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Embodied Foundations of the Self:
Food, Grooming, and Cultural Pathways of Human Development
in Burma-Myanmar and the United States

A dissertation submitted in partial satisfaction of the Requirements for the degree Doctor of Philosophy in Psychology

by

Seinenu M. Thein

ABSTRACT OF THE DISSERTATION

Embodied Foundations of the Self:
Food, Grooming, and Cultural Pathways of Human Development
in Burma-Myanmar and the United States

by

Seinenu M. Thein

Doctor of Philosophy in Psychology

University of California, Los Angeles, 2013

Professor Patricia M. Greenfield, Chair

The present dissertation seeks to understand the origins of cultural differences in the self by examining two forms of embodied caregiving practices: eating and grooming.

Although both eating and grooming lie at the intersection of culture, mind, biology, and social relationships, neither has been examined by psychologists as being possible mechanisms for cultural learning. Chapter 1 describes a mixed-methods (quantitative and qualitative) cross-cultural comparison of children's eating practices in Burma-Myanmar and the United States. The study uses naturalistic video data of 55 children during routine family mealtimes to analyze non-verbal eating behaviors. Results indicate that there are significant cultural differences between families in Burma-Myanmar and the United States in embodied eating practices with regard to three variables: 1. Independence, 2. Agency, and 3. Social Intimacy. Children in the United States are more independent in their eating than children in Burma-Myanmar. Children in the United States are also more agentic, more frequently taking the initiative to eat; in Burma-Myanmar, the caregiver

more often initiates eating. Children's eating in Burma-Myanmar involves more physical intimacy than in the United States. Intimacy takes the form of sharing food, plates, or using the same utensil to feed not just the child, but another person as well. Results also indicate that cultural differences in eating practices emerge early and are sustained across a significant span of development. Chapter 2 describes a mixed-methods cross-cultural comparison of allogrooming practices in Burma-Myanmar and the United States. Using the same naturalistic video database from Study 1, Study 2 analyzes allogrooming behaviors directed at 57 children in Burma-Myanmar and the United States. Chapter 2 reports similar findings to those reported in Chapter 1 in terms of cross-cultural differences. Results indicate that there are significant cultural differences between Burma-Myanmar and the United States with regard to two variables: 1. Interdependence in Grooming, and 2. Intimacy in Grooming. Concerning interdependence, children in Burma are groomed by their caregivers more often than are children in the United States. Grooming is also more intimate in Burma-Myanmar, more often involving the inside of the child's mouth and intimate body parts or direct contact of the caregiver's hand with bodily substances of the child, such as mucous. Similar to the results reported in the first study, Chapter 2 reports that, for interdependence in grooming, cultural differences emerge early and are sustained across a significant span of development. Chapter 2 also reports that there are cultural differences in developmental trajectories for intimacy in grooming. Whereas in Burma-Myanmar, level of intimacy in grooming starts high and remains high as children get older, in the United States intimacy in grooming decreases with the child's age. A key finding reported in Chapter 1 and 2 was the variability in the Burmese sample across all variables. Chapters 1 and 2 also contain ethnographic case

studies illustrating the quantitative findings with qualitative analysis. Chapter 3 contextualizes the findings from Chapters 1 and 2 and attempts to account for the variability in the Burmese sample by reporting case studies of four families in Burma-Myanmar. Using ethnographic research methods, Chapter 3 describes how recent sociodemographic changes in Yangon impact the relationship between embodied caregiving practices and abstract values. While adaptations on the part of Burmese parents to sociodemographic changes often resulted in a disjuncture and tension between embodied practice and abstract values, this observed trend was mediated by socioeconomic factors, including enrollment of children in private schools and access to higher education on the part of parents and grandparents. The present findings raise important theoretical questions about how children may learn culturally specific values about the self. Taken together, the results reported in Chapters 1 and 2 suggest that daily eating and grooming practices may be a mechanism for cultural learning, contributing to culturally divergent pathways of development of the self. The results reported in Chapters 1 and 2 also address important theoretical questions about when cultural differences in the self emerge, with both studies reporting that cultural differences in independence, agency, and intimacy are present even in the period of infancy. The observations reported in the ethnographic study raise important theoretical issues about how sociodemographic changes may alter the relationship between embodied caregiving practices and abstract parental values.

The dissertation of Seinenu M. Thein is approved.

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University of California, Los Angeles
2013

Table of Contents

Introduction and Overview of the Topic	1
References	5
Chapter 1: Eating and the Development of the Self	7
Eating as the Intersection of Culture, Mind, and Biology	8
Eating and Cultural Socialization of Children	10
Previous Research on Eating and Childhood Socialization	12
Development of the Self and the Case of the Burmese	13
Overview of Study 1	15
Method	16
Participants	16
Procedures	18
Dependent Measures	20
Data Coding and Analysis	22
Quantitative Results	25
Results for Hypotheses 1 to 4	25
Qualitative Analysis: Burmese Case Study	29
Description of Household	29
Qualitative Analyses of Interdependence	30
Qualitative Analyses of Minimized Agency in Eating	31
Qualitative Analyses of Intimacy	32
Discussion	34
Directions for Future Research	35

	Conclusion	37
	Tables for Study 1	38
	Figures for Study 1	43
	References	53
Chapter 2: G	rooming and the Development of the Self	57
	Evolutionary Functions of Grooming	57
	Grooming and Culture	60
	Grooming and Cultural Socialization of Children	61
	Overview of Study 2	62
	Method	64
	Participants	64
	Procedure	66
	Dependent Measures	67
	Data Coding and Analyses	70
	Quantitative Results	75
	Results for Hypotheses 1 to 3	75
	Qualitative Results	78
	Case Study in the United States	78
	Case Study in Burma-Myanmar	84
	Discussion	90
	Directions for Future Research	92
	Tables for Study 2	94
	Figures for Study 2	100

	References	113
Chapter 3: Ei	mbodied Practice, Cultural Values, and Shifting Pathways of the Self: A	An
Ethnographic	Study of Burma-Myanmar During a Period of Social Change	115
	Introduction and Background to Ethnography	115
	Greenfield's Theory of Human Development and Social Change	119
	Case Study 1: Shifting Values, Enduring Practice	121
	Case Study 2: Enduring Values, Shifting Practice	132
	Schools as a Motor for Change: Embodied Practice in Private and Pub	olic
	Schools	145
	The Role of Socioeconomic Factors in Shaping Relationship between	
	Values and Practice	147
	Case Study 3: Enduring Values, Enduring Practice	152
	Case Study 4: Shifting Values, Shifting Practice	160
	Discussion	164
	Conclusion	167
	Figure	170
	References	170

List of Tables

Chapter 1 Tal	oles	38
	Inter-rater Reliability for Eating Variables	38
	Results of Mixed Linear Effects Models	39
	Individuals Feeding Children	40
	Frequencies of Food-Related Intimacy	41
	Individuals With Whom Children Are Engaging in Food-Related Intin	nacy
		42
Chapter 2 Tal	oles	93
	Intimacy in Grooming Scale	93
	Results of Mixed Effects Models	94
	Counts and Percentage of Persons Grooming Child in Burma-Myanm	ar
	and the United States	95
	Counts and Percentage of Allogrooming by Activity in Burma-Myanr	nar
	and the United States	96
	Analysis of Simple Effects of Country on Counts of Allogrooming by	,
	Activity	97
	Counts and Percentage of Body Parts Groomed in Burma-Myanmar a	nd
	the United States	98

List of Figures

Chapter	Figures
	Figure 1. Independence of eating: Mean proportion of independent eating
	in Burma-Myanmar and the United States
	Figure 2. Agency in eating: Mean proportion of child-initiated eating in
	Burma-Myanmar and the United States
	Figure 3. Intimacy in eating: Mean level of eating intimacy in Burma-
	Myanmar and the United States45
	Figure 4. Mean level of eating intimacy when children are alone and when
	they are with a sibling
	Figure 5. Scatterplots of scores for independent eating in Burma-Myanma
	and the United States
	Figure 6. Scatterplots of scores for agency in Burma-Myanmar and the
	United States
	Figure 7. Scatterplots of scores for intimacy in eating in Burma-Myanmar
	and the United States
	Figure 8. Four-year-old girl being fed by her caregiver in Burma-
	Myanmar
	Figure 9. Eight-year-old girl being fed by her mother in Burma-Myanmar
	51
	Figure 10. Seven-month-old engaging in independent eating in the United
	States
Chantar '	P. Figures 100

Figure 1. Scatterplots of scores for mean frequency of allogrooming per
minute in Burma-Myanmar and the United States
Figure 2. Scatterplots of scores for mean level of intimacy in grooming in
Burma-Myanmar and the United States
Figure 3. Interdependence in grooming: Mean frequency of allogrooming
per minute in Burma-Myanmar and the United States102
Figure 4. Intimacy in grooming: Mean level of intimacy in grooming in
Burma-Myanmar and the United States
Figure 5. Two-year-old girl in the United States turning off faucet after
washing her own hands without the help of a caregiver104
Figure 6. Two-year-old girl in the United States engaging in independent
self grooming by washing her own face
Figure 7. Two-and-a-half-year-old girl in the United States engaging in
independent self grooming by wiping her face after a meal
Figure 8. Two-and-a-half-year-old girl in the United States engaging in
independent dressing by taking off her own shirt as caregiver watches
from a distance
Figure 9. Nanny in United States brushes hair of a two-and-a-half-year-
old girl
Figure 10. Mother in Burma-Myanmar allogrooming four-and-a-half-
year-old son by washing his face with her bare hands
Figure 11. Mother in Burma-Myanmar allogrooming four-and-a-half-
year-old son by wiping his face during a meal

	Figure 12. Mother in Burma-Myanmar undressing four-and-a-half-yea	r-
	old son	.111
	Figure 13. Counts of allogrooming per minute in US and Burmese case	e
	study	.112
Chapter 3 Fig	gures	.169
	Figure 1. Independent eating behaviors per minute for case studies 1 t	o 4
		.169

Dedication

My dissertation is dedicated to my mother and father. To my father, I especially want to say: it is perhaps not a coincidence that I chose to examine caregiving practices in Burma as part of my dissertation, when I was fortunate enough to be enveloped by so much love and care by you, growing up. I have never had anyone believe in me as much as you do. I wish as much as you do that *Amae* could have seen me receive my doctorate. My mother was the embodiment of dignity, grace, compassion, sincerity, intelligence, and courage. She, along, with my grandmothers and all the women in my family, inspire me continually to strive to be better than I am, because I strive, always, to be like them. I know my journey towards this doctorate did not began with me, but also with my mother and a grandmother I never knew, who travelled many miles to become the first Burmese woman to attain a graduate degree at the University of Chicago. She, along with my maternal grandmother, gave my mother the foundations to be who she was and for that I will always be grateful. My mother set an example for me not only by pursuing higher education and obtaining her medical degree but also by sacrificing all her hard work and leaving behind her entire family, so that her children would have a better future in the United States. I am also grateful to grandfathers on both sides of the family. I am grateful to all my aunts and uncles in both Burma and the United States, each one of whom, gave me endless love and support as I pursued this doctorate. I especially would like to thank my Uncle Than Zaw, Daw Ni, Aunty Ni, Uncle Win, Aunty Dolly, Aunt Moe, Aunt Nwe, Kyee May, Daw Aye, Daw Pe, Aunty Khin Gyi, Aunty Khin Htay, Aunt Kyin Lay, and Ba Tut. Thank you to all my cousins (especially, Karen, Kaythi, and Chawsu), my sister, and my beautiful niece, Charley for always giving me reasons to

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- Campos, J. J., **Thein, S. M**., Owen, D. (2003). Development of sensitivity and responsiveness to emotional expression in early life. *Annals of the New York Academy of Sciences*, 1000, 110-134.

SELECTED PAPER PRESENATIONS

- **Thein, S. M.** & Greenfield, P. M. (2012, June). Feeding infants and children in Burma and the United states: Cultural concepts, Cultural practices, and social change. In P. M. Greenfield (Chair) *Social change and human development: A theory and supporting data from around the world.* A symposium conducted at the meeting of the Jean Piaget Society, Toronto, Canada.
- **Thein, S. M.**, Fiske, A. P., & Greenfield, P. M. (2011, July). Food for thought: Cultural differences in embodied food practices and diversity in attachment. In H. IJzerman (Chair) *Cognitive models of relationships: Social constraints on grounded cognition*. A symposium conducted at the meeting of the European Association of Social Psychology Annual Conference. Stockholm, Sweden.
- **Thein, S. M.**, Fiske, A. P., & Greenfield, P. M. (2011, February). Food and attachment: children's embodied food practices and diversity in attachment relationships. In H. Keller (Chair) *Children's views on families in different cultures*. A symposium conducted at a joint meeting for the SCCR and the AAACIG. Charleston, SC.
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Introduction and Overview of the Topic

The notion of culture as consisting of embodied practice and enculturative processes as necessarily going through bodily channels has deep roots in social theory. In attempting to explain culture, Mauss (1973/1936) emphasized the notion of habitus. According to Mauss (1973/1936), culture at its core consisted not of abstract values or ideas, but what he called habitus or bodily techniques—how people eat, sleep, walk, and inhabit their bodies on a day-to-day basis. Bourdieu (1990) describes habitus as *embodied history*—something that is internalized as second nature and so forgotten. Unlike other aspects of culture, those things that comprise our habitus are necessarily unintentional, unconscious, uncontemplated and often left unarticulated. It has been argued that because of its unconscious, unintentional nature, habitus emerges as actually one of the most important aspects of culture—one that is much more likely to be transmitted from generation to generation (Fiske, 1999).

From an epistemological standpoint, notions of embodiment reach far back into both Western and Eastern philosophies and is intimately tied to broader debates about the nature and origins of human knowledge and existence. The notion of mind/body dualism is fundamental to Christian theology and has been a dominant style of thinking in Western philosophical traditions. Even pre-dating Christianity, Plato articulated in this *Theory of Forms* that phenomena we perceive in the universe are mere shadows—non-physical, immaterial entities. In order for the intellect to grasp such entities or to acquire any knowledge about the universe, the mind must likewise be immaterial and fundamentally non-physical. Like Plato, Descartes concluded that the mind was an

immaterial entity that existed apart from the body and although the two could have a causal relationship with one another, they were fundamentally distinct and separate.

Embodied views of knowledge go against this traditional grain of Western thought. Whereas Western philosophy in the Cartesian tradition has viewed reason as being something that transcends bodily experience, distinguishing humans from non-human animals, embodied philosophies see reasoning as arising from our bodily experiences and evolving from our animal capacities. Like many Eastern religious traditions, including Buddhism, where mind and body are regarded as interdependent, cognitive scientists, linguists, and psychologists, who advocate an embodied view of knowledge view the human ability to reason as being inextricably tied to our bodily capacities and experiences (Verela, Thompson, & Rosch, 1991; Clark, 1998; Lakoff & Johnson, 1999; Campos, Anderson, Barbu-Roth, Hubbard, Hertenstein, & Witherington, 2000; Boroditsky & Ramscar, 2002; IJzerman & Semin, 2009; Lee & Schwarz, 2010).

Piaget (1976) regarded the *sensorimotor stage*—a developmental period where embodied knowledge reigns supreme—as forming the foundation for all subsequent stages and thus all subsequent knowledge. Piaget's insights consequently became foundational to the work of modern developmental science research. Although it offered deep insights into the nature of human learning and cognitive development, Piagetian theory (1976) did not encompass the social domain¹. Likewise, Piaget offered few insights into how individual or group differences in embodied learning history may impact the construction of reality, or the construction of the self.

Although their frame of reference was psychoanalytic and Freudian, rather than cognitive and Piagetian, the issue of embodiment and group differences, especially

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¹ Piaget does discuss the construction of the self during the period of infancy.

culturally constituted group differences, were taken up by psychological anthropologists in the 1940's, 1950's, and 1960's. In *Balinese Character*, Bateson and Mead (1942) refer to the "inadequacy" of verbal information from informants, writing that what anthropologists "technically call (Balinese) culture" is actually the way in which the Balinese, as living persons, move, stand, eat, sleep, dance, and go into trance. Through photographic renditions, Bateson and Mead (1942) unpack the nature of embodied childrearing practices in Bali, including feeding, toilet training, the use of elevation, and trance. Accounts of childhood by other psychological anthropologists, cultural psychologists, and cross-cultural researchers of childhood, likewise, focused on day-to-day practices that engaged embodied, non-verbal, sensorial ways of knowing and learning (Bateson & Mead, 1942; Mead, Bateson, Bohmer, 1954; Whiting, 1963; Briggs, 1998; Levine, Levine, Dixon, Richman, Leiderman, Keefer, & Brazelton, 1996; Maynard, Greenfield, & Childs, 1999; LeVine & Norman, 2001; Quinn, 2006; Keller, 2007).

Embodiment looms large in implicit and explicit developmental goals that parents and caregivers set for children, including culturally specific goals about the self. While there is a well-developed literature that documents the culturally variable nature of the adult self (Doi, 1973; Markus & Kitayama, 1991) and a general consensus that culturally variable aspects of the self are born out of interactions that infants and children have with caregivers and others in their social environment (Rothbaum & Pott, 2000; Greenfield, Keller, Fuligni, & Maynard, 2003; Keller, 2007), there has been very little work in psychology on how embodied experiences may be foundational to self development. Likewise, there has been no work within psychology on how embodied experiences

during childhood may be foundational to culturally variable aspects of the self, including one's sense of independence, agency, and sense of social intimacy with others. What work that does exist on the relationship between embodied practice during childhood and development of the self has focused primarily on what Keller (2002) refers to as *secondary* and *tertiary systems of caregiving* that encompasses such things as bodily contact and motor stimulation (Hertenstein & Campos, 2001; Keller, Yovsi, Borke, Kartner, Jensen, & Papaligouri, 2004; Keller, 2007). There is almost no psychological research on how embodied practices linked to *primary systems of caregiving*, such as food and grooming impact the development of the self.

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Chapter 1: Eating and the Development of the Self

Eating is a basic domain of life, being at once a biological necessity and a daily cultural practice that is laden with both implicit and explicit meaning. The study of food and eating has loomed large within anthropology and sociology, with food studies seen as shedding light on issues such as identity formation and ritual practice (Appadurai, 1981; Kohli, Connolly, & Warman, 2010), but food and eating have taken a less prominent role in psychology. Developmental psychology, especially, has neglected to consider the role of food and eating in children's learning and social development. Hence, although there have been studies on food as it relates to abnormal aspects of development such as disordered eating (Fiese & Schwartz, 2008) and childhood obesity (Krishnamoorthy, Hart, & Jelalian, 2006), there is little known about how daily eating practices affect normal socialization processes.

Especially lacking are cross-cultural studies of eating practices during childhood and their relevance to culturally divergent pathways of development (Greenfield, Keller, Fuligni, & Maynard, 2003). In instances where mealtimes have been the site of cultural comparisons, a major focus has been on symbolic, verbal interactions between caregivers and children with the mealtime being of interest as a 'context' in which narrative and other communicative practices unfold (Martini, 1996; Ochs & Shohet, 2006). The present study is unique in considering eating, itself, to be an embodied, emotionally-meaningful act that can shape children's sense of independence, agency, and sense of shared intimacy with social others.

The current study seeks to address the gap in the psychological literature by comparing mealtimes in two distinct cultures across multiple age groups. Whereas prior

research on eating and childhood socialization has relied on qualitative descriptions of mealtimes (Appadurai, 1981; Ochs, Pontecorvo, & Fasulo, 1996; Ochs & Shohet, 2006), the present study is a *quantitative* cross-cultural comparison. Eating as a daily practice and the family mealtime as a distinct 'activity setting' (Gallimore, Goldenberg, & Weisner, 1993) contain a rich repertoire of embodied behavior from which children can glean a variety of social information. Eating is a way of forming and modulating communal sharing relationships, and the way in which one eats with others both communicates and shapes the nature of those relationships (Fiske, 1991; Miller, Rozin, & Fiske 1998). Comparing daily eating practices in two distinct groups can highlight how a universal daily task that is intimately linked to an evolutionarily adapted biological system can be addressed very differently across cultures.

Eating as the Intersection of Culture, Mind, and Biology

In the *Hungry Soul*, Kass (1999) writes: "eating is that indispensable vital activity that is closest to the mindlessly natural, yet it is also influenced by the emergence of mind and culture" (p. 12). Food and eating are so much a part of our day-to-day lives that it is perhaps difficult to appreciate their import. Indeed, a discussion of eating can feel prosaic when compared to the usual topics of inquiry within academic psychology. Rozin (2006; 2007) has pointed out that the discipline of psychology has been organized largely around features of the 'mind', focusing on mental processes such as attention, memory, and emotions, rather than 'domains of life' such as eating, sex, protection, grooming, and worship.

Part of the importance of eating to social learning and development lies in its ties to our basic biology. Living kinds are defined by the very act of taking in nutrients of

some form and metabolizing them. Conversely, to cease to be alive is to no longer necessitate automatic processes that initiate food intake and excretion (Kass, 1999; Rozin, 2007). A domain-specific approach predicts that, rather than having generalized mechanisms for learning that apply across disparate areas of functioning and development, learning is specific to particular life domains. Siegal (1995) has argued that in child development, the first domain in which nascent intellectual abilities appear often concerns food and detection of toxicity.

Food and eating are directly relevant to how children learn about social relationships. Hunger is one of the earliest means through which children learn about caregiver sensitivity and responsiveness, being one of the 'natural clues to danger' that reliably signals the absence of the attachment figure (Bowlby, 1969). Particularly during the early stages of infancy when the visual system is not yet sufficiently developed, regularity of feeding, along with tactile contact, is likely to be one of the most reliable indicators to an infant that a caregiver is close at hand. In adulthood, eating remains conceptually linked to the notion of interpersonal closeness, with social food transfer emerging as a reliable nonverbal indicator of shared intimacy between two individuals (Miller, Rozin, & Fiske, 1998). More specifically, commensal consumption of food, drink, and other comestibles is one of the strongest ways to constitute communal sharing relationships: eating together simultaneously creates and communicates communal sharing (Fiske 1991, 2004).

Eating has been shaped to an unusual degree by culture, such that there are a range of practices, meanings, and rituals where food is either directly involved or symbolically evoked. Thus, while human morphology and the presence of certain

metabolic requirements result in a certain number of food-related activities that can be considered universal (Rozin, 2007), there are also significant differences across cultures. Cultures dictate the specifics of how, where, and with whom we eat and tie those practices to notions of what it means to be proper, courteous, and human (Elias, 1978; Kass, 1999; Hejmadi, Rozin, & Siegal, 2004).

Eating and Cultural Socialization of Children

Eating emerges as particularly relevant in the socialization of children and their induction into relevant cultural norms about ideal forms of personhood and ideal forms of social relationships, including how independent they should be at various points in development. One important universal developmental task that is subject to cultural shaping and that has been highlighted repeatedly by researchers involves the child's eventual transition into a separate, autonomous being or the tendency to remain in a relatively interdependent relationship with caregivers and kin where the boundaries between the self and others are less marked (Doi, 1973; Markus & Kitayama, 1991; Greenfield, Keller, Fuligni, & Maynard, 2003).

Children's sense of self and personhood, including the ability to differentiate themselves from social others, emerges in tandem with their understanding of personal agency (Bandura, 2006). During infancy and early childhood, personal agency is constructed in part by experiencing the effects of one's actions on others, as well as one's self. While personal effects that result from most forms of self-initiated actions can contribute to how children learn about "the self" (Bandura, 2006), learning that is related to the satiation of basic biological drives can be especially powerful. In the case of eating, infants and young children learn to what extent and in what manner they are capable of

satiating their own hunger through simple motor acts whereby they physically place food in their own mouths. They can also learn to what extent and in what manner others will satiate their food-related needs.

Apart from their link to basic biological processes, eating is likely an important mechanism for social learning and cultural transmission because children engage in it on a daily basis, multiple times a day. From the standpoint of parenting, feeding children lies in the domain of automatic behaviors—habitual actions that are relatively uncontemplated (Bargh & Ferguson, 2000)—but that likely play a role in children's notions of independence and agency. Mauss (1973) and Bourdieu (1990) argued that unlike other aspects of culture, those behaviors that comprise our *habitus* are necessarily unintentional, unconscious, and often left unarticulated. Fiske (1999) points out that habitus emerges as one of the most important aspects of culture—one that is much more likely to be transmitted from generation to generation.

Automaticity and habitus with regard to eating also looms large in relation to childhood socialization and development of the self because feeding and the physical transfer of food in social settings is thought to reflect interpersonal intimacy (Miller, Rozin, & Fiske, 1998; Fiske, 2004). Human adults are necessarily sensitive to who and what has come into contact with food items that they consume and sensitive, also, to the contact history of objects that are placed in or near their mouths, such as cups, bowls, or utensils (Rozin, Fallon, & Augustoni-Ziskind, 1985; Rozin, Nemeroff, Horowitz, Gordon, & Voet, 1995).

While awareness of the contact history of food items is regarded as an evolutionary adaptation to the presence of microbes and parasites, experimental data with

adults indicate that contact history of food items can also be used to track interpersonal intimacy (Miller, Rozin, and Fiske, 1998). For children, sharing food with others in such a way that they are consuming items that have been physically touched by others may be an important indicator of the relative permeability of self-other boundaries and who in their social environment can be considered to be a trusted, intimate other, with whom issues of social and physical contamination need not be a concern.

Previous Research on Eating and Childhood Socialization

Despite the importance of eating as a biologically based, culturally determined, day-to-day, embodied act, there have been few studies of children's eating practices within psychology, especially as it relates to the development of the self. The most relevant studies were conducted during the 1950's by psychoanalytically minded researchers, who, taking to heart the theories of Freud, Klein, and Winnicott, emphasized that children's psychosocial trajectories were differentially impacted by activities such as breastfeeding and weaning (Sears, Maccoby, & Levin, 1957). This early research was hampered by an over-emphasis upon the "sucking mechanism" as a source of "gratification", considering eating to be relevant only as it was related to breastfeeding. Researchers viewed the transition into solid food as necessarily constituting a transition into independence whereby "loving nurturance (was) no longer the inevitable accompaniment of eating" (p. 69) (Sears, Maccoby, & Levin, 1957).

