Introduction

Learning Morality in a Taiwan Village

To Divide an Orange

When we look at the apparently simple actions in children's world, we see even the most abstract concepts of human morality emerging from such concrete, seemingly trivial experiences. One example for children in the Taiwanese village Xia Xizhou, well documented in the Wolf Archive, is the scene of dividing an orange. In this impoverished community where families scrambled to feed multiple children, oranges were a pleasant treat for many youngsters. With some pocket money they got after persistent whining toward mothers or grandparents, children were excited to visit the little stores in the village to buy oranges, among other snacks. On a February evening, six-year-old girl Wang Shu-yu, an adopted daughter, offered to "help" her little sister, two-year-old Wang Shu-lan:[1]

Shu-yu walked out of her house, holding her little sister Shu-lan's hand. Shu-lan had an orange.

Shu-yu asked Shu-lan: "Let sister open the orange for you [break it up for you]." Shu-lan didn't say anything. Shu-yu took it and broke it up into six

[1] CO #685, 2/7/1960. Throughout this book, each episode of fieldnotes, an observation, an interview, or a projective test transcript is indexed by the initials of its data type, followed by its unique ID assigned to each episode within that data type. All unique IDs were generated in Python programming environment and therefore begin with #0. For example, "CO" refers to the data type "Child Observation."

pieces and kept two pieces [sections] for herself. Shu-lan didn't comment. She walked over to the adults who were gambling in front of her house and watched them.

When Shu-yu finished the orange [the two pieces], she went back to Shu-lan and said: "Let me divide it for you." Shu-lan let her and Shu-yu kept one piece. Shu-yu went back over to watch the gamblers.

Shu-yu finished the orange and went back to little sister. Her little sister had only three pieces [of orange] left. Shu-yu: "Let me divide it." She took the orange from Shu-lan and Shu-lan whined and said: "No! No!"

Shu-yu broke it and kept a piece. Shu-lan whined and said: "No!"

Shu-yu: "Never mind." She stuck the piece in her mouth [anyway].

During the tedious process of transcribing fieldnotes one page after another, I burst out laughing when I noticed this episode. My eyes lit up in moments like this. Gathering clues to identify individual personalities from countless fragments of random observations, I was intrigued by this episode. Shu-yu's maneuver blurred the boundaries of the most basic moral categories, care, fairness, and reciprocity[2] on the one hand, and selfishness, dominance, and aggression on the other hand. Her successful maneuver depends on her perceptive analysis of the social situation.

Another episode of dividing an orange introduces yet more puzzles:[3]

Huang Ah-fu (six-year-old boy) and his younger brother Huang Hsin-yu (three years old) ran into the store to buy an orange. Ah-fu wanted to peel the orange and Hsin-yu wanted to do that too. Ah-fu wouldn't give it to him. Hsin-yu started to cry and ran home, saying: "I'm going to tell somebody, I'm going to tell somebody!" He ran to the corner and Ah-fu said: "I'm not going to give you any."

Hsin-yu ran back, whining: "I want to peel the skin. I want to peel the skin."

Ah-fu: "What does it matter whether you peel it or I peel it? You can't eat the skin. Do you want to eat the skin?"

[2] Reciprocity in the sense that Shu-yu might have thought herself entitled to getting part of the orange as fair reward for "helping" her little sister.

[3] CO #382, 12/07/1959.

Hsin-yu: "Alright, you peel half and I'll peel the other half."

Ah-fu: "Alright." Hsin-yu watched. Ah-fu peeled until there was only a little left.

Hsin-yu jumped up and down: "Let me peel that! Let me peel that!" Ah-fu gave it [the orange] to him. Hsin-yu peeled it and gave it back to Ah-fu.

Ah-fu: "Each one gets half." He was counting the sections over and over again.

Hsin-yu to Ah-fu: "Don't let Sister Chen see."

Huang Shu-feng, a boy from another family, had come up and they [all the children who were present at the store] huddled around.

Ah-fu: "Aiyo! [Oh!]" He shoved them away.

Ah-fu: "What is so much fun to look at?" They all laughed. Ah-fu slowly and carefully divided the orange in half. They walked away.

