Richard A. Shweder, and Gilbert H. Herdt, 309–327. Cambridge, UK, and New York: Cambridge University Press, 1990.

An unusual contemporary case of a large-scale urban tailoring shop where novices become expert at the intricate tailoring and decoration inherent in West African clothing. The author contrasts the structure and atmosphere of the apprenticeship with that of the public school.

Marchand, Trevor H. J. *Minaret Building and Apprenticeship in Yemen*. Richmond, UK: Curzon, 2001. In this very thorough ethnography, the author identifies various trajectories among the apprentices. Many progress to a certain level but go no further. A very few continue to become master minaret builders (p. 120).

Tang, Patricia. "Telling Histories: Memory, Childhood, and the Construction of Modern Griot Identity." In *Musical Childhoods and the Cultures of Youth*. Edited by Susan Boynton and Roe-Min Kok, 105–120. Music/Culture. Middletown, CT: Wesleyan University Press, 2006.

The griot is a traveling minstrel—storyteller and musician. An aspiring griot must show great initiative and talent; for example, "Sabar drumming is never taught through formal lessons or apprenticeship, but rather is learned by observation and early exposure" (p. 108).

### **Historical Perspectives on Apprenticeship and Craft Learning**

Apprenticeship and craft learning have not attracted as much attention among historians as among anthropologists, but there is broad consistency across the ethnographic and historical records. In examining the historical record, we see that the apprenticeship involved considerable investment of resources by the apprentice and his or her family (Gies and Gies 1987), both in initial fees and in a long period of what was, in effect, indentured servitude. Contrary to contemporary use of the term (Gruber and Mandl 2001) in discussions of children's education, apprentices did menial work (De Munck and Soly 2007, Crowston 2007) and lived under penurious conditions. These conditions were so bad (Golden 2003, Steidl 2007) that legislation was repeatedly introduced to curb the worst excesses (Rawson 2003, Barron 2007, Mitterauer and Sieder 1984).

Barron, Caroline M. "The Child in Medieval London: The Legal Evidence." In *Essays on Medieval Childhood: Responses to Recent Debates*. Edited by Joel T. Rosenthal, 40–53. Donington, UK: Shaun Tyas, 2007.

Conditions of apprenticeship (pp. 49–51).

Crowston, Clare. "From School to Workshop: Pre-Training and Apprenticeship in Old Regime France." In *Learning on the Shop Floor: Historical Perspectives on Apprenticeship*. Edited by Bert De Munck, Steven L. Kaplan, and Hugo Soly, 46–62. *International Studies in Social History* 12. New York: Berghahn, 2007.

Authorities interceded to change aspects of the apprenticeship. A few years of formal education were added to provide a moral and academic foundation. This process expanded to three steps when a period of manual work was added at the beginning because "children must be taught to work by age seven or eight, if they were to be preserved from a life of debauchery" (p. 55).

De Munck, Bert, and Hugo Soly. "'Learning on the Shop Floor' in Historical Perspective." In *Learning on the Shop Floor: Historical Perspectives on Apprenticeship*. Edited by Bert De Munck, Steven L. Kaplan, and Hugo Soly, 3–32. *International Studies in Social History* 12. New York: Berghahn, 2007.

Evidence from 16th- to 19th-century western Europe that typical apprenticeship, for girls as well as boys, was pretty grim. Children were worked hard, learned little, and rarely became masters at the craft.

Gies, Frances, and Joseph Gies. *Marriage and the Family in the Middle Ages*. New York: Harper and Row, 1987.

The authors draw many parallels between apprenticeship and schooling in the Middle Ages. Both involved separation from home and family (guilds forbid apprenticing to one's parent); years of mind-numbing, repetitive activity; both involved corporal punishment for any lapse in diligence. In addition, both master and teacher were accorded enormous respect and deference (pp. 210–217).

Golden, Mark. "Childhood in Ancient Greece." In *Coming of Age in Ancient Greece: Images of Childhood from the Classical Past*. Edited by Jennifer Neils and John H. Oakley, 13–29. New Haven, CT: Yale University Press, 2003.

Notes evidence of the abuse of apprentices (p. 14).

Gruber, Hans G., and Heinz Mandl. "Apprenticeship and School Learning." In *International Encyclopedia of Social and Behavioral Sciences*. Edited by Neil J. Smelser and Paul B. Baltes, 601–644. Amsterdam and New York: Elsevier, 2001.

Academics (mis)label the relationship between the patient and loving teaching employed by parents of the intelligensia with their children an "apprenticeship." This perspective is well represented in this article, which describes the teacher/master "as a coach providing scaffolding" (p. 602), while the novice is invited to participate jointly in craft (lesson) construction (p. 603). However, this is not at all the scenario described by the majority of those who have researched the apprenticeship.

Mitterauer, Michael, and Reinhard Sieder. *The European Family: Patriarchy to Partnership from the Middle Ages to the Present*. Translated by Karla Oosterveen and Manfred Hörter. Chicago: University of Chicago Press, 1984.

Discussion of the role of guilds in regulating the apprenticeship (pp. 103–105). A transition occurred over time as the apprenticeship evolved into a sweatshop (p. 107).

Rawson, Beryl. *Children and Childhood in Roman Italy*. Oxford: Oxford University Press, 2003.

Examples are offered of early legal statues governing the treatment of apprentices by masters (p. 194).

Steidl, Annemarie. "Silk Weaver and Purse Maker: Apprentices in Eighteenth- and Nineteenth-Century Vienna." In *Learning on the Shop Floor: Historical Perspectives on Apprenticeship*. Edited by Bert De Munck, Steven L. Kaplan, and Hugo Soly, 133–157. *International Studies in Social History* 12. New York: Berghahn, 2007.

"The most important reason for complaints was physical punishment. However, public authorities admonished the guilds not to maltreat their subordinates. In 1775 the mayor and other council of Vienna sent a letter to all crafts and trades' organizations in which they complained about the ill-treatment of apprentices by their masters. Another public admonition in 1845 argued again against masters who maltreated their subordinates" (p. 148).