Mealtimes (as distinct from food and eating) are regarded as being important by developmental psychologists (Snow & Beals, 2006; Fiese & Schwartz, 2008; Larson, 2008), but largely from the standpoint of being a context in which parents and other caregivers can engage in positive verbal interactions with children. There is little

recognition within psychology that mealtime comportments and the eating itself as an embodied act can loom large in childhood socialization. Likewise, although the ethnographic literature is replete with examples of how the meanings, rituals, and routines that surround food and eating differ across cultural settings (Bateson & Mead, 1942; Appadurai, 1981; Levine, Levine, Dixon, Richman, Leiderman, Keefer, & Brazelton, 1996), there has been no consideration within developmental psychology of how such variation may impact children's psychosocial development, especially as it relates to the development of the self.

Development of the Self and the Case of the Burmese

While the impact of culture on eating practices has yet to be highlighted by psychologists, there is a well-developed literature that documents the role of culture as it pertains to the development of the self. In particular, a basic aspect of the adult self that cultural psychologists have posited to be culturally variable is whether one's sense of self is autonomous, individuated, and infused with a sense of agency and personal choice, or, on the other hand, if one is more interdependent (Markus & Kitayama, 1991; Savani, Markus, & Connor, 2008). While there are debates about whether or not the interdependent nature of the self can be seen as dichotomous or as existing on a continuum; whether independence and interdependence are opposite poles of one continuum or two distinct dimensions; and whether or not cultural differences in self or other domains are most logically delineated with reference to national geography, ethnicity, or other criteria; the current study does not take a position on these matters. What the present study assumes is that there is more than one form of self-configuration that can be culturally prioritized and therefore considered normative (Shweder & Bourne,

1984; Markus & Kitayama, 1991), and that sense of self is born out of daily interactions that children have with caregivers and others in their social environment (Greenfield, Keller, Fuligni, & Maynard, 2003; Keller, 2007).

Burma-Myanmar² emerges as particularly relevant to the study of the self, because *the Burmese hypercognize the emotions and sentiments that are involved in attachment and caregiving* (Tu, 1964; Spiro, 1970, 1977). Socialization of young children in Burma is geared towards cultivating a sense of nurturant responsibility for smaller, weaker social others (Thein, Fiske, & Greenfield, 2011).

Since the motive to nurture, protect, and take care of others is not only encouraged, but also valorized, dependency is also a highly indulged motive in Burmese society. Both Spiro (1970) and Tu (1964) observed that dependency is a salient feature of Burmese personality structure. Much like Doi's (1973) account of the Japanese, rather than being viewed as an undesired characteristic, dependency is a highly indulged motive amongst the Burmese, especially within the context of parental or authority relationships.

In contrast to Burma-Myanmar, the United States has been portrayed as a society that values independence, self-reliance, personal choice, and agency (Markus & Kitayama, 1991; Savani, Markus, & Connor, 2008). Rather than being valorized, the dependency motive is often looked upon with ambivalence (Weisner, 2001) or even regarded as pathological. For the present study, the interdependent and independent pathways of development formulated by Greenfield, Keller, Fuligni, and Maynard (2003) form the theoretical foundation on which hypotheses about specific cultural differences in eating behavior are based.

14

² In 1989 Burma was renamed Myanmar. For the remainder of this dissertation, the hyphenated term Burma-Myanmar will be used.

Overview of Study 1

The following study compares non-verbal eating behavior of children and their caregivers during a family mealtime in two cultural settings: an urban center in Burma-Myanmar and an urban center in the United States. Data were collected in Los Angeles and Yangon³. A broad range of ages was sampled in each culture so as to capture the developmental trajectories for each behavior.

The first part of the chapter presents results obtained from quantitative analyses of nonverbal eating behaviors in the two samples. In the second part of the chapter, qualitative examples are drawn from a case study in Burma-Myanmar, in order to further contextualize the quantitative findings, focusing in particular on the developmental patterning of each behavior.

For the quantitative portion of the study, participants were filmed continuously during a family mealtime. The naturalistic behaviors of each participant were then coded and quantified. In particular, we focused on three variables: a.) Independence of eating, b.) Agency in eating, and c.) Intimacy in eating. The following hypotheses were formulated with regard to cultural differences between children in Burma-Myanmar and the United States:

Hypothesis 1: Independence of Eating. It was predicted that children in Burma-Myanmar would have lower rates of independent eating relative to children in the United States.

Hypothesis 2: Agency in Eating. It was predicted that children in Burma-Myanmar would have lower rates of agency in eating relative to children in the United States.

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³ In 1989 Rangoon was renamed Yangon.

Hypothesis 3: Intimacy in Eating. It was predicted that children in Burma-Myanmar would have higher levels of food-related intimacy relative to children in the United States.

Hypothesis 4: Developmental Trajectories of Independence and Agency. It was predicted that whereas children in the United States would show increasing levels of independence and agency as they got older, children in Burma would not show the same rise in independence or agency. There was no predication about the developmental trajectory of the intimacy variable.

Method

Participants

In both cultures, great care was taken to ensure that recruitment methods were in keeping with culturally accepted norms of behavior. In the United States, where both the political system and cultural norms allow for fluid interactions between relative strangers, potential participants were approached and recruited in parks, near schools, and other public places. Participants were handed a recruitment flyer and asked if they would like to participate in a study. Potential participants were told that the researcher was interested in filming their child's mealtime so that it could be compared to the mealtime of children in Burma-Myanmar. If individuals expressed a willingness to participate, their contact information was noted and either an appointment was made immediately or with a follow up phone call. Since the political climate in Burma-Myanmar at the time of data collection did not allow researchers to recruit in public, Burmese families were recruited through intermediary contacts in the community, including community elders, small business owners, and individuals affiliated with religious and educational institutions.

There were a total of 55 children from 33 families in the sample. All participants in the Burmese sample came from various suburbs of Yangon, a large urban center in the southern part of Burma-Myanmar. Three of the Burmese families (four children) were excluded from the analysis because they were informed by one of the intermediaries used for recruitment (a teacher at a private, Western-style school) that they should engage in 'independent eating'. The final sample comprised 32 children from 21 families.

Participants in the U.S. sample came from various suburbs of Los Angeles, a large urban center on the West Coast of the United States. One child in the U.S. sample was not included in the analysis because of an error in the coding process. The final sample comprised 23 children from 12 families. The age range of children in Burma-Myanmar was 9 months to 8 years of age (M = 3.94, SD = 1.66). The age range of children in the United States was 7 months to 9 years of age (M = 3.36, SD = 2.22).

In Burma-Myanmar, there were 18 males and 14 females in the sample. In the United States, there were 11 males and 12 females in the sample. The Burmese participants were relatively diverse in their ethnic origins, with 47% of the children being ethnically Burmese, 25% of them belonging to one or more of the ethnic minority groups native to Burma-Myanmar, another 22% being of mixed Burmese and ethnic minority descent, and 6% being of mixed Burmese and Chinese descent. The U.S. participants were much more homogeneous ethnically, with 87% of the children being of European-American descent. There were two children from one family that were of African-American descent and one child from another family of mixed descent (Mexican-American and European-American).

Household size ranged from 3 to 7 in Burma-Myanmar (M = 4.81, SD = 1.18) and from 3 to 6 in the United States (M = 4.26, SD = 0.69). Forty percent of Burmese children (13 families) and 9% of U.S. children (1 family) had extended family members residing in the household with them. Burmese families also frequently commuted to the residence of extended family (typically grandparents) or had extended family commute to their residence on a daily basis to assist with childcare. The Burmese families also frequently had childcare workers residing with them. A combination of parental reports, as well as tallies by the first author, indicate that the modal number of live-in nannies in the Burmese sample was 2. Because so much caregiving was done by nannies in the Burmese sample, but not in the U.S. sample, analyses were done, where relevant, to ensure that cultural differences were not in fact nanny-mother differences; these findings are incorporated into the Results section.

The modal number of siblings for children in both Burma-Myanmar and the United States was 1. All Burmese and U.S. families can be classified as being middle-class relative to the standards of their own society. All the families in Los Angeles and 20 out of 21 families in Yangon had both the mother and the father residing in the household.

Procedures

Quantitative study. The first author informed participants that she was interested in the day-to-day activities of their children and in taping a mealtime, in particular. Since the goal of the present study was to capture an entire mealtime, there were no arbitrary time limits set on the video recording. Recording for the present analysis began prior to the beginning of the mealtime (i.e., when the food items were brought out) and activities

were continuously recorded until the mealtime had finished (i.e., the food had been taken away and a transition into another 'activity' had occurred). The camera was positioned in such a way that the behaviors of all the children present during the mealtime were recorded. Ninety-six percent of the children in Los Angeles and 63% of the children in Yangon were with at least one sibling during the mealtime. In families where more than one child was present during the mealtime, the behaviors of each of the children were coded separately. The modal meal filmed in both samples was dinner. After the first author finished the video recording, she had caregivers fill out a demographic questionnaire and, when possible, conducted short interviews with them.

Qualitative study. The data discussed in the qualitative portion of the study was collected in the same manner as the quantitative portion of the study, but in addition to video data, the results of the qualitative study integrate data that is drawn from participant observations and structured field ethnography. In total, the first author spent approximately 500 hours, performing participant observations of children's learning environments in Yangon and Los Angeles. Since much is already known about the unfolding of childhood and the nature of family life in the United States, a case study is provided of a Burmese family. Developmental continuity in eating practices and the form that it takes within the same family is highlighted by focusing on siblings.

The Burmese family that is the subject of the present case study was selected for qualitative analyses because the first author had spent the most number of hours observing them compared to the other Burmese families in the sample. In total, the author spent approximately 40 hours with the family, visiting them multiple times (often on consecutive days) in order to gain a sense of their daily routines. The first author is fluent

in spoken Burmese and conducted all participant observations, interviews, and video ethnography with the family that is the subject of the case study on her own.

Dependent Measures

Independence of Eating. The first variable is a measure of independence in the domain of eating. Independence of Eating was conceptualized as a dichotomous variable that assessed whether or not children physically fed themselves (i.e., placed food items in or near their mouths with or without a utensil) or were fed by someone else (i.e., had food items placed in or near their mouths by someone other than him or herself). Coding was done per instance of eating. An instance of eating occurred when a food item was placed to the mouth of the child. If children fed themselves, their behavior was coded as 1 (*independent*). If children were fed by someone else, their behavior was coded as 0 (*dependent*). In instances where a child was fed by someone else, the relationship of the child to the person feeding him or her was coded as belonging to one of the following categories: mother, father, grandparent, sibling, childcare worker (live-in nanny or babysitter), friend, or not specified other.

Agency in Eating. The second variable is a measure of agency in the domain of eating. Agency in Eating was conceptualized as a dichotomous variable that assessed whether or not an instance of eating was child-initiated or initiated by someone other than the child (typically a caregiver). Coding was done per instance of eating. If a child initiated the act of eating, his or her behavior was coded as 1 (agentic). If the act of eating was initiated by someone else, then the child's behavior was coded as 0 (non-agentic). It was assumed that the person placing the food in the child's mouth initiated the act of feeding, unless there were other clear non-verbal cues indicating otherwise. Examples of

clear, non-verbal indicators of the child initiating the feeding, when another person was feeding him or her, were opening the mouth, pointing to the mouth, or pointing to the food item and then the mouth. Examples of clear, non-verbal indicators of the caregiver initiating the eating when the child was eating independently were the caregiver pointing at the food item or placing the utensil in the child's hand.

Intimacy in Eating. The third variable measured whether or not there were nonverbal acts of food transfer and sharing and how intimate they were. Each act was rated on a 5-point scale (1 = low level of intimacy and 5 = high level of intimacy) (Miller, Rozin, & Fiske, 1998). As with the other variables, coding was done per instance of eating. If there was absolutely no food transfer or sharing in an instance of eating, the instance was coded as having an eating intimacy level of 1. If the child used the same plate or bowl that another had already eaten from, the instance was coded as having an eating intimacy level of 2. If the child ate a food item that had been eaten by another, but the food item did not touch both mouths (i.e., sharing a piece of bread by breaking off a piece and consuming that piece separately), the instance was coded as having an eating intimacy level of 3. If the child used a utensil to eat (spoon or fork) that had already been used by another to eat, the instance was coded as having an eating intimacy level of 4. If the child ate a food item that had been eaten by another and the food item touched both mouths (i.e., sharing a popsicle), the instance was coded as having an eating intimacy level of 5. If more than one type of food transfer or sharing occurred for an instance of eating (i.e., a child consumed a food item that had already been bitten by another person, using the same utensil and plate as that person), then the intimacy level rating reflected the highest level of intimacy that was displayed for that instance of eating (so for the

previous example, a rating of 5 would be warranted). If the eating behavior was coded with an intimacy level above 1, the relationship of the child to the person whom he or she had shared either a food item or plate, bowl, or utensil with was coded as belonging to one of the following categories: mother, father, grandparent, sibling, childcare worker (live-in nanny or babysitter), friend, or not specified other.

Data Coding and Analysis

The video was coded using Inqscribe, a software system that is designed specifically for analyzing video data. Both coders were volunteer English-speaking undergraduate research assistants who were blind to the hypothesis of the study. In order to remove verbal cues in both languages equally, coding was done with the audio turned off.

The first step in the data coding was to extract the 'mealtime' from the longer footage. The mealtime was operationalized as beginning when the food items were brought out and as ending when the food items were taken away. Mealtimes ranged from 4 minutes, 50 seconds to 2 hours, 6 minutes in Burma-Myanmar (M = 30 minutes, 56 seconds, SD = 24 minutes, 19 seconds) and from 9 minutes, 24 seconds to 30 minutes, 41 seconds in the United States (M = 19 minutes, 13 seconds, SD = 5 minutes, 57 seconds).

The next step was to identify all the 'instances of eating' that took place during the span of each mealtime. An 'instance of eating' was operationalized as occurring when a food item was placed to the mouth of the child either with or without a utensil and with or without the child accepting the food or swallowing it (this was done to capture instances where there was an intention to feed on the part of the caregiver, but where the child rejected the food item and instances where there was intention on the part of the

child to eat, but where he or she did not have the skills to place the food item in his or her own mouth). The number of instances of eating per child ranged from 7 to 134 instances in Burma-Myanmar (M = 29.69, SD = 26.33) and from 14 to 90 instances in the United States (M = 39.82, SD = 19.01).

Interrater reliability. After each instance of eating had been identified, the next step was to have the two coders independently code for each of the variables according to the criteria outlined above. Inter-rater reliability was assessed for each variable by having both coders mutually code 31% of the data or 17 out of 55 participants (10 from Burma-Myanmar and 7 from the United States) and then computing percentage agreement and Cohen's Kappa with Stata 12.1. The Cohen's Kappas for Independence of Eating, Agency in Eating, and Intimacy in Eating are listed in Table 1. Inter-rater reliability was also assessed for the two variables whereby coders independently categorized the individuals who fed the child, as well as the individuals with whom the child engaged in food-related intimacy. The Cohen's Kappas for these two variables are also listed in Table 1. The Kappas for all variables are in the excellent range (Landis and Koch, 1977).

Creation of behavioral variables. Since both the length of the mealtimes and the total number of instances of eating were variable across children, mean proportions of relevant behaviors were used to index each of the dependent measures. The final score for Independence in Eating was determined by calculating the mean proportion of eating instances in which the child was fed by someone else (having food physically placed in or near his or her mouth) out of total instances of eating (instances of independent eating plus instances of being fed by someone else).

The final score for Agency in Eating was determined by calculating the mean proportion of eating instances in which the child initiated the act of eating out of total instances of eating (instances of child initiation plus instances of caregiver initiation).

Since Intimacy in Eating involved ratings of intimacy from 1 to 5 (with 1 being the lowest form of intimacy and 5 being the highest form of intimacy), the final score for each participant was calculated by averaging the ratings across all instances of eating for the respective participant.

Quantitative data analysis. For each of the main predictors of interest (Independence, Agency, and Intimacy), a linear mixed effects model with Country and Age as fixed effects and Family Membership as a random effect was used, in order to account for the nesting of children within families. Age was conceptualized as a categorical variable across all analyses. Intercepts for each of the three outcome measures were allowed to vary by family.

In order to assess whether or not differences still existed between Burma-Myanmar and the United States after removing all instances of eating in which children were fed by nannies, linear mixed effects models were used to predict each of the main variables of interest (independence, agency, and intimacy), after all nanny-related feeding instances had been removed. A linear mixed effects model was run to assess the effect of the presence of siblings on intimacy. For agency and intimacy in eating, a logistic mixed effects model and a linear mixed effects model were run, respectively, to assess any differences in the dependent variables across feeding instances when mothers vs. nannies were feeding the child. Because independent eating by definition excludes both mothers and nannies as feeders, the nanny-mother comparison was not relevant for this variable.

Random intercepts were used to control for correlated outcomes within a child. All nanny-related analyses were restricted to the Burmese sample, because there was only one nanny present in the US sample. All analyses were conducted with the statistical software package STATA 12.1.

Qualitative data analysis. Qualitative analyses were conducted by reviewing the video data of the family mealtime for the case study and writing qualitative descriptions of behaviors related to independence, agency, and intimacy for each child. These qualitative analyses of behaviors were then supplemented with additional examples and other relevant material drawn from the first author's field notes and other data collected during the structured ethnography.

Quantitative Results

Results for Hypotheses 1 to 4

Hypothesis 1: Independence of Eating. As predicted, there was a highly significant main effect found for Country, z (1) = 9.74, p < 0.001, with U.S. children engaging in a significantly higher proportion of independent eating (M = .98, SD = .04) than Burmese children (M = .27, SD = .34). Table 2 shows the results of the linear mixed effects model for independence in eating. There was no significant main effect found for Age, χ^2 (2) = 0.38, p = .83. The cultural differences begin early and are constant across age. Figure 1 shows the mean proportions of independent eating in Burma-Myanmar and the United States.

Table 3 shows that when Burmese children are not engaging in independent eating, the persons feeding them with the most frequency are their mothers and nannies.

When the same mixed effects model was run on independence of eating, after all

instances of eating in which children were fed by nannies had been removed, there was still a significant main effect found for Country, z(1) = 5.18, p < 0.001. Likewise, there was still no significant main effect found for Age, $\chi^2(2) = 0.91$, p = 0.63.

Hypothesis 2: Agency in Eating. As predicted, the results indicate that there was a highly significant main effect for Country, z(1) = 9.47, p < 0.001, with U.S. children engaging in a significantly higher proportion of child-initiated eating (M = .98, SD = .04) than Burmese children (M = .29, SD = .34). There was no significant main effect found for Age, $\chi^2(2) = 0.97$, p = 0.62. Again, the cultural differences begin early and are constant across the age span studied. Table 2 shows the results of the linear mixed effects model for agency in eating. Figure 2 shows the mean proportion of child-initiated (agentic) eating in Burma-Myanmar and the United States.

When the same mixed effects model was run on agency in eating, after all instances of eating in which children were fed by nannies had been removed, there was still a significant main effect found for Country, z(1) = 5.72, p < 0.001. Likewise, there was still no significant main effect found for Age, $\chi^2(2) = 0.81$, p = .67. For just the Burmese sample, there was a slightly significant difference in agency depending on whether nannies or mothers were feeding the child, with nanny-fed instances being slightly less agentic than mother-fed instances, z(1) = -1.99, p = .046.

Hypothesis 3: Intimacy in Eating. As predicted, the results indicate that there was a significant main effect for Country, z(1) = -3.63, p < .001, with Burmese children having significantly higher levels of eating intimacy (M = 2.22, SD = 1.24) than children in the U.S. (M = 1.00, SD = .02). There was no significant main effect found for Age, χ^2 (2) = 0.94, p = .62. As with the other two variables cultural differences begin early and

are constant across the age span studied. Table 2 shows the results of the linear mixed effects model for intimacy in eating. Figure 3 shows the mean level of eating intimacy in Burma-Myanmar and the United States. Table 4 shows the distribution of levels of eating intimacy in Burma-Myanmar. Table 4 also shows that, in the United States, there was virtually no food intimacy.

When the same mixed effects model was run on intimacy in eating, after all instances of eating in which children were fed by nannies had been removed, there was still a significant main effect found for Country, z(1) = -3.69, p < 0.001. Likewise, there was still no significant main effect found for Age, $\chi^2(2) = 0.17$, p = 0.92. For just the Burmese sample, there was a significant difference on intimacy in eating depending on whether nannies or mothers were feeding the child, with mother-fed instances being more intimate than nanny-fed instances, z(1) = -4.78, p < .001.

Table 5 shows that siblings were by far the most frequent social partners for intimate food behavior in Burma-Myanmar. Additional analyses were conducted to determine if the cultural differences in level of eating intimacy could be explained by the presence of siblings during the mealtime. Results indicate that there is a significant interaction between Country and Sibling Presence, z(1) = -2.28, p < .025. This interaction is explained by the fact that Sibling Presence predicts the mean level of eating intimacy in Burma-Myanmar, $\chi^2(1) = 66.15$, p < .001, but not the United States, $\chi^2(1) = 0.28$, p = 0.60. Figure 4 shows that sibling presence increases rates of food-related intimacy in Burma-Myanmar, but not in the United States. Figure 4 also shows that cultural differences in level of eating intimacy cannot be explained by the presence of

siblings: In the United States, there is very little food intimacy, no matter how many siblings are present.

Hypothesis 4: Developmental trajectories for Independence and Agency. The last hypothesis pertained to cultural differences in developmental trajectories with regard to independence of eating and agency in eating. Specifically, we predicted that, whereas U.S. children would show increasing levels of independent eating and agency as they got older, Burmese children would not show the same rise in independence and agency, resulting in an interaction between Country and Age for both variables. The results of the data analysis did not support this hypothesis. There was no significant interaction between Country and Age for either Independence of Eating, χ^2 (2) = 0.67, p = 0.72 or Agency in Eating, χ^2 (2) = 0.64, p = 0.73. As we have seen, the mean proportions of independence and agency in eating start high and remain high in the United States; they start low and remain relatively low in Burma-Myanmar.

Developmental trajectory of Intimacy. There was also no significant interaction between Country and Age for Intimacy in Eating, χ^2 (2) = 1.33, p = 0.52. Because participants in the U.S. showed virtually no instances of intimate eating, we examined the effects of Age in just the Burmese participants using the same mixed model framework. There was no significant effect of Age on Intimacy in Eating for just the Burmese participants, χ^2 (2) = 0.94, p = 0.63. Again, cultural differences begin early and are constant across the age span studied.

Random effects. To estimate the degree to which eating behaviors were correlated within families, we calculated intraclass correlation coefficients (ICCs) for all dependent variables. The ICC values for Independence in Eating, Agency in Eating and

Intimacy in Eating are .69, .69, and .47, respectively. Thus, eating variables were correlated within families, after controlling for age and country. We also tested for improvement of fit of our regression models when the intercept was allowed to vary. Likelihood ratio tests suggest significant improvement in model fit when the random intercept term was introduced for Independence in Eating (p = 0.0001), Agency in Eating (p = 0.0001) and Intimacy in Eating (p = 0.0021).

Variation in Burmese sample. Figures 5-7 show the scatterplots of scores for independence, agency, and intimacy in eating respectively. Whereas children in the U.S. have consistently high rates of independence and agency, with each child eating independently and agentically nearly all the time, the Burmese are more variable in their behaviors. Likewise, whereas U.S. children show virtually no food-related intimacy, the Burmese are more variable in their behaviors.

Qualitative Analysis: Burmese Case Study

Description of Household

Nga⁴ and Kyi⁴ are twin girls, both four years old at the time of data collection.

Their younger sister, Htwe⁵, is nine months old at the time of data collection and all three children live in a three-bedroom apartment in a suburb of Yangon with their mother, father, and two nannies, Aye⁶ and Sandar⁷. Their grandfather also visits daily and keeps a watchful eye on the children while the mother and father are at work. Aye, the older of the two nannies, is referred to as 'older aunt' by the entire family and regarded by both the parents and children as kin.

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^{4, 4, 5, 6, 7} Pseudonyms are used.

Qualitative Analyses of Interdependence

Nine months of age. Htwe is standing on her own, facing away from Sandar (the younger of her two nannies) who reaches around her from behind and places food into her mouth. Sandar's stance towards Htwe during mealtimes can be characterized as *embodied anticipation*. After the food is placed into Htwe's mouth, Sandar places her hand in front of Htwe's mouth in anticipation of her spitting the food back out even though the infant does not regurgitate the food. At other times she cries "Chew! Chew! Chew! Chew!" after she has placed the food into Htwe's mouth. The care and corresponding dependency does not end with the food being placed in the child's mouth. Sandar oversees and facilitates the entire endeavor of eating. In other households, young children as old as two and three years of age were observed to say during mealtimes "Chew it for me" for substances, such as rice, which are easily chewed on their own. This discourse suggests that it may be common practice for both parents and nannies to masticate the food on behalf of the child. Htwe does not need to maintain focused attention on the food item throughout the feeding. She looks out the balcony or in the direction of her sisters.

Four years of age. Nga and Kyi are sitting on the balcony with Aye, who sits between them, holding a large bowl filled with rice in her left hand and a large spoon in her right hand. Both children sit with their bodies turned away from the caregiver, their attention directed elsewhere. Aye stuffs a spoonful of rice into Kyi's mouth. Kyi offers no resistance, simply opens her mouth and takes in the food. There are no words spoken between Kyi and Aye during this exchange, although Aye opens up her own mouth wide as she places the food in Kyi's mouth. Kyi does not direct her attention towards Aye's

face as she is being fed, nor is her body turned towards Aye. She simply takes the food into her mouth and then simultaneously turns her head away from Aye and begins chewing. Aye fills the spoon again with rice and stuffs it into Nga's mouth. The food is placed inside Nga's mouth without any resistance on Nga's part and although Aye does not utter anything, she opens her own mouth in anticipation of having Nga open up her mouth. Nga does not look towards her caregiver during the interaction, except for a split second after the food has been placed into her mouth where she appears to look up towards Aye's face (see Figure 8). As with their nine-month-old sister, the twins do not direct attention at the caregiver or the food item while the feeding takes place. Both children seem lost in unspoken thought and direct their attention to other aspects of the environment.