Unlike the mischievous Shu-yu, big brother Ah-fu acted in a fair manner, dividing the orange in half. We might be baffled by Hsin-yu's wining though: What is there to fight about in peeling the orange skin? Was it about fairness, whatever you do, I need to do it too ("You peel half and I'll peel the other half")? Was it also about having fun, a kind of joy that our adult minds cannot fathom? Or on the little brother's part, besides fairness and joy, there was yawning for a sense of autonomy and agency? Simple vignettes of dividing an orange point to profound mysteries of learning morality. It is unlikely that parents explicitly taught their children how they ought to divide an orange. Even if parents did so, in reality some children violated the normative prescription, or manipulated it to their own advantage. It is even more unlikely that parents had any moral instructions or opinions on peeling the orange skin.

So how do children acquire moral motivations and sensibilities? This is the primary theme of my book. The book title, *"Unruly" Children*, captures my main argument: From an adult perspective, I see disobedient children defying parental commands and not deterred by punishment. This points to the limits of parenting and socialization, the conventional framework through which we understand the project of learning morality. But shifting to the vantage point of a developing child and zooming

into their own world, I see the opposite of "unruly": Children navigate cooperation, conflict, and the gray areas in between, creatively negotiating their own rules, with complex moral reasoning, emotions, and gendered expressions taking shape in a specific historical context. I trace how children learn morality through playing with other children, including their siblings, and highlight peer learning in moral development.

Han Chinese societies are particularly interesting places to study how children become moral persons. Moral cultivation, or *zuo ren* ("becoming human"), has long been a central concern of Chinese philosophy (Jiang 2021), at the nexus between ethical thoughts, family values, and educational traditions (Bai 2005; Cline 2015; Kinney 1995). Although the imagery of "the child" has assumed a symbolic significance in understanding Chinese morality and family, children themselves are often rendered invisible in actual studies. By bringing to light the story of these "unruly" children from the shadow of classic works in sinological anthropology,[4] this book unsettles prior assumptions about "the traditional Chinese family." For example, children's defiance and maneuvers challenge some entrenched discourses in the academy and beyond: The idea of "the innocent child" in Chinese studies and the stereotype of obedient, docile Asian children – especially girls – in Euro–American popular imagination.

The secondary theme of this book is fieldnotes, from the making of fieldnotes through ethnographic encounters with children to reconstructing an ethnography of children through making sense of historical fieldnotes. I did not have first-person fieldwork experience to orient myself. I was not present at these hilarious scenes of dividing an orange. As an ethnographer, I couldn't help but wonder about the

[4] See James L. Watson's explanation of this term: "'Sinological anthropology' is a term of convenience; it is generally used to designate all anthropologists who work in the field of Chinese studies" (Watson 1976: 355). Many of the foundational studies in sinological anthropology, including Watson's own research, were conducted outside mainland China.

original experience *in the field*. Six decades ago, did the observer on the spot also laugh out loud, when she saw Shu-yu "helping" her little sister to break an orange? Was the observer also baffled, in an amusing way, when she saw the little brother Hsin-yu insisting on peeling the orange skin? The person who observed these children and took notes was Arthur Wolf's research assistant, a Taiwanese teenage girl recorded as MC, who became children's trusted "Older Sister Chen" (MC is shorthand for "Miss Chen"). How did children feel about being observed during intimate moments of their social life, for example, sibling disputes?

As these vignettes show, children are acutely attuned to their social partners' behaviors and intentions. They are also keenly sensitive to what others might think of them: Hsin-yu did not want the observer MC to see what they were doing. Ah-fu shooed other children away from the scene. They might feel embarrassed. They care about reputation. These little gestures, the most human experience, prompt us to reflect on the nature of ethnographic knowledge, knowledge based on concrete social encounters and psychological inferences. Anthropology has ignored the theoretical significance of childhood learning (Blum 2019; Hirschfeld 2002). I would add that studying children can also offer methodological and epistemological insights to our discipline. We should learn *from* children. Perhaps we should also strive to learn *like* children.

These two themes intersect at children's social cognition, a broad set of mental processes and skills that enable individuals to make sense of and respond to the social world, including emotional situations. Therefore, the analytical approach of this book differs from mainstream works in anthropology and Chinese studies: Instead of centering adult social life, as in most ethnographies, I take children's developing minds as a point of departure. For the study of morality, I switched the question from learned patterns of social norms and moral values to the very process of learning. For those interested in childhood, contrary to the conventional perspective of "childrearing" in Chinese studies, which emphasizes how parents and educators shape the moral personhood of youngsters, my

book focuses on children's active learning. Due to the unconventional nature of this book, a reanalysis of other anthropologists' fieldnotes, I can only rely on textual records, for the most part, to reconstruct children's lives. Based on ethnographic close reading, I use computational "distant reading," which has become increasingly popular across social sciences and humanities, to systematically examine these texts. I also interpret the meaning of textual patterns through the lens of children's developing social cognition. Taken together, a new look at the Wolf Archive can address three questions: The question of learning morality in childhood; the place of children in the study of Chinese culture and society; and the contributions of new methodologies to anthropological knowledge.