Qualitative Analyses of Minimized Agency in Eating

Nine months of age. Htwe is standing up, leaning against Sandar, who is holding her up with one hand and carrying a bowl in another hand. Sandar picks Htwe up and sets her back down such that she is sitting next to her and stuffs rice into her mouth with her fingers. Htwe chews the food and then starts to crawl away towards her twin sisters. Sandar cries out "Here, here, come here!!" and pulls her back and sets her back down beside her. Htwe attempts to crawl away again and she pulls her back once again, sitting her back down in her place. Calling loudly, "Hey, hey Kiki (her nickname)," Sandar stuffs more rice into Htwe's mouth with her fingers. The child's agency is minimized by physically placing food in her mouth, but also by holding her in place. Htwe stands up. Sandar stuffs more food into her mouth. Htwe crawls away again, to which Sandar cries "Here, here, Kiki, here". The infant crawls away towards her twin

sisters and beyond them. This time, Sandar reaches over and brings the food to Htwe's mouth without pulling her back into place.

Four years of age. With some effort, Kyi climbs out from behind the couch where she has been playing and walks towards a green tricycle that is inside the living room; she begins to ride it. Although the family had a dining area with chairs and a table, as well as small booster seats for the twin girls, mealtimes did not proceed in the kitchen or eating areas, but either seated on the floor or (more commonly) with a caregiver following the twins around with a bowl full of food. Unlike the nine-month-old infant, who was often held in place as she was fed, the older children were allowed to explore and play during the mealtime. Aye attempts to feed Nga as she is riding around on her tricycle. Nga refuses, shaking her head a bit and pulling away from the food. Aye, who is sitting down on a stool, pulls the tricycle that Nga is sitting on towards her with one foot and stuffs rice into Nga's mouth.

Qualitative Analyses of Intimacy

Nine months of age. Htwe is sitting between, Aye and Sandar, her two nannies, both of whom are sitting cross-legged on the balcony. Htwe's relationship with her caregivers during mealtimes encompasses multiple modalities, with her typically having not only intimate contact through feeding, but often core bodily contact, as well as occasional face-to-face interactions where caregivers look at the baby and smile, sometimes speaking to her and calling out her name. Sandar stuffs rice into Htwe's mouth with her fingers. Although Htwe is turning away from her, Sandar smiles and looks at Htwe's face. Htwe scrambles up, trying to stand, and Sandar picks some food that has fallen on Htwe's lap off with her fingers. Aye, the older nanny, places a hand on

Htwe's arm, helping her to stand up. Aye also smiles and gazes into the baby's face as she does this. Sandar puts her arm around Htwe's stomach and pulls Htwe towards her so that Htwe is now leaning against her core. She reaches around Htwe from behind and stuffs more food into her mouth, using her fingers. When Htwe spits food back out Sandar simply takes it away with her bare hands.

Four years of age. Nga and Kyi are sitting on the balcony with Aye, who holds a large bowl filled with rice. She stuffs a spoonful of rice into Nga's mouth and then gets another spoonful of rice from the same bowl and stuffs it into Kyi's mouth. Aye uses the same spoon to feed both girls. Nga picks up a pink plastic cup of water and takes two sips. Kyi reaches over and grabs the cup from Nga's hand. Nga looks down at the cup, but shows no sign of protest to having it taken away. Throughout the meal, the cup passes back and forth between the two sisters. Likewise, the caregiver alternates feeding the two girls with the same spoon and from the same bowl. Note that this family has many bowls and spoons and plenty of hands to wash them; they are not sharing utensils out of necessity. The twins do not speak to each other during the meal. A sense of shared intimacy is gained only through acts of eating and the coordination of shared items. Likewise, Nga says nothing to the caregiver during the meal and Kyi is observed only to comment at one point that "it's very spicy!" (with regard to the food) and to comment to no one in particular: "(Htwe) keeps going up and down, up and down." Intimate contact between the caregiver and the older children is entirely through the process of feeding.

Discussion

The present study documents major cultural differences in the daily eating practices of children, raising important theoretical issues about how children may learn culturally specific values about the self. Compared to children in Los Angeles, children in Yangon engaged in significantly less independent eating, with some children being fed by caregivers well into the elementary school years (Figure 9). In contrast, as seen in Figure 10, even a seven-month-old U.S. child, the youngest in the sample, was observed to be eating food items on her own. Likewise, children in Burma were less likely than children in the United States to exert agency with regard to gratifying their hunger, relying upon caregivers to satisfy their needs for food. Differences in eating practices of Burmese and U.S. children also emerged in the domain of social intimacy. Burmese children were more likely to consume food items that already had been partially eaten by other individuals. They were also more likely to share spoons, forks, plates, and bowls.

These findings shed light on the nature of continuity and discontinuity in cultural differences across ontogenetic time. We found that group differences in independence, agency, and intimacy were present early in life and maintained across a significant span of development. The question of how and when individuals acquire culture and when appreciable and consequential differences emerge between cultures is a long-standing debate. Developmental psychologists have stressed the role of ecological factors in contributing to developmental continuity from the standpoint of the differences that exist *between individuals*, but have had considerably less to report about developmental continuity from the standpoint of the differences that exist *between cultures* (see

Greenfield & Childs, 1991, for an exception). The present study addresses this issue, thereby filling a significant gap in the literature.

Another key finding from the present study concerns the variability in the Burmese sample. The differences in variability between the Burmese and U.S. sample is interesting in light of the fact that Burma-Myanmar is a society that is currently undergoing significant economic, political, and social change ("Change in Myanmar," 2012). It may be that much of this variability seen in the Burmese families is due to the changing socio-demographic characteristics of Yangon; differences among children may represent differences in degrees of assimilation to globalized social change (Greenfield, 2009).

Directions for Future Research

In light of the present findings that report significant cultural differences in eating practices between children in Burma and the United States, it would be worthwhile in future studies to attempt to identify the psychosocial consequences of such differences. More needs to be done, for example, to determine whether eating is a particularly potent form of social learning, especially in domains relevant to the development of the self. It would be interesting in future studies to examine whether engaging in intimate forms of eating (i.e., taking a bite out of a food item that another has already bitten) is psychologically and emotionally equivalent to gaining intimacy through other means. It is possible that, although children in the United States demonstrate relatively low levels of intimacy in eating behavior, they may demonstrate increased intimacy in other domains such as the sharing of verbal narratives. While physically placing food in another person's mouth may be abstractly equivalent to sharing a verbal narrative in terms of the

intimacy goals that are set, one form of intimate contact may be more emotionally and psychologically potent than another form. It would be interesting to examine whether or not eating is a particularly powerful manner in which to teach children to become independent or cultivate a sense of interpersonal agency. Childhood eating practices may also affect other aspects of psychosocial development, such as pro-sociality, empathy, attachment, trust, and resiliency.

More needs to be done in future studies to determine the exact predictors of the eating practices that are documented in this study. A future direction will be to examine variability in the Burmese sample from the perspective of the social, political, and economic change that Burma is undergoing.

Broadening out both the Burmese and U.S. samples in future studies would shed further light on the eating practices highlighted in this article and the ecological conditions that give rise to them. It would be worthwhile in future studies to examine how eating patterns vary as a result of socio-economic factors in both field sites. Both the United States and Burma-Myanmar are diverse societies, with a dominant majority culture, as well as less dominant minority populations. It would be informative to broaden out the ethnic composition of the U.S. sample in future studies. Studies of immigrant populations in the United States would be especially useful in shedding light on the nature of cultural transmission of eating practices. Most likely, there are not just two forms of eating practices (one independent and the other interdependent), but a range of behaviors that reflect the explicit cultural values, implicit developmental goals, and other affordances that coexist in a particular historical and cultural setting.

Conclusion

In his homage to food and eating, Rozin (1999) writes: "The insulated...self, protected by skin from the rest of the world, experiences a material breach of this boundary a few times every day in the act of eating. The world enters the self" (p. 14). The results of the current study highlight how a culturally variable world can, indeed, enter the self through day-to-day acts of eating. In doing so, the study fills a significant gap in the literature on psychosocial development. Eating practices have the potential to shape developmental trajectories in important ways. We hope that this study is an initial step in putting eating—and those other aspects of our lives that comprise 'habitus'—in center stage, as possible primary mechanisms through which children everywhere are socialized into their respective cultures.

Table 1

Inter-rater Reliability for Eating Variables

Measure	Cohen's Kappa	Agreement
Independence in Eating	.95	97.52%
Agency in Eating	.95	97.52%
Intimacy in Eating	.87	95.87%
Individuals Feeding Children	.86	91.74%
Individuals With Whom Children Are Engaging in Food-related Intimacy	.88	96.29%

Table 2

Results of Mixed Linear Effects Models

Outcome	Parameter	Estimate	Standard	z-statistic	p-value
Measure	Error			1	
Independence					
of Eating					
	Intercept	.278	.072	3.87	0.000
	Burmese ^a	.711	.073	9.74	0.000
	Variance of	.003	.014		
	Intercept				
	Residual	.063	.018		
	Variance				
Agency in					
Eating					
	Intercept	.288	.071	4.03	0.000
	Burmese ^a	.693	.073	9.47	0.000
	Variance of	.005	.014		
	Intercept				
	Residual	.059	.017		
	Variance				
Level of					
Eating					
Intimacy	_				
	Intercept	1.93	.264	7.30	0.000
	Burmese ^a	-1.05	.288	-3.63	0.001
	Variance of	.219	.232		
	Intercept				
	Residual	.653	.218		
	Variance				

a versus reference group, American

Table 3

Individuals Feeding Children

	Self Feeding	Mother	Father	Sibling	Grandparent	Childcare Worker	Total
Burma- Myanmar	273	372	10	3	8	277	943
United States	882	24	7	0	0	1	914
Total	1155	396	17	3	8	278	1857

Table 4

Frequencies of Food-Related Intimacy

	Burma	United States
Types of Food-Related Intimacy		
No food-related intimacy	614	912
Share plate or bowl	29	0
Share utensil	38	0
Share food item (item does not touch both mouths)	12	0
Share food item (item touches both mouths)	0	1
Share plate or bowl, utensil	195	0
Share plate or bowl, food item (item does not touch both mouths)	4	0
Share plate or bowl, food item (item touches both mouths)	0	0
Share plate or bowl, utensil & food item (item does not touch both mouths)	57	0
Share plate or bowl, utensil & food item (item touches both mouths)	0	0
Total	949	913

Table 5

Individuals With Whom Children Are Engaging In Food-Related Intimacy

	No One	Mother	Sibling	Childcare Worker	Total
Burma- Myanmar	613	18	311	2	944
United States	912	0	0	1	913
Total	1525	18	311	3	1857

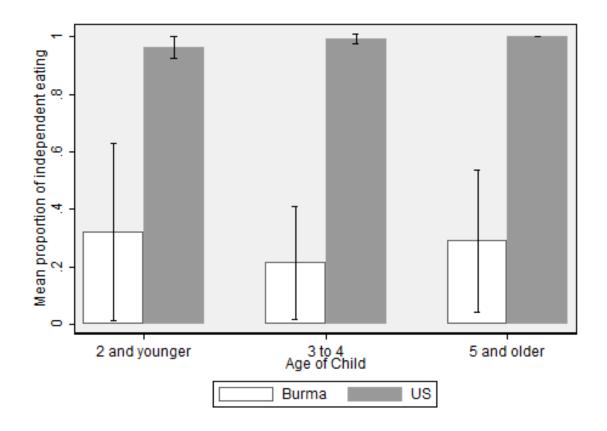


Figure 1. Independence of eating: Mean proportion of independent eating in Burma-Myanmar and the United States.

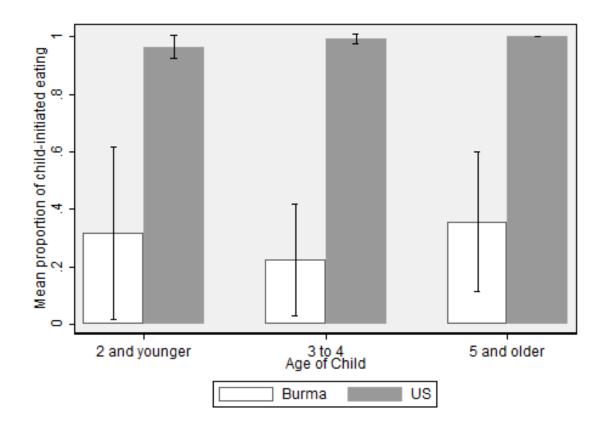


Figure 2. Agency in eating: Mean proportion of child-initiated eating in Burma-Myanmar and the United States.

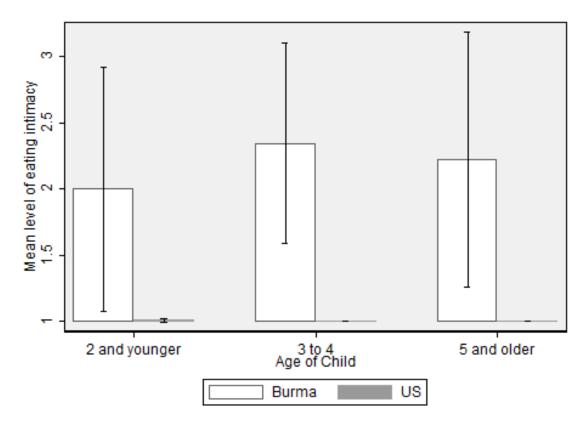


Figure 3. Intimacy in eating: Mean level of eating intimacy in Burma-Myanmar and the United States.

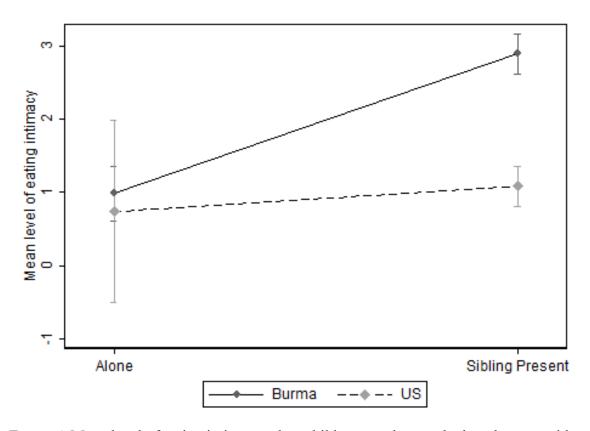


Figure 4. Mean level of eating intimacy when children are alone and when they are with a sibling.

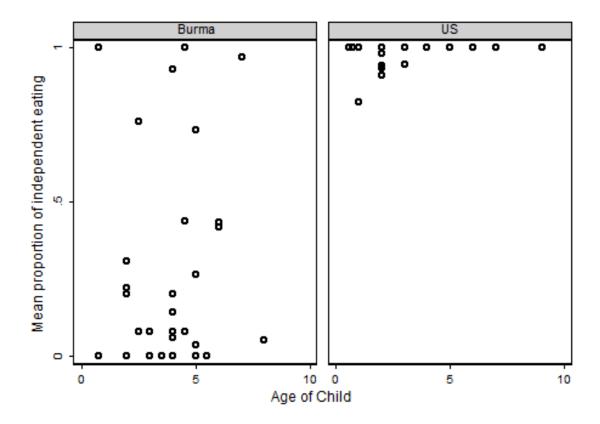


Figure 5. Scatterplots of scores for independent eating in Burma-Myanmar and the United States.

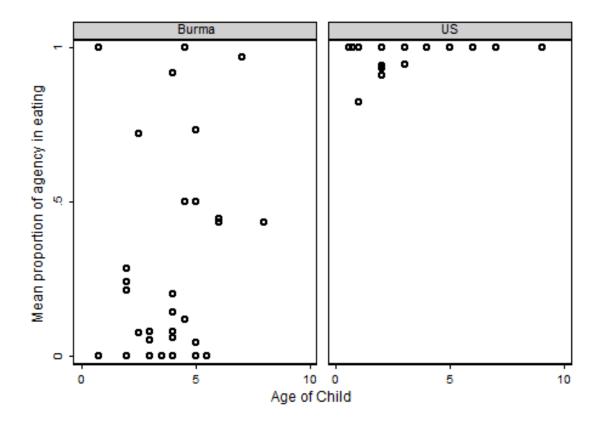


Figure 6. Scatterplots of scores for agency in Burma-Myanmar and the United States.

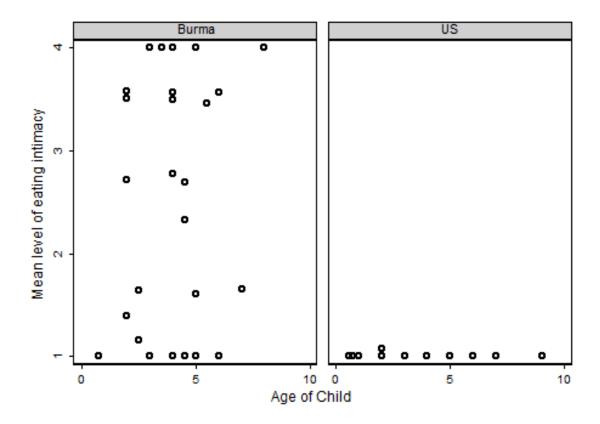


Figure 7. Scatterplots of scores for intimacy in eating in Burma-Myanmar and the United States.



Figure 8. Four-year-old girl being fed by her caregiver in Burma-Myanmar.



Figure 9. Eight-year-old girl being fed by her mother in Burma-Myanmar.



Figure 10. Seven-month-old infant engaging in independent eating in the United States.

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Chapter 2: Grooming and the Development of the Self

Like food, grooming looms large, as a possible primary mechanism for how children learn about the self, because it is, at once, deeply rooted in our evolutionary past, as well as being susceptible to being shaped by both culture and mind. Despite the overwhelming evidence in the primate literature that speaks to the importance of grooming in forming and maintaining social bonds, including group cohesion, there have been next to no empirical studies on how grooming impacts human sociality (please see Nelson & Geher, 2007; Thompson, 2010 for exceptions). Likewise, although allogrooming behaviors are evolutionarily tied to behavioral and hormonal systems involved in parenting, there are no empirical studies on grooming and parental behavior in humans. Developmental psychology has overlooked the role of grooming in children's psychosocial development. Especially lacking are cross-cultural studies of grooming practices and their potential to shape cultural pathways of development with regard to the self.

The Evolutionary Functions of Grooming

From the standpoint of disease avoidance and parasite removal, both personal and allogrooming ('other' grooming) is basic to human survival. Allogrooming looms particularly large for infants who necessarily require the assistance of parents and other caregivers in order to meet basic hygiene needs. Like many other mammalian species, human parents regularly groom their offspring as part of routine caregiving. The importance of grooming to infant survival is derived not only from its more immediate role in reducing risk of disease and infection, but its relationship to other physiological and hormonal systems that are essential for long-term health and well-being. Tactile

contact, an integral feature of most forms of grooming, is linked to temperature regulation of infants. In non-human mammals, such as rats, maternal contact, in the form of licking and grooming, has been linked to both behavioral and endocrine responses to stress (Francis & Meaney, 1999; Liu, Diorio, Tannenbaum, Caldji, Francis, Freedman, Sharma, Pearson, Plotsky, & Meaney, 1997).

Allogrooming on the part of parents and other caregivers is so closely tied to the survival and eventual reproductive success of humans that allogrooming skills are thought to serve as displays for judging parental qualities during mate selection (Nelson & Geher, 2007). Maternal grooming behaviors in rats have been demonstrated to influence neural development, including the development of estrogen sensitivity in regions of the brain that regulate maternal behavior. These studies suggest that grooming may be integral to the intergenerational transmission of maternal behaviors, including the transmission of individual differences (Champagne, Diorio, Sharma, & Meaney, 2001). In terms of parental investment, grooming activities can be costly, both from the standpoint of energy expanded, as well as the hazards presented to caregivers when they handle parasites, waste, and other bodily substances.

Although allogrooming often involves interactions with substances that would typically elicit disgust, parents and other caregivers appear to suppress disgust reactions when handling such substances during routine caregiving of infants and young children. Conversely, those being groomed place themselves in a vulnerable position vis-a-vis the person grooming them, often allowing them access to parts of their body that are perceived as being more susceptible to physical and social contamination (Rozin, Nemeroff, Horowitz, Gordon, & Voet, 1995). Rozin (1995) has found, for example, that

apertures, such as the mouth, as compared to unbroken skin. Fiske (2004) has argued that communal sharing relationships are understood in terms of the metaphor of *merged bodies* and *shared substances*. Many grooming interactions involve both the merging of bodies in the form of physical contact, as well as the handling or sharing of bodily substances that are not one's own (for example, mucus, saliva, feces). In the same manner as food and eating, grooming and being groomed by another may be a social signal of interpersonal intimacy. Grooming may be an especially powerful indicator of interpersonal intimacy for children, who may use information about who is grooming them to infer who in their environment is a an in-group member, with whom issues of social and physical contamination need not be a concern. Likewise, being groomed by another may engender a sense of trust between the child and the person who is grooming him or her.

Allogrooming looms large in establishing and maintaining social relationships. This is true in both primates and humans. Empirical and theoretical work of grooming amongst non-human primates highlight the social functions of grooming and its impact on both dyadic bonds, as well as group cohesion (Grueter, Bissonnette, Isler, & van Schiak, 2013), with some researchers hypothesizing that grooming serves similar functions to human language (Dunbar, 1998). Social grooming has been linked to coalition building, reconciliation, appeasement, and more general patterns of social reciprocity and resource exchange amongst non-human primates (de Waal, 1997; Schino, di Sorrentino, & Tiddi, 2007; Tiddi, Aurel, & Schino, 2010). Although there are no comparable studies in humans, it has been asserted that altruistic behaviors and

cooperation in humans should, likewise, be gaged with more common aspects of day-to-day life, by examining seemingly banal acts such as grooming (Schino & Aureli, 2010).

Grooming and Culture

Like food and eating, grooming activities and the rituals that surround them have been shaped to a large degree by culture. In humans, where personal and allogrooming activities encompass behaviors such as manicures, pedicures, bathing, shaving, facials, hair cutting, brushing, braiding, blow-drying, as well as the application of lotions, perfumes, powder, and other forms of medicinal and cosmetic ointments, the daily routines, rituals, and practices that surround grooming, can be particularly elaborate. Adult humans in many industrialized societies often pay for grooming services, not only for themselves, but for their children and pets, such that entire sectors of the economy and people's life occupations are defined by allogrooming. Public bathing and the rituals associated with it, is an important part of daily life in many societies, including Japan, Turkey, and Scandinavia.

Grooming practices also have a bearing upon culturally specific notions about the self, including notions about moral and spiritual purity. Grooming in the form of physical cleansing is a central part of major religions, including Islam, in which ablutions are integral to daily life and a necessary part of preparing for prayer and worship. Islamic law specifies not only that one should bathe and wash, but also the frequency and manner in which one washes on a daily basis. Likewise, other world religions, including Christianity and Hinduism, use baptism and other water purification rituals in order to symbolically wash away moral and spiritual impurities. The notion of moral purity is thought to be conceptually tied to understandings about physical cleanliness (Lakoff &

Johnson, 1999), so much so that threatening one's sense of moral purity can increase the likelihood that one will physically wash one's self (Zhong & Lilejenquist, 2006). As in the case of the *untouchable* class of India and the *Burakumin* of Japan, the dichotomy of purity versus contamination can extend on a cultural level to cognitions about the specific individuals and broader categories of people that are considered an acceptable or unacceptable part of one's own group identity, with those that are considered unacceptable perceived as *dirty* or *polluted*.

Grooming and Cultural Socialization of Children

Grooming practices are tied to cultural beliefs about ideal forms of self and personhood, not only in terms of their relationship to notions of purity versus impurity, in-group versus out-group, but also in terms of ideals about how independent and individuated the self should be. Phrases like *self care activities* and *personal hygiene* drive home the fact that, in the United States, day-to-day grooming activities are expected to be performed on one's own (Nelson & Geher, 2007). To be unable to attend to one's own basic hygiene requirements can potentially cause embarrassment and shame, not only in adulthood, but also in childhood. It is often taken for granted in the United States that a developmental goal for infants and young children should be to bring them to a point where they can engage in self-care practices on their own, in private.

Developmental psychology has not considered how culture, including socialization goals for interdependence, communality, and supplication to authority, may shape day-to-day grooming practices of caregivers and children. Thus, while there are more than a few ethnographic accounts of how day-to-day grooming practices of children differ cross-culturally with rich qualitative descriptions, including visual data drawn from

video case studies, with bathing, in particular, being a keen interest amongst anthropologists (Bateson & Mead, 1942; Mead, Bateson, & Bohmer, 1954; Gottlieb, 2004), there have been no quantitative studies of children's day-to-day grooming practices within psychology. Likewise, although, psychological anthropologists, like Bateson and Mead (1942), as well as Freudians and neo-Freudians, drew strong links between grooming practices and personality formation, cultural and developmental psychologists have overlooked the role of daily grooming practices and how they have a bearing upon the development of the self.

Overview of Study 2

The following study is a quantitative comparison of allogrooming behaviors in two cultural settings: an urban center in Burma-Myanmar and an urban center in the United States. Allogrooming is defined as the grooming of another person. The study focuses on allogrooming that is performed on the child by others in their social environment (typically caregivers). Data were collected in Los Angeles and Yangon, with the sample being almost identical to the sample used in study 1 (see Participants section for details). Once again, a broad range of ages was sampled in each culture in order to examine the developmental patterning of grooming behaviors.

The first part of the study presents results obtained from quantitative analyses of allogrooming behaviors, with the goal being to compare certain behaviors in Burma-Myanmar and the United States. For the quantitative portion of the study, participants were filmed continuously across multiple routine daily activities. The naturalistic behaviors of each participant were then coded and quantified. In particular, we focused on two variables: a.) Interdependence in Grooming, and b.) Intimacy in Grooming. For

both variables, grooming behaviors in which others are grooming the child (*allogrooming* behaviors) are examined. Allogrooming behaviors, rather than personal grooming behaviors, are examined for both methodological and theoretical reasons. From the standpoint of theory, caregiving and the maintenance of social bonds is linked to behaviors in which organisms groom others, rather than behaviors in which organisms are simply attending to their own hygiene needs. In terms of methodology, since humans, including children, are necessarily in constant contact with their own bodies, it is much more challenging to discern and reliably code for personal grooming behaviors than it is to discern and reliably code for allogrooming behaviors.

In the second part of the study, qualitative examples are drawn from case studies in Burma-Myanmar and the United States, with the goal being to contextualize the quantitative findings and offer insights into cultural differences in developmental trajectories. Secondarily, since dressing is a special case of grooming that is more easily discernable than other types of grooming (including whether or not a child dresses independently or is dressed by a caregiver), but whereby the present study did not have enough instances of dressing to allow for quantitative analyses, the case studies are also used to compare dressing behaviors between the two cultures.

As with the first study, predictions about cultural differences in grooming behaviors, as well as the nature of developmental trajectories in interdependence and intimacy with regard to grooming, are based upon the theoretical formulation of developmental pathways (Greenfield, Keller, Fuligni, & Maynard, 2003; Greenfield, 2009). The following hypotheses were formulated with regard to cultural differences between children in Burma-Myanmar and the United States:

Hypothesis 1: Interdependence in Grooming. It was predicted that children in Burma-Myanmar would have higher counts of interdependent grooming (allogrooming) relative to children in the United States.

Hypothesis 2: Intimacy in Grooming. It was predicted that children in Burma-Myanmar would have higher levels of intimacy in grooming relative to children in the United States.

Hypothesis 3: Developmental Trajectory for Interdependence and Intimacy in Grooming. It was predicted that whereas in the United States there would be less interdependent grooming behaviors as children got older, in Burma-Myanmar, frequency of allogrooming behaviors would remain at the same levels across developmental time. Likewise, it was predicted that whereas in the United States there would be less intimacy in grooming as children got older, in Burma-Myanmar intimacy in grooming would remain at the same levels across developmental time.

Method

Participants

Sampling procedures in both cultures are described in detail in chapter 2. There were a total of 57 children from 33 families in the sample. All participants in the Burmese sample came from various suburbs of Yangon, a large urban center in the southern part of Burma-Myanmar. The sample included 33 children from 21 families. The sample for study 2 is identical to the sample in study 1 with the exception that a child from the U.S. that was not included in the first Study due to an error in the coding process and an infant in Burma-Myanmar who could not be included in Study 1 because it did not

participate in a mealtime and displayed no eating behaviors were included in the sample for the current study. Participants in the U.S. sample came from various suburbs of Los Angeles, a large urban center on the West Coast of the United States. The sample comprised 24 children from 12 families. The age range of children in Burma-Myanmar was 6 months to 8 years of age (M = 3.76, SD = 1.73). The age range of children in the United States was 7 months to 9 years of age (M = 3.31, SD = 2.19). In Burma-Myanmar, there were 19 males and 14 females in the sample. In the United States, there were 12 males and 12 females in the sample. The addition of one infant into the Burmese sample altered the breakdown of the ethnic composition of the children in Burma-Myanmar slightly, with 48% of the children being ethnically Burmese, 24% belonging to one or more of the ethnic minority groups native to Burma-Myanmar, 22% being of mixed Burmese and ethnic minority descent, and 6% being of mixed Burmese and Chinese descent. The addition of one child to the U.S. sample, likewise, altered the ethnic composition of the sample, such that 95% of the children were of European-American descent. Detailed information about household size, and the composition of the families (including socio-economic status, presence of both mother and father in the household, number of siblings, and number of adult caretakers) can also be found in study 1. As with study 1, since so much caregiving was performed by nannies in the Burmese sample, but not in the U.S. sample, analyses were done, where appropriate, to ensure that cultural differences were not in fact nanny-mother differences; these findings are incorporated into the Results section.

Procedures

Quantitative study. The sampling methods for Study 2 were identical to those in study 1. As described in study 1, the first author informed parents that she was interested in filming the day-to-day activities of their children. There were no arbitrary time limits set on the video recording, with one of the goals being to record as many routine family activities as possible, in addition to recording a family mealtime. Participants in both Burma-Myanmar and the United States (both parents and children) were informed during the consent procedure that they could ask the researcher to turn off the camera at any point during the recording. Although there was one child that was designated the 'focal' child (the child on which the camera was to be on at all times), the camera was positioned in such a way that the behaviors of all the children present during any given activity were captured at some point during the activity. Video focal follows ranged from 10 minutes, 9 seconds to 2 hours, 10 minutes, 41 seconds in Burma-Myanmar (M = 50 minutes, 29 seconds, SD = 27 minutes, 7 seconds) and from 13 minutes, 38 seconds to 1 hour, 50 minutes, 14 seconds in the United States. In Burma-Myanmar 64% of the children in the analyses were 'focal' and another 33% were siblings of the focal child. In the United States 50% of the children in the analyses were 'focal' and the other 50% were siblings of the focal child. Since it was possible for children, who were non-focal to be groomed off-camera, children's 'focal status' is incorporated into the Data Analysis and Results section. Likewise, since length of time of the video focal follows may potentially impact the total counts of allogrooming, time of focal follows is incorporated into the Data Analysis and Results section. In families where more than one child was present during the filming, the behaviors of each of the children were coded separately.

Qualitative study. The data discussed in the qualitative portion of the study was collected in the same manner as the quantitative portion of the study, but in addition to video data, the results of the qualitative study integrate data that is drawn from participant observations and structured field ethnography. As described in chapter 1, approximately 500 hours was spent in the field, performing participant observations of children's learning environments in Yangon and Los Angeles.

Dependent Measures

Interdependence in Grooming. The first variable measured the amount of interdependent grooming by measuring the frequency of allogrooming that was performed on the child by others. An instance of primary allogrooming was operationalized as occurring when an individual made (a) motor movement(s) that could be inferred as having the goal of cleaning the child, maintaining the child's appearance, or making the child neater. Examples of allogrooming behavior include wiping hands, mouth, nose, or other body part; washing hands, mouth, nose, or other body part; taking away regurgitated food; combing hair or running fingers through hair in order to detangle hair; shampooing or conditioning hair; removing lint, hair, or food stains from the child's clothing; wiping or cleaning sweat from the child's forehead or other part of the child's body; swatting away insects that are on or near the body of the child; applying lotion to the skin or body of the child; applying nail polish, powder, or other substances that are either cosmetic or medicinal. Grooming typically involved physical contact with the child except in the case of swatting away insects that are near the child's body, but not directly on the child. Coding was done such that each discernable motor movement was coded as a single instance of allogrooming. This was the case even if that motor movement was a

part of a larger repertoire of grooming behavior. For example, if a caregiver wiped the child's hands for five seconds, then each movement of the caregiver's hand that was a discernable 'wipe' was coded as an instance of grooming.

As described in the Data Analysis section, since the variability in length of time of the video focal follows could potentially impact the total counts of allogrooming, length of time for the focal follows was controlled for by adding it as a predictor to the regression models. Likewise, since whether or not a participant was a *focal child* (the child whom the camera was to be focused on at all times) provided differential opportunities for recording allogrooming behaviors, children's *focal status* was controlled for by also adding it as a predictor to the regression models.

Intimacy in Grooming. The second variable measured level of intimacy in grooming on a 6-point scale (1 = low level of intimacy and 6 = high level of intimacy). The two main criteria used in judging intimacy in grooming were: 1.) the nature of the contact and 2.) presence or absence of child's bodily substance (Fiske, 2004). The nature of the contact was conceptualized as consisting of the following categories: mediated contact, unmediated contact between person grooming and substance, and unmediated contacted between person grooming and child. Mediated contact was through an external physical entity such as the child's clothing or a hair brush. Unmediated contact with substance was when person grooming came into direct contact with substance that was removed from child. Unmediated contact with child was skin-to-skin or skin-to-hair. Unmediated contact was considered more intimate than mediated contact with substance.

The second criterion was assessed dichotomously based on whether or not the

grooming involved the child's bodily substances (examples are sweat, mucus, saliva) or non-bodily substances (dirt, food, lint, shampoo) or no substances, with the child's bodily substance considered more intimate. Grooming that involved bodily substance of the child is given priority in the scale as being more intimate, compared with bodily contact with the child (Fiske, 2004). Table 1 shows the intimacy scale.

Once the two main criteria were coded, these codes were then used to rate each instance of grooming:

Level 1. If there was mediated contact between person grooming and the child or the substance that he or she was seeking to remove from the child and there was either no substance present or non-bodily substance present (examples are dirt, food, lint, or shampoo), then the instance was coded as having an intimacy level of 1. Examples of mediated contact with no substance would be brushing the child's hair or adjusting the collar on the child's shirt. Examples of mediated contact where there is a non-bodily substance present would be wiping food stains off the child's face with a wash cloth.

Level 2. If there was unmediated contact between person grooming and the substance that he or she was seeking to remove from the child and there was either no substance present or non-bodily substance present (examples are dirt, food, lint, or shampoo), then the instance was coded as having an intimacy level of 2. An example of this would be if the person grooming the child cleaned food stains off of the child's shirt with his or her bare hands.

Level 3. If there was unmediated contact between person grooming and the child and there was either no substance present or non-bodily substance present (examples are dirt, food, lint, or shampoo), then the instance was coded as having an intimacy level of

3. An example of this would be if the caregiver cleaned food stains or dirt directly off the child's hands with his or her own hands.

Level 4. If there was mediated contact between person grooming and the child or the substance that he or she was seeking to remove from the child and there were bodily substances of the child present, then the instance was coded as having an intimacy level of 4. An example of this would be if there was mucus on the child's face and the caregiver wiped the mucus away with a tissue.

Level 5. If there was unmediated contact between person grooming and the substance that he or she was seeking to remove from the child *and* there were bodily substances of the child present, then the instance was coded as having an intimacy level of 5. An example of this would be if the caregiver wiped mucus off of the child's shirt with his or her bare hands

Level 6. If there was unmediated contact between person grooming and there were bodily substances of the child present, then the instance was coded as having an intimacy level of 6. An example would be if the caregiver wiped mucus off of the child's nose with his or her bare hands.

Since the length of the videos and the total number of instances of allogrooming differed for each participant, the final score for Intimacy in Grooming was calculated by averaging the intimacy ratings across all instances of allogrooming for the respective participant. If a participant had no instances of allogrooming, then he or she was given an intimacy score of 0.

Data Coding and Analyses

The video was coded using Inqscribe, a software system that is designed

specifically for analyzing video data. The first author served as the primary coder. The first step in the coding was to identify all the instances of allogrooming that occurred during the video taped sessions for each participant. After each instance of allogrooming had been identified, each instance was coded according to the criteria described under Dependent Measures. In addition to the criteria described under Dependent Measures, the relationship of the person who was grooming the child, the body parts that were groomed, and the activity that the child was engaging in while he or she was being groomed was also coded. The relevant categories for who was grooming are the following: mother, father, grandfather, grandmother, sibling, childcare worker (nannies), aunt, and other not specified. The relevant categories for body parts were the following: head/hair, face, mouth (outside), mouth (inside), hand/arms, legs/feet, core (chest), core (back), neck/shoulders, and private areas. Since it is possible to groom more than one body part with a single instance of grooming (for example wiping the shoulders and the back with a single action), the categories for body parts were not mutually exclusive. The relevant categories for activity were the following: mealtimes, hygiene-related activities that took place before or after a mealtime, hygiene-related activities that took place as part of a morning or evening routine (in preparation for the day or before going to bed, for example, brushing one's teeth or washing one's face), bathing or showering, other types of hygienic activities not specified (for example, washing one's hands after playing,), and other types of activities not pertaining to hygiene and not specified (for example, playing, doing homework, etc.).

Inter-rater reliability. After each instance of allogrooming had been identified by the primary coder, the next step was to have a second coder independently identify all

the instances of allogrooming and independently code each instance according to the same criteria that is described above. The reliability coder was an undergraduate research assistant. Inter-rater reliability was assessed for each variable by having the second coder code the data for 12 out of 57, or 21% of participants (6 from Burma-Myanmar and 6 from the U.S.) and then computing percentage agreement and Cohen's Kappa with Stata 12.1. The Cohen's Kappa for Interdependence in Grooming is 0.81, z = 22.52, p < .001, with coders agreeing 92.26% of the time. The Cohen's Kappa for Intimacy in Grooming is 0.75, z = 25.27, p < .001, with coders agreeing 87.92% of the time. Inter-rater reliability was also assessed for the variable whereby coders independently categorized the individuals who groomed the child. The Cohen's Kappa for who groomed the child is 0.82, z = 27.45, p < .001, with coders agreeing 92.12% of the time.

Quantitative data analysis. For Interdependence in Grooming, a negative binomial mixed effects model with Country and Age as fixed effects and Family Membership as a random effect was used. A mixed effects model was used in order to account for the nesting of children within families. A negative binomial model was used to model Interdependence in Grooming because the data comprised counts that are over-dispersed with skewed distribution and conditional variances much larger than conditional means. Figure 1 shows the scatterplots for Interdependence in Grooming per minute in Burma-Myanmar and the United States. Time (length of time of the videos) and Focal Status (whether or not the child was the subject of the focal follow or a sibling who was also taped during the focal follow) were also included as predictors in the model in order to assess the effects of Country and Age after controlling for both length of time of videos and whether or not the child was a focal child or sibling of a focal child. In

Order to assess whether or not differences still existed between Burma-Myanmar and the United States after removing all instances of allogrooming in which children were groomed by nannies, the same negative binomial mixed effects model was used to predict Interdependence in Grooming, after all nanny-related grooming instances had been removed. Age was conceptualized as a categorical variable in both analyses.

For Intimacy in Grooming, a linear mixed effects model with Country and Age as fixed effects and Family Membership as a random effect was used. Figure 2 shows the scatterplots for Intimacy in Grooming in Burma-Myanmar and the United States. As with the first outcome variable, Time (length of time of the videos) and Focal Status (whether or not the child was the subject of the focal follow or a sibling who was also taped during the focal follow) were also included as predictors in the model in order to assess the effects of Country and Age and their interaction after controlling for both length of time of videos and whether or not the child was a focal child or sibling of a focal child. In order to assess whether or not differences still existed between Burma-Myanmar and the United States after removing all instances of allogrooming in which children were groomed by nannies, the same linear mixed effects model was used to predict Intimacy in Grooming, after all nanny-related grooming instances had been removed. Age was conceptualized as a categorical variable in both analyses.

In order to assess whether or not differences in Interdependence in Grooming in Burma-Myanmar and the United States were due to the types of activities that the children were engaged in during the video-taped session, a negative binomial mixed effects model with Country, Age, Activity, and the interaction of Country and Age as fixed effects and Family Membership as a random effect was run. Time (length of time of

each activity for each child) was also included as a predictor in the model in order to assess the effects of Country, Age, Activity, and the interaction of Country and Age after controlling for length of time of the activity. All analyses were conducted with the statistical software package STATA 12.1.

Qualitative data analysis. Qualitative analyses were conducted by reviewing the video data and pulling out relevant examples of the following themes: interdependence versus independence and intimacy versus individuation in both Burma-Myanmar and the United States. A single case study was selected in each culture. Since one of the main hypotheses concerns the theme of developmental continuity in interdependent grooming practices amongst the Burmese and the relatively earlier development of independent grooming behaviors in the U.S. sample, rather than compare children of similar ages, a two-and-a-half-year-old girl in the United States and a four-and-a-half-year-old boy in Burma-Myanmar are compared. In addition to the age of the children, the two families that are the subject of the case studies were selected because of their comparability in terms of the time of day and activities that both children were engaging in during the focal follow, as well as similarities in socioeconomic status and household composition, including the presence of a younger, infant sibling. In the case of the U.S. family, it was the only family from the sample in Los Angeles that had extended family members (grandparents and an Aunt) residing in the same household. Likewise, it was the only U.S. family that had a nanny interacting with the child and participating in caregiving practices. The focal children in both families were filmed in the morning, eating a meal and then engaging in routine activities like face-washing and dressing, as they prepared to go to school (kindergarten and pre-school).

Quantitative Results

Results for Hypotheses 1 to 3

Hypothesis 1: Interdependence in Grooming. As predicted, there was a highly significant main effect found for Country, z (1) = -3.14, p = .002, with there being more instances of allogrooming per participant in Burma-Myanmar (M = 67.61, SD = 134.28), as compared to the US (M = 16.54, SD = 30.04). Additionally, Country predicted Interdependence of Grooming even after controlling for the effects of Time and Focal Status. There was no significant main effect found for Age, χ^2 (2) = 4.15, p = .13. Table 2 shows the results of the negative binomial mixed effects model for Interdependence in Grooming. Figure 3 shows the mean frequency of allogrooming in Burma-Myanmar and the United States.

Table 3 shows that children in Burma-Myanmar were groomed with the most frequency by their mothers and nannies. When the same negative binomial mixed effects model was run on Interdependence in Grooming, after all instances of allogrooming in which children were groomed by nannies had been removed, there was still a significant main effect found for Country, z(1) = -2.08 p < 0.05. Once again, Country predicted Interdependence of Grooming even after controlling for the effects of Time and Focal Status. Likewise, there was still no significant main effect found for Age, $\chi^2(2) = 1.25$, p = 0.54.

Table 4 shows the frequency with which children in Burma-Myanmar and the United States were groomed during specific types of activities. When a mixed effects negative binomial model was run in order to assess whether or not differences in Interdependence in Grooming in Burma-Myanmar and the United States were due to the

types of activities that the children were engaged in during the video-taped session, it was found that there was a significant interaction between Country and Activity, χ^2 (5) = 28.63, p < 0.001. Table 5 shows that there are significant effects for Country on Interdependence in Grooming for mealtime activities, hygiene-related activities that took place before or after a mealtime, and hygiene-related activities that took place as part of a morning or evening routine (in preparation for the day or before going to bed), with families in Burma-Myanmar engaging in more allogrooming during these activities than families in the U.S. These effects remain after Bonferroni correction. Table 4 also shows that there are no significant effects for Country on Interdependence in Grooming for bathing or showering activities, other types of hygiene-related activities that are not specified, and other types of activities not pertaining to hygiene that are not specified.

Hypothesis 2: Intimacy in Grooming. It was predicted that there would be significant cultural differences in intimacy in grooming. The results of the linear mixed effects model indicated that there is a significant interaction between Country and Age, χ^2 (2) = 12.94, p < .01, with Age being a significant predictor of Intimacy in the United States, χ^2 (2) = 19.69, p < .001, but not in Burma-Myanmar, χ^2 (2) = 2.83, p = .24. Table 2 shows the results of the linear mixed effects model for Intimacy in Grooming. Table 6 shows the parts of the body that were groomed with the most frequency in Burma-Myanmar and the United States. Table 6 also shows that the Burmese frequently groom body parts that are more intimate, such as the outside of the mouth, the inside of the mouth, and private areas. In the United States these more intimate parts of the body are rarely groomed by others.

When the same linear mixed effects model was run on Intimacy in Grooming, after all instances of allogrooming in which children were groomed by nannies had been removed, there was still a significant interaction between Country and Age, χ^2 (2) = 14.25, p < .001. Likewise, Age was still found to be a significant predictor of Intimacy in the United States, χ^2 (2) = 21.82, p < 0.001, but not in Burma-Myanmar, χ^2 (2) = 2.17, p = 0.34.

Hypothesis 3: Developmental Trajectory for Interdependence and Intimacy in Grooming. The last hypotheses pertained to cultural differences in developmental trajectories with regard to Interdependence in Grooming and Intimacy in Grooming. The first hypothesis predicted that whereas US children would a decrease in levels of interdependence in grooming as they got older, children in Burma-Myanmar would remain at the same levels of interdependence. The results of data analysis did not support the first hypothesis. There was no significant interaction between Country and Age for Interdependence in Grooming, $\chi^2(2) = 0.15$, p = .93. The second hypothesis predicted that whereas in the United States there would be less Intimacy in Grooming as children got older, Intimacy in Grooming would remain at the same levels in Burma-Myanmar. The results of the data analyses support the second hypothesis. Figure 4 shows that whereas Intimacy in Grooming decreased as Age increased in the US sample, Intimacy in Grooming remained at the same levels in Burma-Myanmar.

Variation in Burmese sample. Figure 1 and 2 show the scatterplots of scores for frequency in allogrooming and intimacy in grooming in Burma-Myanmar and the United States. The scatter plots show that families in Burma-Myanmar are more variable in frequency of allogrooming behaviors than families in the United States. Likewise,

Burmese families are slightly more variable in their behaviors than U.S. families in level of intimacy in grooming.

Qualitative Results

Case Study in the United States

Jenny⁵ is two-and-a-half-years-old and lives in a house on the Westside of Los Angeles with her mother, father, maternal grandparents, and infant sister. She also has a nanny, Heidi, who comes to the home and helps take care of her and her infant sister on the weekdays. Jenny's mother works at a full-time job away from home, but her father works at home on the weekdays.

Example 1. Jenny is in the bathroom with her nanny, Heidi. Heidi says to Jenny: "We are going to wash hands right now". Heidi takes the liquid soap that is on the sink and tries to pump it onto Jenny's hand, saying "get some soap". Jenny says "(inaudible) soap". Jenny has her hand held out, but the liquid soap does not seem to come out. Heidi tries to pump it again. Heidi comments: "it's tricky" and then takes the bottle of soap and twists the handle of the pump. She then pumps the soap on to Jenny's hands. Heidi says: "Uppp there you go!", after she finishes pumping the soap. Heidi seems to get some soap on her own fingers as she is performing this task for Jenny. She does not have any contact with Jenny's hands as she puts the soap on her because she is simply pumping it on to her hands, rather than rubbing it into her hands. Heidi turns on the water and as Jenny starts to rinse her hands, Heidi also rinses her hand quickly. Heidi rinses her hands and shakes them dry and says to Jenny: "I'm going to go get your lunch ready while you wash your hands, okay?" Jenny says: "Okayyy", as Heidi leaves her alone in the bathroom. Jenny

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⁵ Pseudonyms are used for both case studies.

says: "I want to drink wahwah (water)" to Heidi, who has already walked away. Jenny pushes herself up onto the sink and puts her mouth underneath the running water and takes a drink. She seems to lose her footing on the stool a bit and readjusts herself. She then puts one hand underneath the running water, then both hands, and claps them together lightly twice and then reaches over and turns off the water and then turns it on again (as shown in Figure 5). Jenny looks underneath the sink and retrieves a bright orange and green washcloth. She places the washcloth underneath the water and begins wiping her face with it. She wipes her face, not by bringing the wash cloth to her face with her hands, but by bringing her face down onto the washcloth and moving her face up and down (as shown in Figure 6). Jenny moves her face up and down about four times on the wash cloth when Heidi comes back into the bathroom. She pats Jenny on the back and says, "OK, Jenny, your din...your lunch is ready. Let's turn off the water, come on." Heidi walks away, leaving Jenny alone again. Jenny does not move from the sink, but takes her hand and puts it inside the washcloth, which resembles a puppet. Jenny takes her other hand and turns the washcloth around and then places it under the running water again. As Jenny brings the washcloth to her face, again, her father comes up behind her and says "Jenny, come on". Jenny wipes her face with the washcloth again, turns around to look at her father. Her father turns off the faucet and says, "Let's go" and seems to walk away. Jenny puts the washcloth down on the sink and says "Dada! Daddy! Daddy!". Her father comes back and picks Jenny up and carries her to the kitchen. He wipes her face quickly with his hands as he carries her.

Discussion and Analysis. At two-and-a-half-years-old, Jenny is left alone in the bathroom by her caregiver to wash her own hands and face. Even though the caregiver

washes and rinses her own hands in the sink, she does not wash or rinse Jenny's for her. The most the caregiver does is to pump soap onto Jenny's hands. As she pumps the soap onto Jenny's hands, there is no contact between them. The soap is pumped with her hand away from Jenny's. Jenny is able to retrieve a wash cloth from underneath the sink in order to accomplish this the task of washing her face, but washes in a manner that indicates hat she may still not have mastered the motor repertoire that is typically employed in washing one's face. Rather than bring the wash cloth to her face and using it to wipe her face, she bring her face down on top of the towel and moves it back and forth. Jenny's caregiver leaves her in the bathroom alone not just once, but twice. Neither Jenny's nanny nor her father appears concerned that she will not perform the tasks correctly. Likewise, they do not intervene. The bathroom is equipped with the accouterments necessary for a young child to be able to perform tasks like face washing and hand washing on her own. There is a stool and a wash cloth with bright colors that resembles a puppet.

Example 2. Jenny is sitting on a high stool at the kitchen counter. Her nanny, Heidi, is standing next to her. The stool that Jenny is sitting on is high enough that Heidi and Jenny are almost the same height. Jenny has just finished an early lunch and will begin to prepare to go to preschool. Holding a paper napkin in her hand, Heidi says: "Let's wipe your hands; let's wipe your hand and your face." She holds the napkin in front of Jenny who looks at it, takes it, and immediately begins wiping her face. Jenny takes the napkin and wipes her forehead and eyes, dabbing her forehead from left to right. After she has cleaned her forehead from left to right, Jenny brings the napkin to her left forehead and eye again and than dabs downward to her cheeks. She then takes the napkin

and wipes her forehead again from left to right. As seen in Figure 7, Heidi watches her clean her face, but does not say anything. Jenny dabs her cheeks again and begins to dab her nose and her mouth, when Heidi says, "I'm going to help your body come down from the stool." Heidi lifts the child from where she has been sitting and sets her down on the kitchen floor.

Discussion and Analyses. Although Jenny's real task after her meal is presumably to wipe her mouth, chin, cheeks, and other parts of her face and hands that are likely in need of cleaning after having eaten, she instead mostly wipes her forehead and eye. At two-and-a-half-years-old, Jenny either does not fully grasp the goals of the grooming task or does not have the motor skills to achieve those goals. Despite this, her caregiver watches and does not intervene as Jenny cleans herself after the meal. Only at the beginning of the task, she signals to Jenny that it is time to "wipe (her) hands and face". Rather than placing the napkin in Jenny's hand, she holds it out to her, such that Jenny has to reach out and take it. The fact that Jenny does not hesitate and immediately begins wiping her own face indicates that both her actions and those of Heidi are routine practice. There is no physical intimacy between the caregiver and Jenny and even when the caregiver has to bring Jenny down from the stool out of necessity, she announces: "I'm going to help your body come down from the stool" in order to signal to the child that for a brief moment, she will not be in control of her own actions.