The Wolf Archive and Intellectual History

The Wolf Archive is a unique, unpublished set of fieldnotes that occupies a significant niche in multiple streams of intellectual history, at the intersection of anthropology and the study of Chinese and Taiwanese societies. In the 1950s and 60s, without access to mainland China, many anthropologists went to Taiwan or Hong Kong for fieldwork and used these sites as a proxy for understanding "Chinese society and culture." Arthur Wolf was among the first American anthropologists who did fieldwork in Taiwan. His first field trip to Taiwan marks a milestone in the "Golden Age" of sinological ethnography (Harrell 1999), as the works of Arthur and Margery Wolf and their students and associates made long-lasting contribution to the study of Chinese and Taiwanese kinship, family, women, gender, and religion. What became lost in this intellectual history, however, was the original intention of the Wolfs' Xia Xizhou field trip (1958–60).

In Arthur's own words, the purpose of this field research was to "add a Chinese case" to the Six Cultures Study of Socialization (SCS) (Wolf Unpublished manuscript:[5] 9). Based on comparative fieldwork in

[5] Hereafter "Wolf n.d."

six societies, Kenya, Okinawa, India, the Philippines, Mexico, and the United States,[6] the SCS was a landmark study in mid-twentieth century American anthropology and an unprecedented endeavor of field research on childhood in cultural contexts (LeVine 2010). Led by Beatrice and John Whiting, anthropologists at Harvard, Yale psychologist Irvin L. Child, and Cornell psychologist William W. Lambert, the SCS project focused on children between the age of three and eleven (with a total sample of 136 children from six sites). This large-scale, cross-cultural research utilized a standardized design that combined anthropological and psychological methods. It produced a series of theoretical, ethnographic, and methodological publications as well as documentaries on culture and child development.[7] A product of collaboration between anthropologists and psychologists, the SCS's legacy on psychocultural study of human development cannot be overstated (Amir and McAuliffe 2020; LeVine 2010).[8]

As an anthropology graduate student at Cornell University, Arthur Wolf became interested in psychology. Under the supervision of psychologist William Lambert and anthropologist Lauriston Sharp, Arthur started his dissertation fieldwork in Taiwan, intending to replicate and expand the SCS template. His project was the first anthropological research on Han Chinese and Taiwanese children. The research had a larger sample size and more complete data than any individual case in SCS. Yet the Wolfs never published any systematic analysis on childhood from this research. A main reason is that during the fieldwork,

[6] The six communities studied were the Nyansongo, a Gusii community in Kenya; the Rajputs of Khalapur, India; Taira, a village in Okinawa; the Mixtecans of Juxtlahuaca, Mexico; the Tarong in the Philippines; and New Englanders in Orchard Town in the United States (all pseudonyms).

[7] The most influential publications include B. Whiting (1983); B. Whiting, Whiting, and Longabaugh (1975); J. Whiting (1966); B. Whiting (1963); and B. Whiting and Edwards (1992).

[8] For a collection of articles on the legacy of the SCS, see a special issue in the *Journal of Cross-Cultural Psychology* (Lonner 2010).

Arthur discovered the institution of minor marriage, *sim-pu-a*, and his interest shifted to marriage norms and incest avoidance. Besides, at a time with no personal computers, it was hard to process such a large amount of data, which also delayed the analysis. But he always appreciated the unique value of this project that these data could generate "dramatically greater systematic knowledge about Chinese childhood than we have ever had before" (A. Wolf 1982: 4).

In his final stage of life, Arthur returned to this project, started writing a book manuscript, and left behind a couple of introductory draft chapters. He reflected on how his own thinking had evolved over the decades: "Had I written in the 1960s as intended, I would have focused on testing the hypotheses formulated by the Six Cultures Study. I now pay more attention to reporting as accurately as possible the data I collected" (A. Wolf n.d.: 36). The shift in attitude is related to his experience of revisiting the fieldsite in the 1990s – which is no longer the village Xia Xizhou but part of New Taipei city. He realized that his research could never be replicated, due to drastic changes in the community (Duryea 1999).