Example 3. Heidi takes the napkin that Jenny is still holding in her hand and says: "You need to take off your shirt; can you start taking off your shirt?" Jenny replies: "Um, OK". Jenny starts grabbing the collar of her shirt, once and then twice. Heidi kneels down behind her and keeps an eye on Jenny as she tries to undress. Jenny takes her shirt

collar and, once again, begins to try to pull it up. She pulls it up so that part of her shirt now covers her face and then she tries to pull the bottom of her shirt up, with her face now completely covered by the top part of her shirt. Jenny struggles some more and finally succeeds in lifting the shirt up and away from her face, so that now the shirt is on her head (her arms still in the sleeves). Jenny grimaces as she struggles with the shirt, takes a few steps forward, turning completely away from Heidi and tries to take the shirt off her head. After a couple of tries, she succeeds in getting the shirt off her head, but it remains on her shoulders, with her arms fully inside the sleeves. As seen in Figure 8, Jenny flings her arms back and tries to remove the rest of the shirt from her body, taking a couple more steps forward, as she does this. Jenny finally says: "I can't." Heidi has been watching Jenny struggle with her shirt the entire time and says: "What do you need?" Jenny continues to struggle with the shirt, trying to take her arms out of the sleeves. Jenny flaps her arms and hops a little as she does this and Heidi smiles and chuckles. Heidi asks again, smiling: "What do you need?" Jenny says: "I need, I need help", as she still attempts to take the shirt off on her own. Heidi asks: "You need help?" Heidi still does not move towards Jenny, who is now a few feet away from her. Jenny, once again, attempts to take the shirt off on her own by placing both hands behind her back and pulling the shirt down with both hands. Heidi observes: "Well, it looks like you are doing it yourself". It is difficult for Jenny to move her arms, since her arms are still inside the sleeve of the shirt, but she tries to reach over to her left sleeve with her right hand to take the shirt off. Jenny says: "I can't, I can't". Heidi says: "Come over here and I'll help you". Heidi stays in place and Jenny walks over to where Heidi is squatting. As Heidi helps Jenny remove the sleeves from her arm, she says: "Good, look, you're learning how to

take off your shirt. Remember how we do sleeves first?" As she pulls one of Jenny's arms out from the sleeve, Heidi says: "Here let's do one". Once the arm is freed from the sleeve, Heidi says: "There you go". Jenny swings her now free arm around and finishes undressing by pulling the sleeves off her other arm on her own. Heidi smiles and says, "Got it". Heidi then says: "Can you go put it in the hamper?"

Discussion and Analysis. As was observed in other households, even with infants and young children, caregivers in the United States encourage the child to perform grooming acts on their own before they intervene or perform it on their behalf. Although Jenny struggles and has to exert a great deal of effort to complete each action, Heidi does not intervene until the very last moment. Rather than immediately helping the child, Heidi prompts her to ask for help. Even when Jenny has stated that she cannot do something by saying "I can't", Heidi does not step in and perform the task for her or help her in any way. Moreover, she asks Jenny "what do you need?" so that Jenny has to articulate the fact that she needs another person to help her achieve her goal. Jenny states twice that she is in need of help, but also continues to try to complete the task on her own as she asks. After Heidi asks her "you need help?", Jenny does not walk over to Heidi, but continues to put effort into completing the task on her own. The fact that Jenny has to walk over to Heidi in order to attain help is significant. Heidi does not simply move towards Jenny and take the sleeve out of the shirt for her. She uses the opportunity to reaffirm that Jenny is learning how to get undressed and to instruct her in how to improve her self dressing skills by reminding her that "we do sleeves first". There is no physical contact between the child and the caregiver, except at the very end of the interaction. Heidi does not hover close to Jenny even as she attempts to dress on her own, but remains a few feet away the entire time. When Jenny later puts on her clothes for school, once again Heidi encourages her to perform the tasks on her own. As seen in Figure 9, the only time Heidi performs allogrooming, without first having Jenny perform the task independently is when she is brushing Jenny's hair and putting it in a pony tail. There are some allogrooming activities that are seen as more acceptable in US families. Hair brushing and styling (especially for young girls) comprise such activities. Heidi brushes Jenny's hair for a long time, talking to her for the duration of the activity.

Case Study in Burma-Myanmar

Tha Tha is four-and-a-half-years-old and lives in a house with his mother, father, grandparents, and infant sister in a suburb of Yangon. The family also has a live-in nanny residing with them. Tha Tha's father works away from home, but his mother stays at home with the two children.

Example 1. Tha Tha just finished eating breakfast and is now in the bathroom with his mother, Yadanar, preparing to go to school. As seen in Figure 10, His mother wets her hands and then wipes Tha Tha's cheeks from right to left. She then places the palm of her hand on his mouth and chin so that it covers them entirely and wipes his nose with her two fingers to clean it of mucus. She then wipes the area below his nose with her thumb and sweeps the entire palm of her hand back across his chin and mouth, this time from the left to right. She does not say anything to Tha Tha as she performs these actions and he, likewise, does not say anything to her. When she takes her hand off for a second, Tha Tha picks up the toothbrush that has fallen into the sink and places it in an orange bowl. Tha Tha's mother rinses her hand with water and then places the entire palm of her hand on his mouth and chin. Again, she makes circular motions to clean both chin and

mouth. Yadanar does this about two times and then pinches his nose again with two fingers to clean it and then wipes his chin and mouth again from left to right. She stops to dab her hand with water again and Tha Tha picks up the toothbrush that he has placed inside the bowl and puts it on top of the shelf that is above the sink. Yadanar dabs her hand with more water and then places the entire palm of her hand on his cheeks and wipes them from left to right again, this time moving a little downward. She still does not say anything to Tha Tha and he does not say anything to her. Tha Tha rests his hands on the sink and does not participate in the cleaning in any way. Once again, Yadanar rinses her own hand with water and then cleans Tha Tha's mouth with a circular motion. She dabs her hand with water again and then cleans his nose, mouth, and chin with the same circular motion. She repeats this one more time and then almost immediately after she stops moving her hands, she begins to walk out of the bathroom, pushing Tha Tha in front of her and keeping her hands on his shoulder as they exist the bathroom. She takes her hand off Tha Tha's shoulder as they walk to the towel rack together. As soon as they reach the towel rack his mother grabs the towel and brings it to Tha Tha's face without saying a word. Tha Tha does not hold out his own hand or reach for the towel. His mother wipes Tha Tha's mouth a few times with the towel and then puts the towel back in place.

Discussion and Analysis. Unlike Jenny, Tha Tha's mother is with him the entire time that he is washing his face. Although Tha Tha is already in school and seemingly capable of washing his own face, his mother does not have him do so. She washes it for him from beginning to end. Her actions are quick and without any type of hesitation, suggesting, once again, that this is routine practice. The level of intimacy between Tha

Tha and her mother is high. She does not use a washcloth, but uses her bare hands to wipe down his face. She, likewise, uses her bare hands and fingers to wipe away mucus. Tha Tha does not protest as she grooms him. He also does not attempt to initiate the grooming in any way. There are no words exchanged between mother and son. The entire interaction, including the sense of shared intimacy, is entirely embodied.

Example 2. Tha Tha is being fed his breakfast (noodles and broth) by his mother, Yadanar. After Yadanar puts the spoon in Tha Tha's mouth, she uses the edges of the spoon to wipe away the access broth that is on Tha Tha's mouth and chin. She whispers something in his ears about 'taking a poop' and starts laughing. Tha Tha smiles. She playfully pokes Tha Tha's cheeks with the spoon. She then picks up a tissue and wipes Tha Tha's hands. As seen in Figure 11, she then takes the same tissue and dabs the left corner of his mouth and then dabs the right corner of his mouth and the dabs the entire mouth from right to left. His grandfather says something inaudible, also about poop. Tha Tha's grandmother, who is also at the table, continues the joke that already has been started and says: "Really? You're also going to take a poop?". The grandfather says, "Actually, every time, after he has breakfast, he always poops afterwards". The mother laughs, teasing him some more, and says: "He does, he takes a poop every morning". Tha Tha smiles and looks a little embarrassed. The grandmother says: "My goodness they are going to say when they review the video in America, as soon as this little boy puts something in his mouth, it comes right back out. They are going to see it." She laughs some more, as does everyone at the table. Tha Tha smiles. Through out the meal, Yadanar feeds Tha Tha, wipes his mouth, first with the spoon, and then with a tissue. She occasionally also wipes his hands with the tissue. At the end of the meal, his father takes

the tissue and wipes his mouth for him, dabbing his mouth twice. And then, the nanny also comes over and wipes his mouth for him before he gets up and walks away.

Discussion and Analysis. Tha Tha's mother constantly wipes his mouth for him as he eats his meal, not only with a napkin, but also with the spoon. Tha Tha is not observed to wipe his own mouth or his own hands during the meal or after it, nor does he take any initiative to do so. Rather than attending to grooming only at the end of the meal (a common practice in U.S. families), Tha Tha's mother and the rest of the family keeps a watchful eye on Tha Tha, making certain that he does not need to be groomed at any point; ready to groom him if he does. At no point, do they instruct Tha Tha to wipe his own mouth or his own hands. Moreover, the mealtime conversation centers around another automatic, bodily process. It is not considered vulgar or belittling, but affectionate to make jokes about Tha Tha's bodily processes. The sense of shared intimacy and interdependent values allows the family to tease Tha Tha affectionately about one basic biological process (excretion) as he engages in another (eating) and it serves to increase intimacy and social bonds, rather than detract from them.

Example 3. Tha Tha is in the bedroom with his mother Yadanar. Tha Tha walks over to near the bed and his mother follows him and opens a cabinet that is next to the bed. She takes out what appears to be a towel and lays it on the bed. Tha Tha's clothing is already on the bed. She closes the cabinet again and then turns around and without saying a word, reaches and grabs the bottom of Tha Tha's jersey with one hand and begins to pull it up. Tha Tha also does not say anything and simply stands with his arms slightly behind him. Tha Tha has a collared T-shirt underneath a thin jersey and Yadanar uses one hand to keep his T-shirt in place while she uses her other hand to pull up his Jersey. After

she has separated the jersey from his T-shirt (they appeared to be stuck together), she uses the hand that was pulling down on the T-shirt to grab Tha Tha's arm and lift it up. As seen in Figure 12, she holds Tha Tha's arms in place with one hand as she pulls the jersey up with her other hand, so that the sleeve of the jersey is removed and one of Tha Tha's arms becomes free. Neither she nor Tha Tha speak as she performs these acts. Even with one of his arms free, Tha Tha does not participate in removing the rest of his jersey. He puts his free right arm down by his sides and his mother grabs hold of his left arm and lifts it up over his head with one hand and pulls his left arm out of the sleeve of the jersey. Tha Tha drops the second arm down by his side. Yadanar lifts the jersey over his head with both hands and takes it completely off. Even when the jersey is on his head and face for a brief moment and he cannot see, Tha Tha does not take any actions to help remove it. He only holds up his hands to near his face briefly, presumably because it does not feel pleasant to have his jersey over his face and head, such that he cannot see. Once again, neither mother nor son speaks during this interaction. Yadanar drops the jersey on the bed and begins immediately to unbutton Tha Tha's T-shirt. Tha Tha looks down at the buttons only for a split second, but then looks up again and puts his arms to the side as his mother unbuttons them. After she unbuttons the buttons that are on the top part of his shirt, Yadanar grabs Tha Tha's left hand and holds it up, while she simultaneously grabs a hold of Tha Tha's shirt from the bottom with one of her hands. She pushes his arm through the sleeve of the shirt and he pulls the rest of his arm out on his own. She pulls the other part of his sleeve off and then the entire shirt up and over his head. She then takes the shirt and wipes Tha Tha's chest with it. There seems to be something on the upper part of his chest and she uses her fingers to pick it off.

Discussion and Analysis. Tha Tha is already four-and-a-half-years-old and, unlike Jenny, who is two-and-a-half-years-old, he shows virtually no agency or independence of action in removing his own clothing. Tha Tha's hands are by his side or behind his back the entire time that his mother is undressing him. He does not unbutton his own clothing nor lifts up his own shirt or jersey for either to be removed. Even when Tha Tha is required to lift his arm up so that the sleeve of the shirt can be pulled off his arm, he does not actually initiate the action himself. Both instances, when Tha Tha is required to lift his arm in order to complete the task, his mother grabs a hold of his arm, lifts it up, and slides the sleeve off of it. Tha Tha does not protest when his mother is taking off his clothing and the ease and facility, as well as the orderly manner, in which she performs these tasks suggest that this is routine practice for the pair. His mother does not offer any instruction to Tha Tha on how dressing and undressing should or should not be done (i.e., "sleeves first"). Unlike, the interaction that Jenny has with her caregiver, there area no verbal exchanges between Tha Tha and his mother. The interaction is entirely embodied. Also, unlike the interaction between Jenny and her caregiver, there is constant physical contact between Tha Tha and his mother and are no verbal qualifiers (i.e., "I'm going to help your body come down from the stool") that signals that the contact is an exception, rather than the norm.

Tha Tha and Jenny have very similar total counts of allogrooming (129 and 116, respectively), but as seen in Figure 13, the children differ as to how consistently and during what activities their caregivers groomed them. Tha Tha's caregivers groomed him consistently throughout the morning, with each activity having a high count of allogrooming and the allogrooming instances being more evenly distributed within and

across activities. For Jenny, as well as other US children, there are short instances of concentrated allogrooming (as when her caregiver is brushing Jenny's hair). Moreover, the grooming for Jenny, as well as other US children, occurs only during the course of activities that have explicit goals to address hygiene.

Discussion

The present findings, taken together with the results reported in chapter 1, raise interesting theoretical issues about how culturally specific information about the self is transmitted to children. The present study documents cultural differences between families in Burma-Myanmar and the United States in both frequency of allogrooming and level of intimacy in grooming. Compared to children in Los Angeles, families in Yangon engaged in significantly more allogrooming of their children. Likewise, families in Burma-Myanmar displayed more intimate forms of allogrooming than families in the United States. Burmese and U.S. families also differed in terms of age-related changes in levels of intimacy in grooming. Whereas in the United States, intimacy in allogrooming decreased as children got older, in Burma-Myanmar levels of intimacy in allogrooming started high and remained high. Allogrooming in Burma-Myanmar were also more often involved the inside of the child's mouth and intimate body parts, even for children as old as 5. Additionally, as seen in Figure 13, U.S. children tended to have short instances of concentrated allogrooming predominantly during daily activities that were explicitly structured around hygiene-goals. In contrast, allogrooming practices of families in Burma-Myanmar were more evenly distributed within and across daily activities.

The results of the present study report similar findings to those reported in chapter 1 on cultural differences in children's eating practices. Both the present study and the

results discussed in chapter 1 report cultural differences in non-verbal, embodied caregiving practices between Burma-Myanmar and the United States, with the U.S. participants displaying more independent behaviors and less intimate behaviors in both eating and grooming behaviors. Chapter 1 additionally reported that Burmese and U.S. children also differed in level of non-verbal agency in eating, with U.S. children being significantly more agentic than the Burmese.

A major difference in findings between the two studies, however, pertains to developmental continuity in cultural differences. As already discussed in chapter 1, questions about when individuals acquire culture and when appreciable differences between cultures emerge is a long-standing issue within developmental psychology and related fields. The results reported in chapter 1 suggest that, for eating practices, cultural differences emerge early and are sustained across a significant span of development. Likewise, differences in frequency of allogrooming appear to emerge early and are sustained across developmental time. For intimacy in allogrooming practices, however, the results of the present study suggest that the behaviors of Burmese and U.S. families are similar when children are under the age of two, with cultural differences increasing with development.

Another key finding reported in both chapter 1 and 2 concerns the variability in the Burmese sample. Once again, the differences in variability between the Burmese and U.S. sample is interesting in light of the fact that Burma-Myanmar is a society that is currently undergoing significant economic, political, and social change ("Change in Myanmar," 2012).

Directions for Future Research

As with food and eating, it would be worthwhile in future studies to attempt to identify the psychosocial consequences of allogrooming behaviors. Like eating, grooming may be a particularly potent form of social learning for children, especially in domains relevant to the self. Given the well-developed literature, indicating that behavioral systems of grooming are linked to the regulation of stress in non-human mammals (Francis & Meaney, 1999; Liu, Diorio, Tannenbaum, Caldji, Francis, Freedman, Sharma, Pearson, Plotsky, & Meaney, 2008), it would be worthwhile to examine if allogrooming practices and grooming vigilance amongst maternal, paternal, and other types of caregivers have an impact upon stress regulation in children. Since the mammalian literature indicates that grooming practices during infancy predict stress regulation for adults, it would be interesting to examine the same issues in humans. Future studies should seek to examine whether parental allogrooming behaviors during infancy and childhood are linked to later psychosocial outcomes such as resiliency, trust, and attachment.

The differences in developmental trajectories in cultural differences reported in the two studies raise important theoretical questions about the domain-specificity of caregiving practices and the behavioral systems that regulate them. Although both eating and grooming fall within the domain of the 'primary care system' as defined by Keller (2002) and although both behaviors are arguably understudied aspects of the attachment-caregiving system explicated by Bowlby (1969), it is interesting to note that there are different patterns in terms of cultural differences in developmental trajectories for eating and grooming behaviors. More needs to be done to examine if eating and grooming

behaviors are part of a larger caregiving system and, if so, exactly what the nature of that caregiving system is, including, whether or not embodied versus non-embodied and primary versus non-primary forms of caregiving practices have differential functions and impact.

Table 1
Intimacy in Grooming Scale

Type of Contact	Presence of Bodily or Non-bodily Substance	Intimacy Rating
Mediated Contact with Child, Substance, or Both	No substance or Non-bodily Substance	1
Unmediated Contact Between Person Grooming and Substance, No Contact ^a or Mediated Contact with Child	No substance or Non-bodily Substance	2
Unmediated Contact Between Person Grooming and Child	No substance or Non-bodily Substance	3
Mediated Contact with Child, Substance, or Both	Bodily Substance	4
Unmediated Contact Between Person Grooming and Substance, No Contact ^b or Mediated Contact with Child	Bodily Substance	5
Unmediated Contact Between Person Grooming and Child, Unmediated Contact with Bodily Substance	Bodily Substance	6

^aExample of unmediated contact with substance and no contact with child would be if caregiver swatted a mosquito with his or her bare hands as it hovered in close proximity to, but not directly on the child's body.

^bExample of unmediated contact with substance and no contact with child would be if a child spat up regurgitated food onto caregiver's bare hand, without making bodily contact with caregiver.

Table 2 Results of Mixed Effects Models

Outcome Measure	Parameter	Estimate ^a	Standard	Z-	p-value
			Error	statistic	
Allogrooming					
	Intercept	.110	.482	0.23	0.819
	Burmese ^b	-1.18	.374	-3.14	0.002
	Age 3-4 ^c	486	.315	-1.54	0.122
	Age 5+ ^c	686	.363	-1.89	0.059
Intimacy in					
Grooming					
C					
	Intercept	1.54	.261	5.91	0.000
	Burmese ^b	01	.277	-0.04	0.969
	Age 3-4 ^d	.339	.248	1.36	0.173
	Age 5+ ^d	.002	.269	0.01	0.994
	Burmese*Age 3-	-1.05	.365	-2.89	0.004
	4 ^e	-1.29	.412	-3.14	0.002
	Burmese*Age 5+e				
	Variance of	.069	.097		
	Intercept				
	Residual Variance	.282	.095		

^a Estimates for allogrooming in log-count units; estimates for intimacy in grooming are untransformed

b compared to American reference group

compared to Age 0-2 reference group, overall effect of age not significant ($\chi^2(2) = 4.15$, p = 0.1258)
^d compared to Americans for Ages 0-2
^e overall interaction significant ($\chi^2(2) = 12.94$, p = 0.0016)

Table 3

Counts and Percentage of Persons Grooming Child in Burma-Myanmar and the United

States

	Burma-Myanmar	United States	Total
Mother	1146 (86.04%)	186 (46.97%)	1332 (50.19%)
Father	20 (0.89%)	95 (23.99%)	115 (4.33%)
Nanny	1047 (46.37%)	115 (29.04%)	1162 (43.78%)
Sibling	14 (0.62%)	0 (0.00%)	14 (0.53%)
Grandmother	21(0.93%%)	0 (0.00%)	21 (0.79%)
Aunt	2 (0.09%)	0 (0.00%)	2 (0.08%)
Other not specified	8 (0.35%)	0 (0.00%)	8 (0.30%)
Total	2258 (100.00%)	396 (100.00%)	2654 (100.00%)

Table 4

Counts and Percentage of Allogrooming By Activity in Burma-Myanmar and the United

States

	Burma-Myanmar	United States	Total
Mealtime	828 (36.67%)	16 (4.04%)	844 (31.80%)
Hygiene-related activities before/after mealtime	554 (24.53%)	27 (6.82%)	581 (21.89%)
Bathing/ Showering	34 (1.55%)	167 (42.17%)	201 (7.57%)
Hygiene-related activities (morning/evening)	555 (24.58%)	105 (26.52%)	660 (24.87%)
Other non-hygiene- related activities, not specified	253 (11.20%)	70 (17.68%)	323 (12.17%)
Other hygiene- related activities, not specified	34 (1.51%)	11 (2.78%)	45 (1.70%)
Total	2258 (100.00%)	396 (100.00%)	2654 (100.00%)

Table 5

Analysis of Simple Effects of Country on Counts of Allogrooming by Activity

Activity	Estimate ^a	Standard Error	Z-value	Unadjusted p-value	Bonferroni- adjusted p-value
Mealtime	-1.73	.441	-3.93	.0002	.001
Hygiene-related activities before/after Mealtime	-2.25	.767	-2.93	.003	.020
Hygiene-related activities (morning/evening)	-2.30	.739	-3.11	.002	.011
Bathing/showering	.735	.476	1.55	.122	.734
Other hygiene- related activities, not specified	-2.20	1.04	-2.11	.035	.210
Other non- hygiene-related activities, not specified	-0.18	.487	-0.04	.970	1.00

^a estimate of difference: Burma-Myanmar minus US

Table 6

Counts and Percentage of Body Parts Groomed in Burma-Myanmar and United States

	Burma	US	Total
Face	263 (11.64%)	57 (14.49%)	320 (12.05%)
Mouth (outside)	581 (25.73)	10 (2.52%)	591 (22.25%)
Teeth/inside of mouth	49 (2.17%)	1 (0.52%)	50 (1.88%)
Hair/Head	190 (8.41%)	132 (33.33%)	322 (12.13%)
Hands/Arms	292 (12.93%)	96 (24.24%)	388 (14.61%)
Core (front)	233 (10.31%)	23 (5.80%)	256 (9.64%)
Core (back)	183 (8.10%)	14 (3.53%)	197 (7.42%)
Legs/Feet	197 (8.72%)	60 (15.15%)	257 (9.68%)
Neck/Shoulders	97 (4.29%)	3 (0.75%)	100 (3.76%)
Private Areas	108 (4.78%)	0 (0.00%)	108 (4.06%)
Neck/Shoulders + Hands/Arms	16 (0.70%)	0 (0.00%)	16 (0.60%)
Core (back) + Legs/Feet	1 (0.04%)	0 (0.00%)	1 (0.03%)
Core (back) + Hands/Arms	2 (0.08%)	0 (0.00%)	2 (0.07%)
Core (back) + Core (front)	2 (0.08%)	0 (0.00%)	0 (0.00%)
Core (back) + Neck/Shoulders	3 (0.13%)	0 (0.00%)	3 (0.11%)
Core (back) + Private Areas	6 (0.26%)	0 (0.00%)	6 (0.22%)
Core (front) + Private Areas	1 (0.04%)	0 (0.00%)	1 (0.03%)
Core (front) + Legs/Feet	1 (0.04%)	0 (0.00%)	1 (0.03%)
Core (back) + Legs/Feet + Private Areas	1 (0.04%)	0 (0.00%)	1 (0.03%)
Core (back) + Neck/shoulders + Head/Hair	3 (0.13%)	0 (0.00%)	3 (0.11%)
Core (front) + Neck/shoulders	1 (0.04%)	0 (0.00%)	1 (0.03%)
Other not specified	18 (0.79%)	0 (0.00%)	18 (0.67%)
Total	2258 (100%)	396 (100%)	2654 (100%)

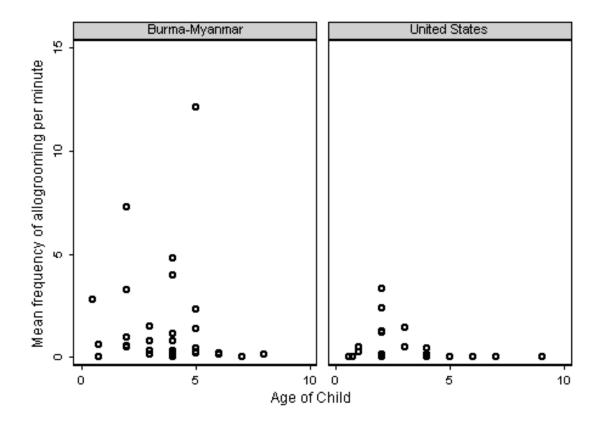


Figure 1. Scatterplots of scores for mean frequency of allogrooming per minute in Burma-Myanmar and the United States.

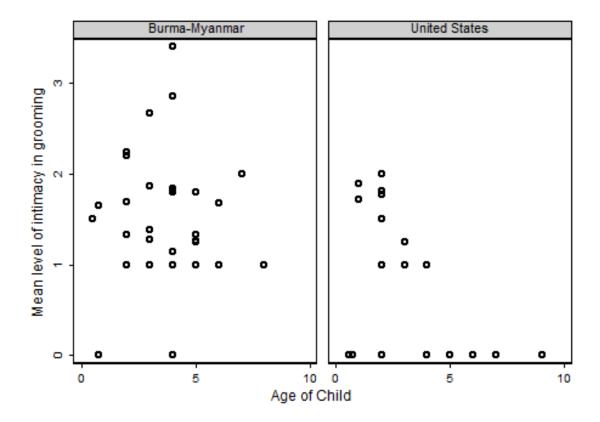


Figure 2. Scatterplots of scores for mean level of intimacy in grooming in Burma-Myanmar and the United States.

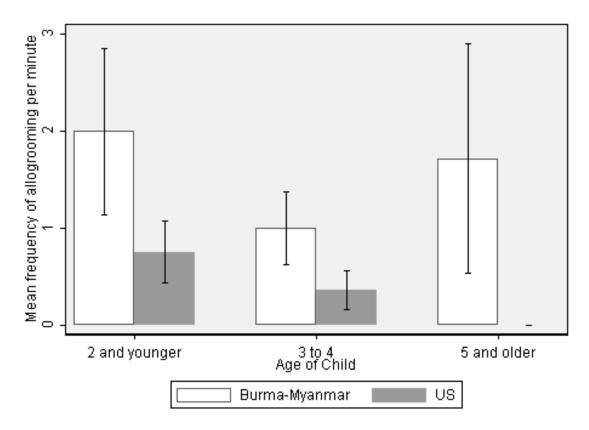


Figure 3. Interdependence in grooming: Mean frequency of allogrooming per minute in Burma-Myanmar and the United States

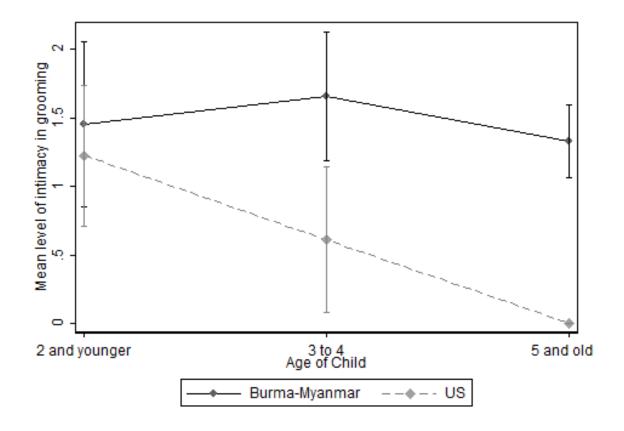


Figure 4. Intimacy in grooming: Mean level of intimacy in grooming in Burma-Myanmar and the United States.



Figure 5. Two-and-a-half-year-old girl in the United States turning off faucet after washing her own hands without the help of a caregiver.



Figure 6. Two-and-a-half-year-old girl in the United States engaging in independent self grooming by washing her own face.



Figure 7. Two-and-a-half-year-old girl in the United States engaging in independent self grooming by wiping her face after a meal.



Figure 8. Two-and-a-half-year-old girl in the United States engaging in independent dressing by taking off her own shirt as caregiver watches from a distance.



Figure 9. Nanny in the United States brushes hair of a two-and-a-half-year-old girl.



Figure 10. Mother in Burma-Myanmar allogrooming four-and-a-half-year-old son by washing his face with her bare hands.



Figure 11. Mother in Burma-Myanmar allogrooming four-and-a-half-year-old son by wiping his face during a meal.



Figure 12. Mother in Burma-Myanmar undressing four-and-a-half-year-old son.

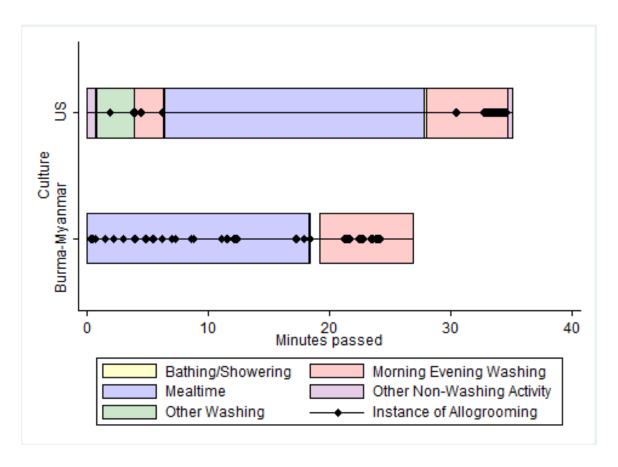


Figure 13. Counts of allogrooming per minute in US and Burmese case study.

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Chapter 3: Embodied Practice, Cultural Values, and Shifting Pathways of the Self: An
Ethnographic Study of Burma-Myanmar During a Period of Social Change

Introduction and Background to Ethnography

The present ethnography grew out of a larger study, ⁶ which was conducted on the nature of childhood and embodied socialization practices in Burma-Myanmar in 2008 and 2009. This period of Burmese history was deeply impacted by major political events, including the Saffron Revolution of 2007, as well as more subtle shifts in policy and practice that occurred during the 1990s and resulted in a relaxation of state control and the privatizing of large sectors of the economy. Among other things, these events led to the proliferation of private elementary and secondary schools throughout the Yangon area. The reverberations from the Saffron Revolution; the internal scramble on the part of political, religious, and civil society leaders to bring aid to survivors of Cyclone Nargis; and the less publicized, but nonetheless deeply impactful, changes in policy and practices throughout the 1990s eventually culminated in an historic democratic transition that began in 2011 and continues as this chapter is being written in the Spring of 2013.

Although what was originally conceptualized as the main focus of inquiry for both the quantitative and the ethnographic study was a comparison of childhood embodied practices in Burma to embodied practices in the United States, it became quickly apparent that Burmese culture, including the embodied practices that I sought to capture, was not stable, but seemed to shift over time, as historical circumstances in Burma-Myanmar changed. The main forms of embodied practices that I originally sought to document were not the two discussed in the first part of this dissertation: eating and grooming. At the beginning of my fieldwork, having been exposed to Piagetian theory

⁶ Chapters 1 and 2 of the present study reflect the results of this larger study.

(1976) as an undergraduate at UC Berkeley, but also having had a life-long interest in issues of equality and hierarchy, I was not so much interested in the metaphors of merged bodies and shared substances as I was in the metaphors of up versus down and higher versus lower, which were used to evoke authority relationships (Brown & Gilman, 1960; Fiske, 2004; Keating, 2000; Schubert, 2005). During my first night in Yangon, in the home where I was taking up residence, I saw a 6-year-old boy climb over his grandmother, who was seated on a sofa in the living room. He stood up on the sofa at one point such that his torso was higher than his grandmother's head and reached up over her to grab something on the shelf above. He playfully touched her hair, as he sat back down. That same night, I saw the same 6-year-old sit crossed-legged on the wooden floor of the living room as his nanny placed spoonful after spoonful of rice into his mouth. The embodied practices I recalled from my own childhood and for which I had just travelled 8,000 miles not only to document but to *relive*, had largely disappeared from Yangon. Yet, many other aspects of Burmese *habitus* (Mauss, 1973; Bourdieu, 1990) seemed to have endured in these families, while the larger society around them had shifted.

I encountered the effects of social change and the adaptations made by parents, grandparents, teachers, and school administrators in response to that change at every turn from that 1st day of fieldwork, in 2008, onward. Particularly salient was the need for middle-class parents residing in Yangon to adapt to economic realities in which their children would need to develop a sense of independence and agency that was not required of them during their own youth.

Although Burmese parents expressed deep concerns about their children's future, including having their children develop the appropriate skills that would allow them to be

independent and properly able to care for themselves, there was often a disjuncture between their explicitly stated values and daily caregiving practices. This was especially evident when one contrasted parental goals and values with everyday practice in domains that would be considered more automatic forms of behavior (Bargh & Ferguson, 2000), or those actions that comprised their habitus (Bourdieu, 1990; Mauss, 1973). Habitus seemed to be on a different timeline of change and in many ways less susceptible to change even in the face of broader parental values being altered (Fiske, 1999). As such, parental values in many households had shifted to a focus on more independent modes of being, but caregiving practices in the domains of food, grooming, and other embodied practices remained unchanged in many households.

Simultaneously, as I was embarking upon my first journey into fieldwork, my advisor, Patricia Greenfield, was finishing the last draft of her manuscript, putting forth her theory of social change and human development, reflecting a journey that had begun in the Highland of Chiapas in the 1960s and that continues to this day, as I am writing up my research. When I first visited Dr. Greenfield at the Center for Advanced Studies at Stanford, as a recruit to be a doctoral student at UCLA in 2005, she was already working on theoretical formulations about globalization and social change. Greenfield's (2009) theory speaks to the dynamic nature of the cultural learning environment and the shifts in developmental pathways that resulted. The theme that I encountered in Yangon on that first night and many times since was, indeed, one of shifting pathways, and it is the dominant metaphor, as well as the theoretical framework, that I will employ in the present ethnographic study.

Although the dominant trend in urban centers was what I will refer to for the remainder of this paper as *shifting values, enduring practice*, the proliferation of private primary schools that emulated Western educational practices promoted the opposite pattern of adaptation in some households. In these households, parents retained more traditional values, while there were *child-led* changes in day-to-day practices. This pattern of adaptation to social change will be termed *shifting practice, enduring values*.

Whereas embodied socialization in schools is often studied separately from embodied realities in the homes, one of my goals in this ethnographic study is to demonstrate how school socialization can also impact routine family practices and how the child, rather than being a passive receiver of cultural information, can be a conduit for cultural change and an active agent in his or her own socialization. I give great weight to the role of formal pedagogy and schooling in changing individual and collective (including familial) psychologies.

The role of the private schools highlights yet another aspect of the relationship between embodied practice and abstract values during periods of social change: the relationship between socioeconomic status and access to globalized discourse and technologies. The disjuncture and tension between abstract values and embodied practice becomes increasingly prevalent as societies such as Burma-Myanmar expand outward by having more contact with the globalized West and East. For many Burmese families, however, access to the globalized discourse about independence and individualization is contingent upon their ability to afford private schools and purchase privileged technologies, such as satellite television. In these cases, families show a pattern of adaptation that I will refer to as *enduring values*, *enduring practice*. Socioeconomic

status can also have a positive cumulative effect across generations such that families in which grandparents who had access to private schools and higher education in their youth better integrated independent and interdependent patterns of living in both practice and values. I call this pattern of adaptation the trend of *shifting values*, *shifting practice*.

What was perhaps most exciting about the patterns of change I observed in Burma-Myanmar was that they touched upon core themes in psychological anthropology: questions about how culture is acquired, through what channels, how deeply it is internalized, and also how it is transmitted across generations. These issues have been of concern to researchers and theoreticians since the inception of the field (Bateson & Mead, 1942; Briggs, 1998; Levine et al., 1996; LeVine & Norman, 2001; Quinn, 2006; Spiro, 1997; Whiting, 1963). In the following ethnography, case studies of families residing in a large urban center in Burma-Myanmar, as well as case studies of classroom environments in the same urban environment are used to demonstrate that globalization and the transition into a market-based economy can alter children's learning environments (Greenfield 2009), differentially impacting embodied versus nonembodied forms of socialization, and causing both a disjuncture and tension between explicitly stated values and daily caregiving practices.

Greenfield's Theory of Human Development and Social Change

Greenfield (2009) posited that cultures, rather than being static, are dynamic and ever shifting. As sociodemographic conditions change, patterns in human development are also transformed. Greenfield (2009) borrows the terms Gemeinschaft (community) and Gesellschaft (society) from Tonnies (1957) to describe this shift. Whereas prototypical Gemeinschaft communities are small-scale, insular, and defined by low

levels of technology, Gesellschaft societies are those that are large-scale and highly globalized with a majority of families having access to modern technologies. As Gemeinschaft communities rely more on commerce (especially large-scale capitalism), and as they also become urbanized, have more regular contact with the global community, and become by necessity more complex and heterogeneous, the learning environment of children living in such societies is altered, shifting their developmental trajectories from interdependent modes of being to more independent patterns of behavior that are more common in Gesellschaft societies (Greenfield, 2009).

Perhaps most relevant to the current ethnography is that Greenfield's (2009) theory highlights two distinct pathways through which children's learning environments can be altered: On the one hand, changes in sociodemographic realities can alter abstract cultural values of parents, which in turn cause shifts in children's learning environments. One can expect that, especially during the early stages of social change, a disjuncture will occur between explicit values and daily practices, such that parents, grandparents, and teachers may have a tendency to express abstract cultural values that place priority on independence, agency, and individuation, while embodied practice across various domains would continue to reflect interdependent modes of relating to social others, emphasizing supplication to authority and intimacy within the family. A second pathway in which children's learning environments can be altered, as posited by Greenfield's (2009) theory, is for shifts in sociodemographic realities to alter the child's learning environment directly. In this second case, a disjuncture and tension between abstract values and daily caregiving practices can occur, when embodied practices begin to shift first, while the more abstract cultural values of parents remain intact.

Case Study 1: Shifting Values, Enduring Practice

Winmar⁷ is 6 years old and lives on the second floor of an apartment building in Yangon with her mother, father, and 2-year-old sister, Thandar. Winmar's right hand has a slight deformity due to a congenital condition but I observed her use that hand to write and pick up objects, including notebooks, pencils, toys, bowls, slices of fruit, and sheets of paper. Although Winmar was already enrolled in school, her younger sister, Thandar remained at home during the day. Thandar's father, Tut, works long hours as an administrator for a foreign nongovernmental organization (NGO). Tut obtained his bachelor's degree some years back in History. He also earned a Masters in Public Administration and a Diploma in Business Law. Tut's father had a bachelor's degree in economics and a Masters in Banking, which he obtained at a university in the former Czechoslovakia. Tut's mother graduated secondary school, but did not attend university and was a housewife during his childhood. Winmar's mother, Mae, also works full-time in a similar position to that of Tut. Mae also has a bachelor's degree. Both Mae's mother and father graduated from middle school, but not secondary school. The family lives on a busy street with street vendors, pedestrians, and cars right below their apartment. The apartment is compact and, rather than having walls, it has partitions that separate one room from another. As is the case in many Burmese families, Winmar's father and mother are from two different ethnicities; while Tut is ethnically Burmese, his wife is Karen. As neolocality is the norm among the Burmese, especially among urban residents, Winmar and her family are not living with other extended family. Since domestic help is inexpensive in Yangon, the family has a nanny who helps with childcare and household chores.

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⁷ Pseudonyms are used for all case studies.

Tut confided in me about some of his concerns about his children's future, as reflected in my field notes:

During my second visit to their home, I asked Tut what kind of qualities they wanted to foster in their children. Tut replied that they did not want to push the girls in any particular direction in terms of profession. I pressed further and asked what kind of qualities he wanted them to possess in interacting with others, and he described in concrete terms that, especially for the older child, he pushes her to do things on her own. He enrolled her in school at the age of 3 years, and he related to me that she feels very comfortable in school now with other children. He also said that sometimes she even takes the rickshaw by herself to go to her tutorial sessions (the Burmese call these private lessons *tuition*). Tut proudly informed me that she knows how to bargain for the rickshaw ride—she knows when the price is too high. In response to the same inquiry, Tut further conveyed to me that his 6year-old daughter knows how to answer the phone and take phone messages: She knows how to ask who it is and write down a number where they can be reached. He also said that she could tell people her own phone number and address (when he said this, I was reminded that when I asked him for his name and contact information during my first visit to his home, he had the child write it down for me in my notebook).

When first given the task of articulating the developmental goals he had for his children, Tut gave an answer that can be categorized as culturally normative and polite.

In a predominantly Buddhist society, where spiritual salvation can be attained only through personal efforts in which one accumulates sacred knowledge and where even the

nature of the salvation itself is fundamentally one of epistemic fulfillment (i.e., reaching enlightenment), erudition, as well as institutional indicators of learning, is not only desired and respected, but valorized. The attainment of educational degrees and professional goals through hard work and effort is valorized across all segments of Burmese Buddhist society for both men and women. Even children in the rural villages talk about exam scores and often say that their life goal is to become a physician, regardless of how realistic that possibility is. When asked about developmental goals for their children, the immediate response from Burmese parents is not necessarily to discuss relational or moral qualities, nor is it to discuss social intelligence, but to discuss the child's life trajectory from the standpoint of educational attainment. All the parents that I interviewed during my fieldwork named educational attainment as a developmental goal for their child. They often named educational attainment first, seeming to prioritize it above other goals. Typical responses from Burmese parents would take two forms: In one form, they assert that they will put all their efforts into helping their children attain the highest level of education possible. In an alternate form, parents may deny having any longings for their children's educational or professional attainment ("I do not push them in any particular direction"). Tut was, therefore, giving a relatively normative answer to the question posed to him (albeit one that resembled Western notions of cultivating free will and personal choice). When pressed a bit further, however, Tut expresses some very real anxieties about his children's future, anxieties that are tied into his perceptions of the changing nature of economic life in Burma-Myanmar. Tut believes that he needs to play a role in helping Winmar and Thandar develop independent living skills.

Tut's push to enroll Winmar in school at the age of 3 years, as well as his push to have her bargain for rickshaw rides and commute to school on her own, is related not only to the themes of independence and self-reliance, but also to the theme of educational attainment. Tut wants his daughters to be independent so that they can attain culturally valued traits—erudition and a high level of formal education. Rather than existing in isolation from or running contrary to his other goals, Tut's valuing of independent qualities in his children was tied to other culturally important beliefs and values. Tut's valuing of self-reliance, competence, and independence was integrated into other developmental goals that he had for his children. They were also consonant with other aspects of his worldview, as well as other aspects of what can be characterized as a Burmese worldview. The goal of cultivating independence in his children was not a haphazard one that Tut had casually picked; it was well contemplated. It was also implemented with a great deal of earnestness on his part.

As Tut and I spoke further about his efforts to push his daughters to be selfreliant, it became apparent that he was cognizant of how different his parenting practices were from those of his own parents, as my field notes reflect:

I asked Tut if his upbringing was the same, and he replied that it was completely different. He said that his parents were always with him. He never did anything for himself. He also said that when guests (*ahtha*) came to the house, the children would go to their rooms and stay there. Tut took this opportunity to point out again how his daughter were unafraid of strangers—something that he commented on once again, when he accompanied me downstairs to hail a cab. His younger daughter came downstairs with us and he stated that this was because his

2-year-old was accustomed to being taken out into the streets. He conveyed that she is not afraid of strangers and is also quite independent.

Encouraging his elder daughter to take the rickshaw to school, teaching her how to answer the telephone, as well as showing pride that his younger daughter felt comfortable away from home and "out in the street" were consonant with another common dichotomy in Burmese culture and, hence, in the Burmese psyche: household member (*ayenlu*) versus guest (*ahtha*). Similar to Japanese socialization practices that distinguish between inside the home (*uchi*) and outside the home (*soto*), the difference between guests of the family and the family itself is a fundamental distinction in Burma-Myanmar (Rothbaum, Pott, Azuma, Miyake, & Weisz, 2000).

For urban-dwelling, middle-class Burmese children, the home environment is one in which they are, in most circumstances, enveloped by the nurturance and care of adult authority figures who attend to their needs—often before those needs are verbally articulated. As shown in chapters 1 and 2, the familial environment (and especially one's relationship with adult authority figures) is both physically intimate and permeated by a strong sense of trust. These traits are cultivated on a day-to-day basis by acts such as feeding and grooming. The presence of guests (*ahtha*) in the house is a signal to children that their usual behaviors should be put on hold and that they should assume a more polite, somewhat more formal bodily comportment and emotional demeanor. When children become a bit older (or whenever they are inclined to do so) they can begin to show hospitality and care to the *ahtha*, making certain that their needs are well-anticipated and taken care of, especially, in basic domains such as food and drink. The etiquette that young children are expected to assume in front of *ahtha* also has parallels to

the socialization within Japanese families, where the polite etiquette (*yogi gyogi*) that Japanese children are expected to assume with those outside the home stands in contrast to the "extreme indulgence that [they] enjoy with parents inside the home" (Rothbaum, Pott, Azuma, Miyake, & Weiss, 2000, p. 1130). Middle-class children in Yangon, who are otherwise indulged by their caregivers and have little responsibility, learn how to assume responsibility for others by interacting with guests (*ahtha*).

Because young children are not expected to converse with adults (*lugyi*, meaning literally *big person*), it is considered polite to greet visiting adults and, then, excuse oneself to go to the interior of the house or apartment. Some of the more independent, bolder children may remain in the common areas to interact with the guests, converse with them, and show them hospitality. Tut explicitly mentioned that, when he was younger and guests (*ahtha*) would come to the house, he and his brothers and sisters would go to their rooms. By staying close to the interior of the house and not mixing with guests (*ahtha*), Tut and his siblings were simultaneously upholding the demarcation between family and nonfamily, as well as demonstrating their lack of independence.

Although the distinction between household member (*ayenlu*) and guests (*ahtha*) is fundamental to Burmese understanding of social relationships, Tut was consciously trying to alter this traditional pattern of behavior in an earnest attempt to achieve the developmental goals of self-reliance and independence that he had set for Winmar and Thandar. Tut seemed to place traditional norms of staying close to the familial home and properly demarcating the difference between family and nonfamily as being less of a priority than cultivating these new qualities in his children. Once again, Tut's valuing of independent qualities for his two young daughters was tied to more complex cultural

beliefs and practices. Likewise, they were born out of a need to adapt to the realities of Burma-Myanmar transitioning into a more globalized economy and having increasing contact with the outside world.

Tut's statements also demonstrate a generational shift in caregiving practices for urban-dwelling Burmese. Tut's daily life as a child was different from how he attempts to structure the daily lives of his children. This was true even though he indicated to me that he had grown up in the same urban area. The values he attempts to inculcate through practices that he deems important are different from the values that his parents attempted to inculcate in him and his siblings. Tut explicitly stated that his parents were "always with him," indicating that he had very little independence.

Tut's statements and the light they shed on the intergenerational transmission of values reminded me of a conversation I had had with an older Burmese gentleman, who had come of age during the U Nu Era. The U Nu Era (named after Prime Minister U Nu) spanned just 14 years and was a period in Burmese history, directly after independence from the British and prior to the military government's taking over, when Burma had an active parliamentary system and strong ties to the international community. U Thant, a Burmese diplomat, who would eventually become the third Secretary General of the United Nations, served as U Nu's Secretary of State (Myint-U, 2007). The gentleman, with whom I spoke, stated that his parents were also "always with him" and that his father wanted to accompany him when he registered for university, something that he found mortifying because he had grown up during an era when individualistic values were already taking hold.

Tut's generation grew up during the Ne Win Era and came of age during some of Burma's darkest years of isolationism and economic hardship. Just as values of independence and individuation can arise with the introduction of globalization and an embracement of Western capitalism, they can just as easily rescind as the society becomes less prosperous and has fewer contacts with the outside world (something that Tut experienced during his own childhood and adolescence). Some of the more lasting movements towards independent modes of being for urban dwelling, middle-class children in present-day Burma are enabled not only by the newly developed private school system; access to Western technologies and the media; and parents such as Tut, who have deep anxieties about their children's futures, but also by their grandparents who grew up during the Parliamentary Era and have a keen awareness of what comprises individualism, independence, and contact with the international community.

The developmental goals for independence and self-reliance that Tut set for his daughters were tied to his anxieties about the future, a fact that he acknowledged during the following interaction:

I asked him before I left why he raised his children so differently, given that he was raised a certain way. He said that circumstances are different now. He said that previously only one person could work per family and take care of the rest of the family. Now everyone has to work. He said that his older daughter will have to take care of herself and do things on her own. He said that she might eventually have to go abroad as well, and so she would need independent skills. He said that even with both parents working, it was difficult to make ends meet.

Tut explicitly tied his valuing of independence and self-reliance, including the very real sense of pride that he felt when his daughters would successfully act in an independent manner, to his anxieties about the future. His concerns about the future are explicitly linked to the changing nature of Burmese society. Tut was especially concerned about the changing nature of economic life and the changing nature of livelihoods.

Given how concerned Tut was about having his daughters develop independent living skills and, likewise, given how very real and pressing his concerns appeared to be, I was surprised when, at the end of the conversation, I asked off-handedly and quite casually, whether his older daughter (the 6-year-old) brushed her own teeth, washed her own face, and took baths on her own. He replied, "No, she is too young." Tut had consciously contemplated the types of qualities he wanted to cultivate in his children. He also quite consciously had decided that the traits that he particularly valued in his children were independence, competence, and self-reliance. Tut did not seem to realize, however, that daily embodied practices such as grooming would have a bearing on these qualities.

Mealtimes in Tut's household had a mixture of independent and interdependent practices:

Although the mealtime begins with the girls eating sliced fruit on their own, when Tut's wife brings out the rice porridge that comprises their main meal, she immediately tries to feed Thandar. When Thandar cries and wants to hold the bowl on her own, Mae mutters, "Oh, she wants to eat on her own," and allows Thandar to hold the bowl and spoon. Mae then brings out another bowl from the kitchen and pours some of Thandar's porridge into a new bowl for Winmar,

saying to Thandar: "Poor thing, she wants something to eat as well". Mae goes back in the kitchen for a long while, leaving the children in the common area. The children begin to eat on their own. When Mae comes back into the common area, she notices they have not eaten all their porridge and tries to feed Thandar again. Once again, the child cries when Mae tries to take the plate of fruit that Thandar is holding and tries to feed her rice porridge. Mae is able to feed only Winmar.

Several moments later, she begins to feed them again.

The developmental goals that Tut and his wife set for their two daughters impact only certain aspects of Mae's behavior. Mae's initial instinct is to feed the children. However, she relents easily when Thandar insists on holding the bowl and spoon on her own. She also seems to infer that Thandar wants to eat on her own when the child seems to cry at having certain objects (the bowl of porridge and plate of fruit) taken from her.