A New Look at the Wolf Archive: Theoretical Framework

Six decades after the original fieldwork, my reanalysis of the Wolf Archive has more than "documentary historical value" (Edwards 2000: 318).[9] This book is not just about recovering disappeared childhood and obscured intellectual history. It is also an attempt by a female Chinese anthropologist to establish a dialogue with Western specialists of an earlier generation. To animate this conversation, I brought in my own intellectual vision that cuts across anthropology, psychology, and Chinese studies, drawing from new conceptual interests and empirical findings. First, trained in cognitive anthropology and developmental psychology, I examine

[9] Edwards (2000), entitled "Children's Play in Cross-Cultural Perspective: A New Look at the Six Cultures Study," revisited SCS data on children's play.

everyday childhood learning through the perspective of children's developing social cognition in cultural contexts. This theoretical stance differs from the SCS' behaviorist paradigm that treats the human mind as a black box. It also goes beyond the "human nature versus learning" dichotomy that framed Arthur Wolf's vision when he resumed this project later in his life. Moreover, while the SCS and Arthur Wolf set out to study childhood and childrearing in a general sense, this book puts morality as an explicit focus and in light of a naturalistic perspective.

What Is Learning? From Behaviorism to Cognitive Anthropology

The SCS project, as ambitious and significant as it is by today's standard, was motivated by a behaviorist understanding of childhood learning. The SCS theorized learning as stimulus–response processes and emphasized external reward and punishment in shaping behavior. The SCS's behaviorist hypothesis was clearly stated in its "field guide": "reward by socializing agents for behavior of any given system will increase the habit strength of behavior in that system" (J. Whiting 1966: 11). Since the 1950s, however, the study of childhood learning has undergone significant paradigm shifts, the most prominent shift being the "cognitive revolution" (Miller 2003) and the interdisciplinary study of the mind. Scientists have accumulated a vast body of knowledge about children's developing minds: Young children have a much more complex mental capacity and richer emotional life than the behaviorists once assumed, and they are not mindlessly responding to environmental stimuli. Whereas behaviorists treated the human mind as a black box, cognitive scientists today consider how the mind works as central in any meaningful understanding of learning and behavior. In the case of studying children, this means taking cognitive development seriously. This especially matters for understanding social learning – learning from interacting with other people (Gweon 2021) as well as the transmission of human culture (Hirschfeld 2002; Tomasello 2016).

Arthur Wolf's own understanding of child development evolved, reflecting his ambivalent attitude toward the SCS theoretical paradigm: At the beginning, he intended to test the SCS hypotheses. The decades he spent studying incest avoidance and proving the Westermarck hypothesis[10] (A. Wolf 1995, 2014) changed what he wanted to know about children. As he recounted in his draft manuscript, he was still interested in explaining children's behavior, but his interest had drifted away from the earlier behaviorist paradigm and toward a nativist view: "It [my interest] simply shifted from what people learn to what they are born knowing. I now take more seriously than I once did the possibility that behavior is not very malleable. It might be that while human-beings learn quickly they do not modify their behavior as a result" (A. Wolf n.d.: 28–29). Without taking into consideration how the child's mind works (which is similar to the SCS framework), here my predecessor resorted to the strict dichotomy of learned versus inborn knowledge. In contrast, many cognitive anthropologists today have come to view this as ultimately a false dichotomy (Boyer 2018).[11]

I find the cognitive neuroscientist Stanislas Dehaene's book, entitled *How We Learn: Why Brains Learn Better than Any Machine … for Now*, helpful for understanding the basic concepts of nature and learning: "Pure learning, in the absence of any innate constraints, simply does not exist. Any learning algorithm contains, in one way or another, a set of assumptions about the domain to be learned" (Dehaene 2020: 24–25). Dehaene's definition of learning applies to multiple levels of empirical reality: "In cognitive science, we say that learning consists of forming an internal model of the world. Through learning, the raw data that strikes

[10] The Finnish anthropologist Edward Westermarck (1894, 1921) posited, in *The History of Human Marriage*, that siblings who have close physical proximity during childhood are expected to experience sexual indifference toward one another.

[11] The debate on innate and acquired characteristics of biological organisms has a long and complicated history; for a review, see Griffiths and Linquist (2022).

our sense turns into refined ideas, abstract enough to be reused in a new context – smaller-scale models of reality" (2020: 3).