The remainder and majority of the mealtime proceeds in a manner very similar to that of other Burmese families documented in chapter 1:

Winmar, is sitting to the right of a large television set in the living room. Her 2 - year-old sister, Thandar, is sitting at a coffee table, also watching television. Their mother walks over to Thandar, holding a bowl in her left hand and a spoon in her right hand. The mother walks to the right of Thandar and utters, "Here, younger one, here." Winmar does not turn her head, but is looking at the television, so walks to her other side, bends slightly and places a spoonful of rice porridge into her mouth. She stops for a moment to stir the contents of the bowl and then walks over to her older daughter. Before she approaches her, she says, "Winmar, here;" Winmar, here." And then as the child does not respond, she walks over to her and

says, "Do not sit so close to the TV. I told you. Don't make me unhappy." She pushes the child's head softly, away from the television, at which point, the child turns around and she places a spoonful of food into her mouth, using the same spoon as she did for Thandar. The child's attention wavers from the television for a split second and immediately turns back toward it.

Although there is a mixture of interdependent and independent eating behaviors in the beginning part of the meal, Winmar and Thandar's interactions with their mother begin to resemble caregiving behaviors observed in other Burmese households. Their mother physically places food into the children's mouths. Since neither child was required to take responsibility for satiating their own biological drives, both the 6-year-old and the 2-year-old were able to direct their attention to other aspects of their environment (in this case, the television set) throughout the mealtime. There is also a great deal of intimacy between the two siblings: The mother uses the same bowl and food to feed the two girls throughout most of the mealtime. Tut is not there for the beginning of the meal, but comes home from work during the latter half of the meal and sits in the living room as the girls have dinner. He seems to think nothing of the fact that his wife is feeding his 6-year-old daughter.

When I asked Tut, during that same conversation that I had with him about how he was trying as best he could to cultivate independence in his children, if it was normal for his wife to feed them. He quickly replied "yes" and resumed talking about his attempts to cultivate self-reliance and autonomy. Tut did not seem to realize that my question was related in any way to the topic that we were discussing. As with grooming, the daily habits that surround food and eating seemed to operate more automatically,

below explicit, conscious awareness. As such, they also seemed to be on a different timeline in terms of susceptibility to change. Embodied practices, particularly those bearing upon the primary system of parenting (eating and grooming) seemed to be more resistant to change.

Case Study 2: Shifting Practice, Enduring Values

Sithu and Soe are 7 and 2 years old, respectively. The two brothers live in one of the townships that is a part of greater Yangon with their mother, father, grandmother, 6month-old infant sister, and their three nannies. The neighborhood they live in is quiet compared to other neighborhoods in Yangon and its various townships and consists mostly of large two-story family homes, rather than apartment buildings. This home is a spacious two-story house with plenty of room for the two boys to run around and play. Their father previously worked in construction, but now owns a successful company in the food and beverage industry. Their mother stays at home with the two boys. Both parents hold bachelors' degrees, as do almost all four grandparents, with only the maternal grandmother not having attended university. Both parents are also ethnically Burmese and Buddhist. Soe and Sithu attend the same private school. Two-year-old Soe has already been attending preschool for the last 4 months, and Situ is in the second grade. The private school they attend is one of several private schools that emerged throughout the 1990s, when policies prohibiting private enterprise relaxed. Soe and Sithu's school is modeled after Western educational practices and has explicit goals of cultivating independence and self-reliance in the students.

After spending some time observing the family and filming a mealtime with the two boys, I interviewed the mother about developmental goals that she had for her children, and she conveyed the following:

In teaching them, I explain them everything, even how to talk, you know. I teach them how to talk with elders as well as younger people. Actually, both of my sons listen to what I say, you know . . . But I always have to teach them how to talk to other people . . . I tell them every time, they visit other people's homes and see other belongings, they should never say, "I want this and that." I have told them to tell us what they want, and we will buy it for them if we can afford it. We tell them, "If it is suitable for you, if it is suitable for a 2-year-old, we will buy it for you." I speak to them in this manner. Also, I tell them not to interfere or interject when elders are conversing. I also do not interfere with the conversation of elders. That comprises a good habit. I teach them to be hospitable to guests who visit us. I always teach them, you know.

When asked what her developmental goals for her children are, Myin cited values that can be considered to be interdependent. Moreover, like Tut, the goals that she articulated were tied to complex cultural beliefs and practices. Myin not only stated that she wished that her sons be polite, but she also focused on politeness norms that are based on two main cultural beliefs: The first belief pertained to authority relationships. Myin stated quite emphatically that she teaches her children not to interject when elders are having a conversation. She also pointed out that her two sons listen to what she says, indicating that she is proud when they are obedient.

The second cultural belief that Myin touched upon was, once again, the dichotomy between family and guests (*aynelu* vs. *ahtha*). She described how she admonishes her children when they are guests in other people's homes: Whereas in the internal environment of the family, Soe and Sithu can ask for what they want and expect their wishes and desires to be fulfilled, outside the family, they must show restraint. Likewise, Myin teaches her children that, when there are guests in their own home, the children should be hospitable to them and thus assume a more polite demeanor than they would among family members. Unlike Tut, who is seeking to make the distinction between family and nonfamily less marked, Myin is seeking to demarcate clearly the difference between the two groups, thus encouraging her children to remain close to the family.

When I enquired further about developmental goals that she had for her children and the worries that she had, Myin, just like Tut, discussed educational attainment and the prospects of having to send her children away to school when they were older:

When he grows older, I will let him pursue what he wants to be. For instance, if he wants to become an engineer, I have no plan to force him to become a doctor. I mean, I will support him in whatever he wants to be. What I am currently planning is that . . . now I send them to (a private school). I will let them get as much education as they can get here, close to me, you know. I also do as much as I can, you know. I do. I will do everything for them. When they are able to stand on their own two feet and become financially independent, I will let them study and work abroad. There are some parents, you know, who send their children away from them when they are really young. These parents support them

financially, but they cannot (be with them) and see them or what they are doing. Perhaps, the children might do whatever they want, since we can't see them. Like, whether they use the money appropriately or not, you know. What I want is for my children to get as much education as they can get here by sending them to these schools, close to me. I will let them get an education (here), so that I can *control* them (and give nurturance). So far, I have planned it this way (laughing).

It is interesting to note that both Tut and Myin are having to adjust to the realities of a changing society, one in which their children will likely have to go abroad to study and work.

The educational system in Burma-Myanmar was deeply impacted by political events and economic policies over the last 50 years. The university system especially suffered. Starting in 1962, when the newly established military government blew up the Student Union at Yangon University in an attempt to quell student dissent, the relationship between the government and the higher educational system has been strained at best. In 1988 and between 1997 and 1999, after a series of student-led uprisings, all universities were categorically closed, so that it took some students up to a decade to earn their degrees. Even after the universities were reopened (in one case, after a 2-year closure), Yangon University, Yangon Technical Institute, and other institutions of higher learning were dismantled, physically relocated, and scattered throughout the countryside. Poor economic development, isolation from the international community, and a lack of state funding for higher education led to further deterioration. With a growing military elite, which resembled a reemerging middle class, the central government began to relax

some of its economic control throughout the 1990s, allowing for the proliferation of small private enterprises ("Myanmar Moves to Privatize", 2010).

Given the extent to which the Burmese value erudition, it was not surprising that one of the first sectors to be privatized successfully in Burma-Myanmar was the educational system. Private primary and secondary schools sprang up all over Yangon throughout the 1990s, many of which had explicit goals to teach its students independent living skills. Although there was a plethora of primary and secondary schools, there were no opportunities or readily available resources that would have allowed universities to be privatized and very little hope that the powers that be would resuscitate Yangon University and Yangon Technical Institute, both of which had played pivotal roles in the 1988 protests.

In terms of structural, economic, and political realities, neither Myin nor Tut had many options if they wished, as they did, to have their children continue with their education toward earning a meaningful degree. Whereas Tut described the ways in which he was attempting to help his children to develop independent skills (e.g., taking a rickshaw on their own to attend a tutorial or learning how to interact with strangers), Myin emphasized how she will give them as much nurturance as possible, for as long as possible, before having to send them to study abroad. When Myin stated that she "will do everything for (her children)," she was taking an opposite stance to that of Tut. Rather than encouraging her children to perform tasks on their own, she was stating explicitly that she intended to perform those tasks on their behalf. Myin further stated that she preferred to keep her children "close to her." She expressed anxiety at the thought that her sons might be far from her and that she would not be able to "see" what they were

doing or provide them with nurturance and guidance. Myin's cognitions about her own parenting were clearly based on ideals of interdependence and a strong sense of needing to provide maternal protection and nurturance.

Although Myin desired to have her sons adhere to more interdependent values, the fact that both her sons attended a private school that explicitly attempts to cultivate independent living skills often caused a disjuncture and tension between Myin's cognitions about ideal ways of parenting and how she was actually able to interact with her children on a daily basis. Her younger son would assert often that he wanted to perform tasks on his own. This included primary care activities, which are highlighted in chapters 1 and 2, such as eating and grooming. This was apparent in the following interaction:

Aye Win is wiping Soe's hands and Soe says to her, "Older sister, I am going to drink water." Aye Win responds by saying, "Drink, drink!" The glass of water is on the table and Soe takes his first sip by lowering his head down to the glass, holding the glass with both hands and tilting it slightly. Aye Win, rather than letting Soe perform this action on his own, holds the glass with one of her hands (over Soe's hands), helping him to tilt the glass. Aye Win then picks up the glass and moves it away from Soe, seemingly in an attempt to have him drink while she alone holds the glass. Soe responds by calling out, "No, older sister, I will do it myself" and grabbing the glass back from her. He then takes a sip of water, holding the glass on his own.

Soe, at age 2 ½ years, does not take for granted that adult caretakers should satiate his biological drives, including hunger and thirst. Quite the opposite, he seems to value

his own sense of competence and takes pride in his ability to perform these acts on his own, without the help of a caregiver. Soe not only demonstrated that he can perform these acts on his own, but also expressed a strong sense of agency when he grabbed the glass back from his nanny. Soe's assertion of personal agency was all the more interesting because he did it *in relation to a caregiver*. While the caregiver in this particular instance was his nanny, it is worthwhile and interesting to contemplate whether he would have felt equally emboldened with respect to his mother or father or others who are traditionally viewed as authorities.

In contrast to his older brother, who entered the private school system in kindergarten, Soe had been attending private preschool since he turned 2 years old. The consequences of developmental timing of the inculcation of both explicit values and embodied practice become apparent when one compares the behavior of the two siblings. Sithu, now 7 years old, was sitting at the kitchen table and eating on his own. It is unclear whether eating independently and from a separate plate is routine for Sithu. Prior to mealtime, his mother was recorded as saying to Sithu, "Go eat by yourself; your brother will be fed separately (by the nanny)," indicating that, at least some of the time, the two siblings are both fed by the nanny and from the same plate. Sithu was also recorded as saying to the nanny, while she was feeding the 2-year-old, "Feed me, feed me!" taking on a plaintive tone that made him sound younger than he was. In one instance, when Sithu had not yet commenced eating, a dish filled with curried eggs was sitting in front of him. He said, "Eggs, eggs . . . I am going to eat eggs." Although the plate of eggs was sitting directly in front of him, Sithu did not dish it onto his own plate. He waited for his mother to walk over and dish the food onto his plate on his behalf. Likewise, Sithu did not show

any annoyance when his mother stood over him and instructed him on how to eat—something that she did at multiple points. At one point, Sithu is trying to eat with a spoon and his mother turns to him and asks, "You want to eat with your fingers?" even though he had not indicated that he did. She instructed him to go wash his hands and eat with his fingers, and he complied without protest. Soe, by contrast, displayed a negative emotional reaction when his sense of agency and autonomy was undermined. He reacted automatically to any impingement on his autonomy, as became apparent in the following interaction:

Winmar, one of Soe's other nannies, is standing next to Soe's older brother, taking the stems off grapes with a small knife. Win Aye walks up to Soe, picks up one of the grapes and tries to put in his mouth. Soe moves his head away. Aye Win, once again, tries to put the grape in Soe's mouth and he moves his head away and grabs the grape. He places the grape into his own mouth.

While Soe seems to have negative emotional reactions to having his sense of agency and autonomy undermined, his mother, Myin, shows automatic reactions that resemble anxiety when faced with the prospect of having her two-year-old son eat and drink on his own:

Soe was being fed his nanny, Aye Win, in the living room, while his older brother, Sithu, and their mother, Myin, are in the kitchen with the other two nannies. Soe gets up after having a spoonful of food put into his mouth and wanders away from Aye Win, who follows him. Soe walks into the kitchen area where his older brother is sitting at the table and says: "I will eat by myself". To which his mother replies: "What is it? You want to eat on your own?" All four

caregivers (the mother and three nannies) make a lot of fuss and commotion about Soe wanting to eat on his own. His mother cries out to one of the nannies: "He wants to on his own!". Another nanny cries out: "He will eat on his own!" Soe's mother tells Aye Win: "Get the little chair for him". While the nannies retreat to the room behind the kitchen in order to find a stool for Soe, Myin turns to her older son, Sithu, who is seated at the kitchen table and says: "Make sure you eat well."....Myin then turns her attention to Soe. She picks up his bowl filled with rice and eggs and takes the spoon and moves the rice around in the bowl and looks as if she is about to feed Soe. She then sets both the bowl and the spoon back down, saying to Soe: "If you eat a lot of rice, where shall I take you?" Soe is seated on the chair and his mother picks him up as Soe's nanny brings over a green plastic stool. Myin pulls Soe up so that he is now standing on the chair. The mother turns to the nanny and says: "No, not that one" (referring to the stool). The mother reaches down and picks up the spoon, fills it with rice, and stuffs it into Soe's mouth.

Despite the fact that Soe has explicitly requested to eat on his own, Myin still feeds him. Myin does not immediately act in a manner that contradicts Soe's request. Soe's request appears to be taken seriously by all four caregivers, but the commotion and fuss that ensue over what, on the surface, seems to be a simple request does not allow for independent eating. Moreover, the kitchen table is not set up so that it allows for independent eating. There is no booster seat or chair that Soe could sit on and there is none that is easily accessible for the caregivers (it takes the nannies and the mother multiple trips to find the right chair for Soe to sit on). There are no bibs, sippy cups, or

any of the other technologies and accoutrements of independent eating, which are found in U.S. homes. In other Burmese households, caregivers rarely even had tissues, napkins, or towels in the same room while they fed their children. They would often use the spoons that they used to feed the children to wipe excess food away from the children's mouths and use their bare hands to take away any regurgitated food. Likewise, they would pick up grains of cooked rice that fell on the children's arms, legs, and laps with their bare hands, sometimes placing it into their own mouths.

In the aforementioned example, Myin clearly felt anxious about Soe's engaging in independent eating. Myin picked up the bowl of food, along with the spoon, and set it back down again, only to pick it up yet again, multiple times. She understood that Soe wanted to eat on his own. According to the interview that she gave, she was clearly aware of Burma-Myanmar's changing circumstances and the necessity to help her children develop independent living skills. Yet, despite all this, Myin still felt compelled to feed Soe. Myin displayed anxiety over her son's independent eating multiple times throughout the video, described as follows:

Myin comes back from the other room along with the nanny, who is carrying a wooden stool. Myin picks Soe up as the nanny places the stool down on the chair. Myin then sits Soe back down on the stool. She immediately picks up the bowl filled with rice, along with the spoon and again moves the food around in the bowl. Soe still has food in his mouth from when his mother fed him earlier, and she says to him, "Chew and eat! Chew and eat!" She is still holding the spoon as she says to Soe, "Are you done (chewing)? Are you done?" She fills the spoon again slowly with rice as if to feed him. Then once again, she sets the spoon and

bowl down on the table. Soe is still chewing, and she steps away from the table and goes to the backroom for a second.

Similar to the eating behaviors discussed in chapter 1, Myin attempts to oversee the entire endeavor of eating, not only by having placed the food into Soe's mouth earlier, but also by instructing him to chew. She asks if he is done eating and then fills the spoon with rice in anticipation of feeding him again. This sequence of behavior takes place *after* Soe has requested to eat on his own.

It takes several minutes from when Soe first requested to eat independently for Myin to allow him to do so:

Just a couple of seconds later, Myin comes back to the table, picks up the spoon and the bowl once again, and moves the rice around with the spoon. Soe still has not put any food into his own mouth, after requesting to eat on his own. Myin continues to hover over Soe. She pushes the bowl towards Soe and says, "Eat!" but then immediately picks up the spoon again before Soe can pick it up and moves the food around in the bowl. As she picks up the bowl and fills the spoon with rice, Soe looks up at her, places his right hand on her chest, and says, "I will do it myself." Myin still picks up the bowl and spoon and begins to feed him, even after he has said this, and then catches herself at the very last moment and says, "Oh, you will eat it yourself!" She sets the bowl and spoon back down and walks away, saying as she leaves, "Be sure to put it in your mouth carefully."

After Myin walks away, Soe picks up the spoon, scoops up some rice, and puts it into his mouth.

As seen in Figure 1 and illustrated in the above example, when changes to embodied practices are *child-led*, there is a mixture of independent and interdependent behaviors and a constant negotiation between caregivers and children.

Perhaps one of the best indicators that one is indeed encountering habitus and automatic behavior, in contrast to contemplated, deliberate action, is the discomfort and anxiety that can be observed on the part of the individual who is compelled to change that behavior. Myin clearly shows anxiety and discomfort when Soe requests to eat on his own. Moreover, Myin's reaction indicates that she is personally invested (emotionally and motivationally) in maintaining interdependent caregiving practices (Spiro, 1997; Throop, 2003). Although Myin understands on a more abstract level that she *should* allow her son to eat on his own, her anxiety and discomfort at having to do so is palpable. Moreover, having not yet mastered the embodied practices and habits of discourse that are all too familiar to Western mothers and fathers during mealtimes (e.g., face-to-face interactions, eye contact, and verbal dialogue in which one attempts to engage in conversation with even very young children), Myin walks away from the table entirely when she resigns herself to the fact that Soe will eat independently. She does not surrender control that easily, however, instructing him as she walks away to "be sure to put the food in (his) mouth carefully."

Soe seems to be deeply invested, on an emotional and motivational level, in enacting independent values (Spiro, 1997). Unlike Myin, who has encountered independent values largely through discourse, Soe's inculcation into independent values in the preschool he attends proceeds through channels of embodiment. Soe's mother and

nanny explicitly told me that he often asked to perform grooming and eating activities on his own. They also conveyed that he learned to make these requests at school.

Spiro (1997) and other psychological anthropologists (Briggs, 1998; Hollan, 2000; Obeyesekere, 1981) distinguished between cultural acquisition and internalization, with internalization looming larger than mere acquisition in cultural reproduction. Spiro (1997) asserted that, while some aspects of culturally acquired knowledge are learned fairly shallowly, there are other forms of cultural knowledge that are so deeply internalized that they are implicated in one's sense of self and one's morality. While Spiro did not make an explicit link between embodied practice and cultural internalization, Bourdieu (1990) categorized habitus as being something that is internalized such that it becomes like one's second nature. Such internalization results in automatic reactions to persons and events (Bargh & Ferguson, 2000).

In Soe's case, his preference for independence and agency in the domain of food already seems to be at the level of automatic behavior (Bargh & Ferguson, 2000). James (1902/2001, p. 75) wrote about the primacy of intuition and "impulsive belief", hypothesizing that one's "unreasoned and immediate assurance is the deep thing in us." James posited that, "articulate reasons are cogent for us only when our inarticulate feelings of reality have already been impressed in favor of the same conclusion." For Soe, what at this stage in his development is an automatic behavior, inculcated through embodied practice, can easily burgeon into a more complex value system as he grows older (Haidt, 2001).

Schools as a Motor for Change: Embodied Practice in Public and Private Schools

The personal agency displayed by Soe in his interactions with both his mother and the nanny can be traced to embodied socialization practices at his private preschool. As stated earlier, the poor public education system and an emerging upper and middle class during the 1990s contributed to the proliferation of private schools in urban centers such as Yangon. Many of these private institutions have been at the forefront of progressive democratic practices, socializing children to exercise both agency and autonomy with regard to thinking and behavior. The socialization practices in these private schools can be contrasted with those found in the government-run schools, especially village schools outside of Yangon.

Particularly striking when comparing the two school systems are the embodied practices used to inculcate values of interdependence versus independence. Whereas government-run schools placed emphasis on the downward regulation of the person's sense of personal agency through bodily comportments emphasizing motoric constriction, stillness, and rigidity in the presence of authority, the private schools embraced the opposite patterns of embodied practice. In the government-run schools, especially those located in traditional villages, students are not able to approach teachers without their permission. When teachers wish to mark papers, the students are asked to line up in front of the teachers and approach them, at first, with a deferential posture (Thein & Fiske, 2008). Once the child is close enough to the teacher to hand over the paper, he or she must do so with both hands⁸. The child is then obligated to stand with arms crossed and body completely rigid and still until the teacher is finished marking the paper and excuses

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⁸ The traditional gesture is to hold the paper in one hand while resting the other hand on the wrist or forearm.

the child. The child then moves away from the authority figure, typically by backing away a few steps with lowered posture, before turning around and returning to his or her seat.

The children in the private schools, by contrast, engage in embodied practices that emphasize control of their own bodies, as well as a relaxed comportment in the presence authority. I observed young children in the pre-school classes participating in embodied practices where they would squirm and twist their bodies or jump up and down as they sang songs or played games, usually within a couple of feet of authority figures such as teachers. I visited a preschool class where children were on the floor stretching and performing yoga poses alongside their teachers. During the yoga practice, as well as throughout the day, the preschool teachers would hug the children and say, "I love you" (*chilata*)—a practice that is probably quite new, since in most Gemeinschaft societies, including Burma-Myanmar, interpersonal closeness is taken for granted and not verbally articulated.

In traditional Burmese life, interpersonal closeness as indexed by physical closeness and behaviors such as grooming and feeding is common in the home, but not the school environment. Teachers are regarded as distant authority, inspiring emotions like awe, fear, and deference (Keltner & Haidt, 2003). I saw numerous examples of this when I was in a rural village, near Minbu, performing participant observations inside the schools. One memorable example was when the principal of the village school, who was, from what I could tell, a warm, jovial, and easy-going man, called a child over to where we were standing and asked him how old he was. The child trembled as he approached us, unable even to speak, and held up five fingers, opening and closing his hands to signal

that he was 5 years old. I know that it was not my presence as a stranger in the village that inspired his fear, because he and his classmates were very happy to run around me and make jokes, as I videotaped them outside the classrooms during recess. The child was intimidated by the over-powering figure of the principal.

A monk who was the head of a government-run primary school in Yangon, informed me that he tried not to "frighten" the children too much, because, otherwise, they would not want to attend school at all. He seemed to be aware of the awe and fear he and other teachers at the school inspired in the small children. When I performed participant observations inside his school for several weeks, he and his staff would take on serious, stern tones and demeanors with the students. Although to an adult observer, it was obvious that they were not actually mean, but putting on stern faces, the students at the school seemed to take their behavior at face value. When viewed in light of the traditional practices in the villages and other government-run schools, the affectionate manner in which the pre-school teachers in the private schools would interact with the students are quite significant. They signify important and potentially consequential shifts in socialization practices in relation to authority.

The Burmese rely on metaphors of *up versus down* and *higher versus lower* and physically place bodies above and below one another in order to communicate and evoke authority and rank. Embodied stances of lowered postures to acknowledge hierarchical relationships are more pronounced in Burma-Myanmar than in other places of East and Southeast Asia and arguably some of the most pronounced practices of this kind in the world, rivaled only by similar practices documented throughout Oceania (Duranti, 1992; Keating, 2000). Fiske (2004) described how so-called authority ranking relationships are

constituted by the use of what he calls a *social physics*, in which vertical space (who is above whom, or who is higher than who), mass (who is bigger than who), and force (who is stronger than who) are used iconically to represent power and rank. Fiske (2004) and Schubert (2005) posited that the metaphor of *up versus down*, in order to denote power, appears to be universal: Those who are higher up are seen as being more powerful and having greater authority than those who are below them.

The Burmese tendency to place bodies above and below one another in order to mark authority relationships—practices that were also prevalent in urban homes in Yangon when I was a child—are remarkable. The consistency with which children are required to engage in these practices while at school is also remarkable. Children everywhere seem to understand authority in terms of who is bigger and higher. Likewise, children everywhere have the experience of being smaller and shorter than adults, but in the village schools in Burma-Myanmar, the height differences between children and adults are accentuated by embodied practices. Students are obligated to keep their heads below that of adult authority figures by taking certain postural stances, engaging in acts of prostration, and being seated on the floor, while adults sit or stand on furniture.

In contrast, children in the private schools are allowed to sit and stand on the furniture (often with their heads and bodies physically above the adults). Similar to the practices found in US preschools, the teachers are trained to kneel or squat down so that they are at eye level with the children. I often saw children climb on top of their preschool teachers and pat them on their heads or reach over and play with their hair, as the teachers sat or squatted down to be close to them. As a child, I was never allowed to touch an adult on top of the head. If a situation required that I reach over an adult or raise

my body so that my head and torso would be above the adult's, I was required to say *gadaw* (literally *bow-down*, but it has come to mean *I beg your pardon*). I had a conversation with a fourth-grade teacher at one of the new private schools, and she conveyed to me that, because she had taught for over 20 years at government-run schools, it felt extremely uncomfortable for her to have the students interact with her physically in the way that they did. She described to me that her students would tap her on the shoulder or pull her arm to get her attention, something that would be unheard of in the village and other government-run schools where children are obligated to keep their distance from authority figures, unless beckoned by them to approach.

The developmental timing of when embodied practices such as bowing are introduced to village children is also remarkable. Children are taught how to *gadaw* when they are as young as nine-months-old. Adults hold the infants' palm together for them and then press their torso downward towards the floor. Adult caregivers always do this in context, for example, during formal events when the infant is interacting with elders, monks, or in front of depictions of the Buddha. Children in Burmese villages begin school at the age of 5 years, when they are developmentally ready to be placed in an environment that requires them to practice motor control. Moreover, the youngest children had to adhere to the strictest rules regarding proper bodily comportment in the presence of authority. Because many of these motor practices are exhausting to maintain, there are varying degrees of adherence to these practices. Whereas in other environments, one maintains these practices only for a fraction of the time, during the school day, inside the village classrooms, children are obligated to abide by them 100% of the time.