The opening vignettes of dividing an orange, for example, allude to several internal models of the social world, models that have moral significance and can motivate behavior: Models about ownership, for example, in the first vignette, the orange belonged to the little sister, about fairness in resource distribution and exchange, for example, in the second vignette, the two brothers ought to divide the orange equally, and even about dominance, for example, in the first vignette, the older sister clearly exploited the little one, perhaps because she was older. Different internal models can cohere or stand in contradiction. Learning means that children not only construct these models, but also weigh and evaluate different models according to the concrete situation. Taking advantage of a younger sibling might override a sense of respect for ownership, if the older sibling predicted that she could get what she wanted. Learning also means that children constantly update these internal models of the social world, based on their prior experience, and alter their predictions about others' behavior: Next time the little girl might not be easily tricked by her older sister's seemingly altruistic offer.

This idea of "forming internal models" is related to but different from the concept of "cultural models" that has been discussed extensively in American cognitive anthropology during the earlier decades.[12] According to the classic definition, "A cultural model is a cognitive schema that is intersubjectively shared by a social group" (D'Andrade 1987: 112).

[12] "Cultural Models Theory" (CMT) includes a cluster of theories concerning the relationship between cultural knowledge, language, and mind. It was systematically developed in the 1980s (D'Andrade 1981; Strauss and Quinn 1997; Holland and Quinn 1987). Cognitive anthropologists are reviving this theoretical tradition today (de Munck and Bennardo 2019). But as Claudia Strauss (Forthcoming) points out, compared to classic definitions of cultural models as shared cognitive schemas, recent formulations of CMT (Bennardo and Munck 2020) lack conceptual clarity, that is, including too broad sets of cultural knowledge, such as cultural themes that are not mentally represented in interconnected associative networks.

For one thing, proponents of cultural models theory (CMT) tend to follow the dichotomous view of nature versus learning and understand cultural models as "learned." In contrast, some "internal models" in the dividing-an-orange scenario, for example, notions of fairness, are likely constrained by innate predispositions. Moreover, forming internal models does not mean that children simply "absorb" or "internalize" cultural knowledge. While some CMT theorists do emphasize the importance of childhood learning, they tend to simplify the process of learning and reduce it to "socialization" or "internalization." My research challenges this framework and draws attention to the complex psychology that underpins how children actually learn and negotiate cultural models (Xu Forthcoming). In the Taiwanese historical context, certain cultural models of social hierarchy and kinship, for example, girls yielding to boys, older children yielding to younger ones – especially for siblings, might feed into children's evolving internal models of how to divide an orange. But an important part of learning morality is active evaluation and judgment as to whether one should conform to these cultural norms or not. This often requires paying attention to a variety of situational factors, such as authority's presence or absence, personal relationships, and previous social interaction histories. Among these complex inferences and calculations, some might require deliberate effort while other processes might operate automatically without one's awareness. To better understand the process of learning, that is, "forming internal models," I advocate a cognitive anthropology approach that engages with latest psychological research and takes seriously how the mind works.

Childhood Learning in Cultural Contexts: A Reviving Interdisciplinary Program

Within the past decade or so, new conversations between anthropology – mostly evolutionary anthropology – and psychology brought forth a revived interest in studying child development in cultural context. A

recent article (Barrett 2020), *Towards a Cognitive Science of the Human: Cross-Cultural Approaches and Their Urgency*, identified "children" as the most common title word across all empirical cross-cultural studies since 2010 (a sample of 249 papers). This new wave of research is partly a response to the persistent sampling bias in cognitive science – populations predominantly from WEIRD (Western, Educated, Industrialized, Rich, Democratic) societies (Henrich, Heine, and Norenzayan 2010). It is also an effort to examine the universal and variable aspects of human cognition, as well as the mechanisms that guide the interaction between the two. Note that cognitive anthropologists have cautioned against a mechanistic dichotomy of "universal versus variable" in the study of culture as well as the conceptualization of "WEIRD" societies (Astuti and Bloch 2010). But we need increased participation from sociocultural anthropologists to further this critical conversation.

These new studies value the SCS's enduring legacies on interdisciplinary collaboration, cross-cultural comparison, and field research (Amir and McAuliffe 2020). But compared to mid-twentieth century, we have made substantial progress. The most exciting progress is occurring in the domain of social cognition, especially in identifying human children's extraordinary, universal capacity to learn from others (social learning) and to acquire and transmit culture (cultural learning), which supports the highly variable behavioral and cultural repertoires (see Barrett 2020 for a review). Taking advantage of new theories and findings on cognitive development, and using sophisticated methods across cultures, researchers have established a more nuanced and accurate understanding of the relationship between mind and culture. These psychological foundations have significant implications for understanding how we organize societies and cultures, yet so far sociocultural anthropologists have rarely engaged with this line of interdisciplinary study. My work addresses this problem through examining children's moral development, one of the most important topics in this new research program.

Mind, Culture, and Moral Development: The Missing Child in Sociocultural Anthropology

My reanalysis pursues a key question that the Wolfs never asked, that is, how children become moral persons. This conceptual focus is shaped by booming new interest in morality across anthropology and psychology. My research facilitates critical conversations between sociocultural anthropology, a field in which research on childhood learning is marginalized (Hirschfeld 2002), and the increasingly synergetic constellation of psychology and evolutionary anthropology, a research program that takes children more seriously. My work aims to, metaphorically, rescue "the missing child" in sociocultural anthropology.

According to classic moral development theories (Piaget [1932] 1997; Kohlberg 1984), a sense of morality does not emerge until after early childhood. But recent research has established a new consensus that young children have more complex moral cognition and emotions than previously assumed (Turiel 2018). Psychologists have found that various foundations of morality, such as empathy, fairness, care and harm, and coalitional sentiments, emerge early on, even in infancy (Lucca, Hamlin, and Sommerville 2019; Woo, Tan, and Hamlin 2022). Thanks to collaboration with evolutionary anthropology, recent cross-cultural comparative experiments have identified universal and culturally diverse aspects of children's prosocial development, for example, acquiring a sense of fairness in resource distribution (Blake et al. 2015) and learning cooperative norms (House et al. 2020).

In the past few decades, sociocultural anthropology has also witnessed a flourishing interest in morality and ethics, and has made it into an explicit theoretical focus.[13] In this new scholarship, anthropologists have either elaborated their critique of psychological studies of morality or included conversations with psychologists in general reviews of

[13] For reviews of the field or comprehensive edited volumes, see Lambek (2010a); Fassin (2012); Laidlaw (2017, 2023); and Mattingly and Throop (2018).

the anthropology of morality and ethics (Fassin 2012; Laidlaw 2023). Anthropological and psychological approaches to morality have their respective limits: Psychologists tend to prioritize western-centered concepts and samples, without addressing the rich diversity of human moral experience. They are also prone to micro-level explanations that can hardly account for the complexity of human action in context or processes of social change. Many anthropologists, on the other hand, despite an explicit attempt to go beyond a Durkheimian framework that conflates "moral" with "social" (Yan 2011), still commit to the Durkheimian paradigm of disregarding human psychology when explaining behavior.

My work emphasizes the perspective of child development and learning that is rarely addressed in the new anthropology of morality and ethics. Sociocultural anthropologists' bias against studying childhood learning is closely related to the field's entrenched antipathy toward psychology and psychological explanations of human behavior.[14] Due to such persistent biases, mainstream anthropological accounts of learning are psychologically implausible: "How people actually learn (as opposed to how societies organize learning) is scarcely understood by anthropologists" (Stafford 1995: 11). Sociocultural anthropologists have largely approached children as "passive assimilators" who simply "absorb whatever testimony the environment throws at them" (Astuti 2017). Such a simplified view of learning, like the analogy of a sponge absorbing water, reflects outdated assumptions: The child's mind is a black box and "mind internal" processes are irrelevant, or the child's mind is a blank slate, with no initial guidance or constraints on learning. If we start from these assumptions, we have flattened, obscured, or even erased the complexity of children's mental life.

That is why, as cognitive anthropologist Charles Stafford (2013: 21) points out, "psychologists and anthropologists clearly have a great deal to learn from each other when it comes to the study of child development

[14] Quinn (2005); Quinn and Strauss (2006); and Stafford (2020).

in general and children's moral/ethical development in particular." By studying children, we can begin to appreciate the full complexity of learning, the basis through which human morality is established and negotiated. This is not to say that a sociocultural anthropology perspective is not valuable or that we should blindly follow psychologists. In fact, through studying children, we can bring deep cultural knowledge to challenge Western moral psychology concepts, such as popular constructs of individualism versus collectivism and autonomy versus conformity. We can provide ethnographic insights on children's spontaneous social life and address macro-level factors and processes such as social change and transformations of moral values.[15] Along these lines, my book does more than present an ethnographic account on Taiwanese children, as opposed to laboratory studies of predominantly Western children. It goes beyond the focus on prosocial behavior in recent psychological literature to also delve into the dark side of moral experience, that is, dominance, punishment, and violence. It explores the intertwinement of cooperation and conflict in children's everyday life, that is, the gray area of teasing, and illuminates the inherently messy dimensions of moral life. Lastly, as part of what the anthropology of morality and ethics has emphasized, this book highlights the ethical action of fieldwork experience itself (Lambek 2010b), but with a special reference to children as our interlocutors and in light of children's socio-moral cognition – "cognition" as a general term that also encompasses emotional and motivational processes. Reanalysis of the Wolf Archive provides a unique opportunity to inject reflections on the intersubjective nature of field research, ethnography and knowledge production more broadly. These kind of reflections are still lacking in cross-cultural studies of child development (Broesch et al. 2020).