The Role of Socioeconomic Status in Shaping Values and Practice

While a disjuncture between abstract values and embodied practice was apparent in both Tut's and Myin's families, I encountered other families in Yangon where neither values nor practices had shifted, even as the entire society around them had changed. It did not seem coincidental that Tut, who was so articulate about the challenges facing his own family, worked for a foreign NGO and also held an advanced degree. This is exactly what would be predicted by Greenfield's (2009) theory of social change and human development. Thus, although he and his wife both worked long hours and the family lived modestly, he had been exposed to enough globalized discourse about ideal developmental goals to be able to reason in a complex manner about his children's future in view of the types of skill he should help them develop. Moreover, Tut's parents were also highly educated and his father had been educated abroad. In a similar manner, Myin and her husband, as well as the children's paternal and maternal grandparents (except one) had all attended university. Not only did Myin have access to the globalized discourse on parenting through the children's private school, she, like Tut, was able to reason about it in complex ways.

The disjuncture and tension between daily embodied practice and explicitly stated values could occur only if a person is able to engage in some form of discourse about the concepts that their behavior reflected. For most individuals in any culture knowledge of alternatives to culturally normative behaviors is gained only through direct experience or discourse with others. Often, discourse with others takes place through formal pedagogy. Values and practice are most likely to be at odds with one another when the parent(s) socio-economic status is such that they have had access to formal education, but whereby

their daily 'habitus' has remained unaltered. In another household, the father, who was highly educated and a physician, named cultivating "reason" and "logic" (he used the English terms) as being one of the goals that he set for his two daughters. Like Tut, this father also spoke about cultivating independent skills and felt that teaching the girls how to reason and think would be in the service of helping them to care for themselves in the future. When I came to their house the next night, while the father was attending night school to obtain his Masters in Business Administration, I observed his wife feed both girls, a 4-year-old and an 8-year-old, from the same bowl for the duration of the meal.

In Gesellschaft societies, discourse is often born out of interaction with media, where one is likely to have knowledge of problematized dichotomies even though it has little or no bearing on one's day-to-day life. In 2008 and 2009, there was still censorship in Burma-Myanmar and strict control over the media by the Ministry of Information. Many households in Yangon had television, but they were able to view only what was aired on Myanmar State Television (MR-TV). Access to other forms of media hinged upon a family's ability to be able to install satellite television in their homes (an option available only to the very wealthy). Access to the Internet was also tightly controlled and most households in Yangon either did not have Internet in their homes or the Internet was so slow that it did not have much of an impact on how the family members accessed culturally relevant information.

In interdependent, or Gemeinschaft societies, discourse often also takes place with parents, religious figures, and other authority figures who give moral instruction to the younger generation. Information about proper ways of behaving is 'passed down' from one generation to another. Hence, in Gemeinschaft societies (more so than in Gesellschaft

societies), socio-economic status and level of education of one's parents and their parents loom large in the types of discourses to which one would have been exposed.

In the last part of the ethnography, I will discuss the cumulative effects of socioeconomic status on access to globalized discourse. I will also discuss how access to globalized discourse impacts the relationship between abstract parental values and daily, embodied practice. On one end of the continuum are individuals, who have not had access to globalized discourse either through higher education, media, or discourse with their own parents. These individuals will have *both values and practice endure*, even as the larger society shifts in significant ways.

On the other end of the continuum are individuals, who have not only had access to globalized discourse through their own pursuit of higher education and ability to access media through privileged technologies, but who also have highly educated parents. These individuals are able to absorb discourse on independence versus interdependence and native versus foreign practices in highly complex and advanced ways. Often, as in the case of one family whose situation I will describe, they do not simply emulate behaviors that are found in the West, but have 'raised consciousness' and are able to successfully adapt traditional values and practice to modern realities, such that there is a successful evolution and *shifts in both values and practice*.

Case Study 3: Enduring Values, Enduring Practice

Winnie lives with her son, Zaw; her daughter, Wahwah; and her husband, Sint.

Her son and daughter are 5 and 3 years old, respectively. The family's dwelling resembles more a shop than a residence. The first story of their dwelling is just a single room with a small kitchen and bathroom in the back. There is no wall in the front part of

the house and no door that leads from the inside of the house to the outside, but simply a folding, steel gate, similar to what one would find in the front of a shop. Upstairs, is the family's sleeping quarters. It is also a single room. The street on which their house is situated was one of the busiest streets that I had seen in Yangon and also one of the most diverse. Neither Winnie nor her husband has attended a university. Maternal and paternal grandparents also did not attend a university; in fact, Winnie's mother and father had not even graduated from high school. As is common in Yangon and other urban areas in Burma-Myanmar, Winnie and her husband do not belong to the same ethnic group and also follow different religions. Winnie is ethnically Karen and Christian, and her husband is a Burmese Buddhist. Her husband sells used auto parts and fixes cars. Winnie is a stayat-home mother. Her son attends a government-run school, and her daughter attends a small preschool in the neighborhood, which charges very little money for tuition. The family also has a nanny, who helps look after the children on a daily basis. After filming the family, I had the opportunity to talk to Winnie about developmental goals she has for her children:

S: What kinds of issues do you worry about with regard to your children?

W: What is most important (to me) is that I am concerned about their health, as a mother. Honestly speaking, it is important to be financially stable here when you are not unhealthy; since we are not financially stable, right now, we just make sure that our children are healthy, for instance, making sure they do not catch a cold, something like that. If they are sick, they will have to be absent from school. They will be lagging behind in lectures and studies. Education these days depends on the parents; we have to push them along and pressure them; we cannot just sit

back and watch. The most important issues are health and education. I am getting old, and the age difference between the children and me is quite large. I had them when I was 33-years-old, so I become worried when I think about (how old I will be) as they get older. I will also be growing older. For some families, the age difference is not quite as much. Since I had them in my 30s, I am worried about their future and my current business situation. It will not be a problem, if the business keeps going well. Here, if the business goes well, we can send the kids to any type of school we want and provide any kind of living standards we want. Right now, we just provide them with what we can, depending on how we are doing financially.

The issue of independence versus interdependence has not yet become a problem for Winnie. Her concerns about her children pertain to basic issues such as health and finances. Although Winnie is not able to express explicit values about developmental goals such as independence versus interdependence, her interdependent values are apparent from what she conveys to me about day-to-day living:

S: When (under what circumstances) do you discipline your children?

W: I scold them when they damage things. When we buy new toys . . . they are curious and start exploring the toys such that they start to damage them. I feel that they are wasting money and I scold them for that. Also, when they don't listen to me. For instance, before going to school, when I say, "Let's go take a shower," they won't want to (take a shower). They kept going on and on (doing other things). When they get fussy like that, I have to scold them. Sometimes, they want everything to be up to them. When I set rules or tell them that they have to wake

up, get up, wash their faces, brush their teeth, they would be like, "No, I want to watch cartoons first." They wouldn't wash their faces. Also, when I prepare or buy noodle salad, they want something else–crispy stuff (to go on top of it). When I would buy them (the crisp stuff), they want something else, like milk. They are just fussy like that, (requesting) one thing after another. I want them to just do what I prepare for them to do in the first place. However, sometimes, I have to be flexible and just let them do whatever they want and prioritize their wishes. They cry when they are not satisfied, which ends up keeping me busier. So, often times, I just make them whatever they like so that they would not fuss anymore. I cannot ask them to behave how I want them to behave every day. Well, sometimes, they just eat what I prepare. The youngest daughter is the worst. Every time right before she is sent to preschool, she knows she will be made to take a bath. So, she fusses and refuses to take a bath. She won't go. When she has to put on her uniform, new clothes, she does not want to change, she knows she has to go to school, and she insists on staying in her pajamas. She just sits there and cries. Three people have to pick her up and force her to go to school. She's not happy at school.

S: How would you like to see your daughter and son interact with each other?

W: I want them to love each other. The age difference between them is just 1

year; so, even though they love each other, they are both stubborn. Especially if

both of them are trying to get something; usually, the older son sort of bullies the

younger daughter to get what he wants.

S: So, do you scold them when that happens?

W: Of course, and oftentimes, I have to punish my son physically (hit him). I want him to be gentle with his little sister, and give her more favor, since she is younger. But sometimes, the younger daughter is naughty; she goes and takes what her brother is playing with. Then, he doesn't bear with it (*hnya*). But also, when I scold the younger daughter, force her to take a shower and stuff, he doesn't like it either. He doesn't like it when I scold and physically punish the girl; he loves his sister.

Although Winnie does not problematize independence versus interdependence in the same manner that Tut and Myin did, she nevertheless describes how much she values that her children demonstrate interdependent qualities, including obeying authority and not expressing personal preferences. Winnie describes how she scolds them when they express personal preferences in terms of food. Likewise, she laments that when she tells them what to do (e.g., wake up, get up, wash their faces, brush their teeth), the children refuse to do so and insist on doing what they like, rather than what is required of them by authority. Moreover, she describes how the two siblings should relate to one another in an interdependent way, whereby the older child takes care of (e.g. shows favor to) and protects the younger child. She expresses disapproval when the older son bullies his younger sister, but describes the situations where he feels protective toward his sister with pride ("He doesn't like it when I scold and physically punish the girl; he loves his sister").

In Burma, relationships with authority figures are not simply about deference and obedience. Authority relationships comprise a sense of responsibility on the part of authority toward those who are "smaller and weaker." As described in chapter 1, children

are taught to develop a sense of moral responsibility for smaller or weaker social others. This is accomplished largely by emphasizing the physical smallness and, hence, neediness of younger siblings. There is just one Burmese word (*hnya*) to describe the act of being able to take more or all of a divisible good because one is stronger, bigger, and more powerful, but, rather than take all or more of it, one takes the least possible amount or none at all. *Hnya* is also commonly used when one is strong enough to beat someone (at a race, game, or other contest of strength), but rather than using one's strength to win, one lets the weaker person win by holding back one's power or strength. As such, *hnya* is the opposite of bullying. Winnie evokes this word (*hnya*) when she discusses how she wishes her son would "show favor" to his younger sister. In other households, the only time I would see mothers display contempt for their children was when, in relation to a younger sibling, a child would not *hnya*—that is, they would not allow a sibling who is weaker and smaller to have more of something, or allow the younger sibling to take a toy or other possession from them, or win at a game.

In contrast to what I found in Tut and Myin's families (i.e., a disjuncture and tension between abstract values and embodied practice), daily practice in Winnie's family was not at odds with her interdependent values:

Winnie is in the downstairs living area with her daughter, Wahwah; her son, Zaw; the children's nanny, Win Aye; and two friends of the family who are visiting. Zaw has just come home from school, is still in his school uniform, and is standing in the living room on a small scooter, which he had been riding earlier. Winnie is seated on a couch in the living room, and her daughter is seated next to her on a stool. Winnie says to the nanny, "Change his clothing for him," and

hands her one of his pants that she has on her lap. And then she says to Zaw, "Change, change, change from your school clothes." The little boy jumps up and down and indicates that he does not want to change, and his mother says, "When you come home from school you have to change your clothes." The nanny stands in front of Zaw, holding the pair of pants. Zaw says, "I do not want to," but the nanny approaches him anyway and begin to undo the buttons on the cuff of his school uniform. Zaw pulls his arms away and says, "No!!" The nanny grabs his arms again and says: "Change!" Zaw replies: "No (I won't) change," pulling away from her. His mother is watching this interaction that Zaw is having with his nanny and interjects, "If you won't change, (your clothes) are dirty; you have been wearing them all day. You have been playing all day, while wearing them." Zaw looks over at her, and she holds out some food, as if she wanted to feed him. In the same instance, the nanny, once again, moves towards Zaw and tries to unbutton his shirt... The nanny continues to unbutton his shirt. His mother says, "Even if he does not change his pants, change his shirt for him." The nanny unbuttons his shirt entirely and then unbuttons the cuffs on his sleeves. After taking off Zaw's shirt, the nanny takes both children upstairs. The children run around and chase each other. The nanny takes out pajama bottoms from the cabinet and holds them out. She pulls down Zaw's pants for him. She holds out the pajama bottoms and he steps into them. She pulls them up for him, and he steps into the other leg of the pants. She pulls that side up for him, too, and then pulls the entire pair of pants up and adjusts the waist band multiple times. Zaw picks up the long-sleeve top that goes with the pajama bottoms, but the nanny

grabs it from him. She pulls it over his head as he squirms and reaches for something on the shelf above. He pushes his arms through the sleeves on his own. His nanny says, "When we are done, you can go downstairs and jump around and play." She opens up the other sleeve for him and also pushes his arm inside that sleeve, still fidgeting. She pulls down the rest of the shirt and then adjusts the shoulders of the shirt. She adjusts the bottom of his shirt again.

The interactions that Winnie has with her son are quite consistent with her interdependent values. Even though temperamentally, he seems to be less docile than the other children in the case studies (see chapter 2), he is still dressed and groomed by his nanny, even at the age of 5 years. Unlike Soe, who asserts agency in terms of wanting to perform actions on his own, Zaw's behavior can be categorized as disobedient and high-spirited. It is not that he insists on getting dressed by himself; he refuses to get dressed at all. When Zaw shows disobedient behavior, both his mother and the nanny are insistent that he complies. His nanny physically tries to remove his clothing for him, even though Zaw has stated that he does not want to get dressed. His mother mostly directs commands at him by ordering him to change. Moreover, even though Zaw is right there, she does not speak directly to the child, but tells his nanny what to do in relation to Zaw's body. In the villages, as well, I noticed that adults would often talk about children to other adults while the children were sitting or standing just a couple of feet away. The adults did not engage in dialogue with the children directly.

Zaw's interaction with his caregivers also highlight how interdependent eating and grooming practices are carried out with children who are temperamentally not docile.

Zaw's nanny takes his clothing off for him and likewise puts his shirt and pants on for

him, even as Zaw fidgets. Likewise, she feeds him even as he is running around the house and climbing over the furniture.

Case Study 4: Shifting Values, Shifting Practice

Aung is 5 years old and lives with his mother, father, infant brother, maternal grandparents, paternal grandfather, uncle, and two nannies. The neighborhood they live in is entirely residential and consists of large two-story homes. Aung's father, Pyone, is a physician and has a medical degree but now runs a successful business. His paternal grandfather is also a physician, but was already retired. His mother graduated from university and now runs a successful business. Pyone is ethnically Shan-Chinese and Buddhist. Aung's mother is Burmese Buddhist. Aung is enrolled in the same private school as Soe, although he is in a higher grade.

Perhaps, what is most striking about the conversation I had with Aung's father about the developmental goals he had for Aung was how sophisticated his understanding of independence and interdependence was. When I asked Pyone what types of qualities he wanted to cultivate in his son, he replied that he wanted Aung to be a "good global citizen" and that he also wanted him to contribute to his community as an active citizen in what he hoped will be a democratic society. He said that he wanted his son to exercise personal agency, but it was a sense of agency that should be tempered with respect toward and responsibility for others. He further said that Burmese children (not just his own son) needed to learn how to become good leaders, who can provide an example for others and who could fix the problems that were ailing the larger society. Pyone's discourse was thus not simply about dichotomies of obedience versus disobedience, agency versus compliance, and nurturance versus independence. Pyone recognized the

value in personal agency and independence of action, but he also emphasized responsibility toward others. Moreover, in contrast to Winnie, the responsibility emphasized by Pyone was not a relational one directed only at family members. Nor was it a personal, individualistic one, as is common in most U.S. households. Pyone emphasized responsibility to the larger society.

The parenting practices I observed in Pyone's household were consonant with the beliefs that he conveyed:

Aung is sitting at the dining room table by himself as his grandmother is bringing more dishes from the kitchen and setting them on the table. Aung is still sitting on his own, with no one sitting next to him, and he dishes out some soup from a bowl and pours it over his rice. His father comes over to the table and sits down next to Aung and says to him, "Are you really eating? Are you really eating?" to which Aung nods. Aung smiles and puts more food onto his plate from the other dishes on the table (there are about 12 different dishes on the table). Aung's mother is now seated on the other side of Aung. Neither Aung's mother, his father, or any of the other adults at the table looks over at Aung as he is eating, but his mother does look over at Aung's father. She asks Aung's father to pass the bowl of rice, which he does. Aung's father reaches behind Aung to grab the extra spoon that he has on his plate. He does not make any attempts to feed Aung, but picks up the spoon and uses it to ladle some meat onto his father-in-law's plate. He says to his fatherin-law: "Eat the pork." Aung continues to eat on his own. He uses his fork to put pieces of meat onto his spoon and then puts the spoon into his mouth. His mother also reaches for some food and puts it onto her father-in-law's bowl, saying

"Father, please have a little more." The mother then puts more food onto her own plate. Aung picks up some rice and meat with his spoon and puts more food into his mouth.

Aung eats independently and his parents and grandparents seem to be comfortable with his behavior. Aung is responsible not only for placing food into his own mouth, but also for dishing the food onto his own plate. His parents do not instruct him on how to eat and, likewise, do not tell him to chew, as was seen in the other Burmese households. In some respects, Aung is treated as another adult. He is treated as being equally competent and capable of taking responsibility for himself and others, including the adults, who were present. This is apparent from the following interaction:

Aung is sitting at the dining room table with his entire family. He takes a big spoonful of rice and puts it into his mouth. He turns around and smiles at his father, although he does not say a word, and his father says, "You ate a lot, didn't you?" Aung nods. His father asks, "Do you want to wipe your hands?" He gives Aung the napkin. Aung takes the napkin and wipes his mouth by dabbing it from right to left and then sets the napkin down on the table. His mother looks over at him for just a brief moment while he dabs his mouth, but then looks away again. Neither his mother nor his father gives him any instructions on how to clean his mouth. They continue to talk and eat their own food. His father also looks over at Aung for a moment as he dabs his mouth and then resumes eating his own food and talking to his father-in-law. Aung takes another drink of soda. He has finished everything on his plate. He takes another sip of soda, and then takes yet another sip. His grandmother says something to Aung and he shakes his head in answer to

her question. Aung takes one more gulp of his soda, sets down his glass, and then pushes his chair back. His father asks, "Have you had enough?" Aung gets up and walks away from the table. He goes over to the sink, which is just a few feet away from the dining room table and his paternal grandfather says, "Wash your hands, wash your hands, okay?" His grandmother says, "He will take a drink of water." His paternal grandfather say, "Drink water and wash your hands, okay?" Aung takes a glass that is on the sink, walks over to the drinking water and gets a glass of water. He brings it over to his father and his father says, "Give it to younger grandfather first."

Pyone is affectionate with Aung; but, similar to the families observed in the United States, the affection is conveyed through eye contact and facial expressions of emotion. Unlike in U.S. families, Aung and the other adults at the table do not engage Aung in conversation. The verbal exchanges they have with him are only about immediate behaviors ("you ate a lot"). In contrast to US families, they do not ask Aung about his day. They also do not ask him for his opinions about various issues (large or small).

The relationship that Aung has with his grandparents is significant. Aung's paternal grandfather is well-educated and a physician. Moreover, he came of age during the U Nu period when Burma-Myanmar was comparatively prosperous, with strong diplomatic relationships with other countries. Aung's paternal grandfather seemed to play a strong role in the family and appeared, in some respects, to be the head of the household. He greeted me, along with the parents, when I came into the house and sat and spoke with me for a while. In the above example, he gives Aung instructions to "drink water and wash your hands." He also tells Aung at another point during dinner

"be sure to show the researcher how well you can say your (Buddhist) prayers." While other Burmese families felt comfortable with my presence in their household largely because I am also Burmese, Aung's family (especially his father and grandfather) seemed to feel comfortable with me, not only because of my heritage, but also because they understood the process of collecting data and conducting research.

As previously mentioned, Aung attends the same private school as Soe, where his family most likely hears the same message from teachers and administrators about the need for the children to develop independent living skills. Aung's family understands the message about independence versus interdependence in a manner that is fundamentally different from that of Soe's family. Neither Aung's parents nor his grandparents appear to be anxious about Aung's eating on his own or wiping his own mouth. To the extent that the discourse about independence versus interdependence is also about the tension between Western and non-Western ways of parenting, it is notable that Aung's family still demonstrates traditional values such as respect and consideration for elders. Aung's family is able to adapt to changing circumstances in Burma-Myanmar in such a way that they simultaneously help him develop independent skills, while still teaching him traditional values. Notions of responsibility, which are traditionally relational and based on family and kinship ties, are embraced by Aung's father with a much wider view of responsibility toward all of society—the ideal form of responsibility that is encouraged in most democracies and Gesellschaft societies.

Discussion

The case studies highlighted in this current study highlight two distinct pathways through which children's learning environments can be altered (Greenfield, 2009). On the

one hand, changes in sociodemographic realities can alter the abstract cultural values of parents and other caregivers, causing shifts in children's learning environments. This pathway is perhaps best highlighted by the first case study. Changing sociodemographic realities in Yangon had caused Tut to place priority on independent values, over interdependent ones. By encouraging his daughter to commute to school on her own or by teaching her how to take phone messages, Tut tried to help Winmar develop the independent living skills that were in line with his values. The learning environment of both his children, however, with regard to embodied practices in the domain of food and grooming remained largely the same. While values had shifted first, the case study and Figure 1 indicate that practices had also begun to shift, leading to variable feeding practices along the independence-interdependence dimension. Independent practices largely lagged behind independent values such that there was often a discrepancy between values and practice.

A second pathway in which children's learning environments can be altered is for shifts in sociodemographic realities to alter the child's learning environment directly (Greenfield, 2009). In this second case, a disjuncture between abstract values and daily caregiving practices can occur, when embodied practices begin to shift first, while cultural values remain intact. This second pathway is highlighted by the second case study, where one sees evidence of *child-led changes* to embodied practices in the domain of food and grooming. Private elementary schools and pre-schools in Yangon that emerged as a direct result of greater levels of prosperity and a movement towards privatization directly altered Soe's learning environment. Soe learned independent eating and grooming practices in a private pre-school. Thus, while Soe's mother, Myin adhered

to shift through Soe's insistence. Rather than seeing one type of behavior (either independent or interdependent), there is a mixture of practices. As seen in Figure 1, there is also a constant negotiation between the parent and the child.

The roles of the private schools in causing shifts in embodied practices within the homes highlight the relationship between socioeconomic status and access to globalized discourse about ideal goals to set for children's development. Greenfield (2009) describes how high levels of technology and more formal education can lead to more Gesellschaft values. In Tut's case, although his children did not attend private schools nor did he and his wife have access to privileged technologies, he was highly educated and also had a highly educated father who had spent time abroad. Tut also worked for a foreign NGO.

When families are unable to afford private schools and unable to gain access to globalized discourse about independent values through other means (i.e., technology-driven media or highly educated parents), neither values nor practice will shift towards more Gesellschaft values. As seen in Figure 1, this was the case in the third case study discussed. For Winnie and Zaw, neither values nor practices had shifted.

The fourth case study highlights how socioeconomic status can also have a positive cumulative effect across generations. Aung's grandfather, as well as his mother and father, had access to higher education. The family was thus able to successfully adapt to Burma-Myanmar's changing realities by integrating independence and interdependence, with regard to both values and practice. For Aung's family both values and practice had not only shifted; they had evolved.

A core theme that runs through each of the case studies is intergenerational transmission. Greenfield's (2009) theory of social change deals explicitly with change within a lifetime as well as change that occurs across generations. The theme of intergenerational transmission is significant for each of the families, not only in terms of transmission that occurs from parent to child, but cumulative experiences that spans multiple generations. For all the children in the case studies, the historically specific values and embodied experiences of their parents and grandparents have an impact upon their developmental trajectories.

Conclusion

The present ethnographic study documented the lives of four families in Burma-Myanmar, a society that is undergoing tremendous change. Many consider Tut, Myin, Pyone, and Winnie to be part of Burma's *lost generation* (Gray, 2013). Lost because their most promising years as high school and university students were lost amidst a sea of political turmoil. While I detected an underappreciated and uncelebrated heroism in the daily lives of all the families that I interacted with, both in the United States and in Burma-Myanmar, it was especially poignant to interact with members of this *lost generation* and to witness them contemplate the realities of a now changing Burma-Myanmar in terms of the hopes and longings that they casted for their own children. For some parents these longings gave way easily into anxieties and fears, simply because, as a part of this *lost generation*, they were ill equipped to deal with the changes. Still, there was tremendous strength of will and a remarkable resiliency amongst all the families I interacted with, and tremendous love as well.

Often accounts of oppressed people—those who are deprived of basic dignities, whose futures are dim, and where there is a collective pain—convey how pained individuals, who are deprived of their own basic needs, can neglect the needs of even their own children and forget to nurture and take care of those around them (Turnbull, 1972; Scheper-Hughes, 1993; Goldstein, 1998). There were many individuals in Burma-Myanmar who seemed embarrassed by the feeding and grooming practices I sought to document when they caught on to the topic of my enquiry. I can only hope that the Burmese recognize that what I documented and, consequently, the narrative of social change in Burma-Myanmar, is not simply about a non-globalized society and a nonglobalized people who must alter current practices, including their habitus, to catch up to the globalized East and West. It is also a narrative that conveys how even in the midst of a collective pain that was unprecedented in modern history in terms of the sheer length of time that Burma's oppressive regime ruled over the country with its iron fist, quite remarkably, their parents and grandparents still nurtured them and fed them, such that these practices endured.

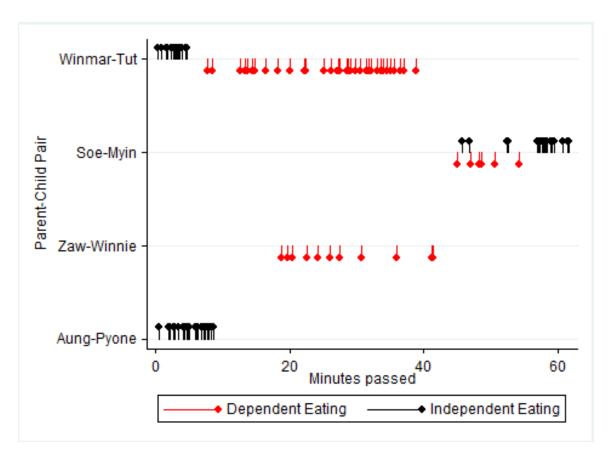


Figure 1. Independent eating behaviors per minute for case studies 1 to 4.

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