[15] My own work brought a sociocultural anthropology voice into these conversations with psychologists (Chapin and Xu Forthcoming; Xu 2014, 2017, 2019, 2020a, 2022a).

Learning Morality … Like a Child: A Naturalistic Approach

Synthesizing these interdisciplinary conversations on morality, I adopt a naturalistic view that has become increasingly visible in anthropology, cognitive science, and philosophy:[16] The capacity to learn morality is a defining feature of humanity because humans evolved as a cooperative species. In other words, human children are born to learn morality. An important open question concerns *how* children acquire morality: Some researchers advocate that morality is based on an innate "moral core," rather than active learning (Woo, Tan, and Hamlin 2022); others emphasize the role of domain-general learning mechanisms in acquiring morality (Railton 2017).[17] But many researchers on both sides share a common assumption, that is, a strict dichotomy of nature versus learning, or what is biologically prepared versus what is "learned." I use quotation marks for "learned" because my theoretical starting point is to reject this dichotomous framework.

I envision the relationship between nature and learning as mutually constitutive: Learning morality is simultaneously universalistic and pluralistic. Moral development "is originated in our species' natural history of cooperation and coordination and actualized in our holistic social history" (Xu 2019: 657). Besides the evolutionary roots of human morality, there is a universalistic dimension to learning morality because cultivating morality and raising children as socially valued members is a basic goal across all societies. The pluralistic nature of learning morality manifests at various levels: From a cultural perspective, understandings of moral learning, the desirable moral values, socialization strategies, and

[16] For example, Tomasello (2019); Curry, Mullins, and Whitehouse (2019); Boyer (2018); and Wong (2023).

[17] The nativism–empiricism debate on the origins of morality includes a variety of theoretical stances together forming a full spectrum. For example, the journal *Cognition* published a special issue on "moral learning" (Cushman, Kumar, and Railton 2017), a collection of papers that introduce diverse viewpoints regarding the types of learning mechanisms and the respective roles of innate constraints.

social agents vary across diverse communities (Fung and Smith 2010). From a cognitive perspective, children's moral intuitions are underpinned by multiple mechanisms of social cognition, motivated by solving different types of problems and/or regulating different sets of social relations. From a normative perspective, due to the inherent complexity of human cooperation and diversity of basic moral intuitions, there is no "single true or most justified morality" (Wong 2023) that is not context dependent. To be human, even for young children, is to learn how to deal with conflicts or contradictions between different moral concerns.

At a time when artificial intelligence (AI) is captivating popular imagination and stirring up controversy, writing this book in the IT hub Seattle, I find it helpful to compare human children to AI, in this naturalistic framework. At the moment of writing this chapter, ChatGPT frenzy is sweeping the world. Machine-learning power seems to overshadow human learning. Artificial intelligence appears far superior to human intelligence in many respects. Computer scientists are so ambitious that they are training AI systems to learn human morality (Metz 2021). However, cognitive scientists remind us that it is human children who hold the real key to deciphering the mystery of learning and intelligence (Gopnik 2022). I am intrigued by what is so special about human children. Like an ethnographer chatting with her interlocutor, I asked ChatGPT what it thought of itself in comparison to human children:

To my question "who is better at learning, ChatGPT or a human child?" ChatGPT did not give a definitive answer, but it did point out some crucial differences: ChatGPT was trained on a large amount of data, what is called "training data" in the field of machine learning, but it may lack the ability to understand emotions and social cues that are crucial for human interaction and communication.[18] When I further

[18] ChatGPT March 6, 2023 entry, via https://chat.openai.com/chat. A recent study (Kosinski 2023) suggests that the newest version of ChatGPT might possess some capacities of Theory of Mind (ToM), but to what extent it is truly humanlike ToM is still debatable.

specified my question, asking "Who is better at learning morality, AI or a human child?" ChatGPT returned several paragraphs of overlapping, sometimes repetitive answers, which I summarized as follows:[19]

> Morality is a complex and multifaceted concept that involves a wide range of cognitive and emotional processes. … While AI systems can be programmed to follow moral rules and principles, they lack the ability to understand the nuances of moral decision-making and the importance of context and personal experience. In addition, AI systems do not possess the same level of empathy and emotional intelligence as human children, which are essential for moral reasoning and moral decision-making. … Human children have the capacity to develop a deep understanding of moral values and principles through socialization, moral reasoning, and moral emotions such as empathy, guilt, and shame. They can learn from a variety of sources, including parents, teachers, peers, and their environment, and their moral development is influenced by a range of factors, including culture, religion, and personal experiences.

This fairly reasonable answer highlights the complexity of learning morality. Artificial intelligence systems are not well designed, at least so far, to learn human morality. But for human children, this task seems intuitive and much easier. The child's mind is not a blank slate. Children's moral acquisition, which starts very young, requires limited input (Ayars and Nichols 2017). This stands in stark contrast to the "big data" approach in AI systems. At least in the domain of morality, children's "learning algorithms" must be superior to prevalent AI architecture, shaped by our species' natural history. Cognitive scientists have made substantial progress in tracing the developmental emergence of moral knowledge. But a great deal of learning morality remains a mystery, for example, how exactly it unfolds in real life, due to the scarcity of systematic ethnographic studies. The Wolf Archive can shed precious light into this mystery.

[19] ChatGPT March 6, 2023 entry, via https://chat.openai.com/chat.

The Invisible Child in "The Chinese Family"

My reanalysis of the Wolf Archive is not only motivated by renewed conversations between anthropology and psychology. It also aims to address popular biases in Chinese studies from a new angle, concerning the place of children. The imagery of "the child" has assumed a significant and evolving role in Han Chinese culture, due to its importance in various branches of philosophical thoughts (Hsiung 2005: xi), its place in cosmological order (Topley 1974), and its connection to educational desire and political governance (Bakken 2000; Kipnis 2011). "The child," family, and morality are closely intertwined, a tradition that dates back to early China (Cline 2015): Family values are an integral part of moral order (Jiang 2021), family relations constitute an important space to cultivate morality (Kinney 1995), and childhood is a critical phase in the lifelong project of moral cultivation – the ultimate goal of education (Li 2012).

However, despite such symbolic significance, the experience of children – children as agents with a rich inner world, not passive objects of representation, recollection, and moral discourse – remains largely invisible in sinological anthropology. This is true even in a key domain, the study of Han Chinese family and kinship.[20] From the formative time of this subfield, when the Wolfs' works helped establish the parameters for studying the traditional Han Chinese family, to the present era when family life has undergone complex transformations, children exist merely in the shadow of parent–child ties or childrearing ideologies.

Based on their Xia Xizhou fieldwork, Margery Wolf pointed out the lack of systematic study of childrearing at a time of a growing interest

[20] The anthropological literature on the Chinese family system is incredibly rich. As a part of kinship studies, it was a foundational theme in sinological anthropology (G. D. Santos 2006). The early work was mainly influenced by the British social anthropology paradigm, especially Maurice Freedman's lineage model, and also informed by conversations with sinologists. For a review of early work, see Ebrey and Watson (1986). For recent developments in the field, see Brandtstädter and Santos (2011); G. Santos and Harrell (2016); and Yan (2021).

in "the Chinese family"[21] among Euro–American anthropologists: "The Chinese family has been examined in many contexts – from its place in the economy to its role in ancestor worship. Only in passing has it been considered in terms of the family's basic function: the training of future adult members" (M. Wolf 1978: 224). But even in this seminal paper entitled "Child Training and the Chinese Family," her central focus was childrearing, whereas children are mere objects of training: Children get deterred, conditioned, and molded by adults' discipline. This "child-training" paradigm has dominated anthropological and psychocultural research on Chinese childhood for a long time (for a critical review, see Xu Forthcoming; Xu 2017: 149–53). The paradigm prioritizes vertical, parent–child ties in family relation and highlights Chinese family values such as filial piety, obedience, and parenting strategies such as shaming[22] and punishment. It aligns with long-lasting ideas about Chinese family and childhood, especially the emphasis on moral ideologies and adult teaching, nurturing, and transforming (*jiao hua*) in learning, although such ideas mostly derived from representations of elite families. Limited historical records of Chinese children's life, especially those from nonelite, working-class families, could partly explain why young children remain "the most blatant, intellectually innocent, and professionally overlooked among the unrepresented" in historiography (Hsiung 2005: 261). The invisibility of children's experience in earlier sinological ethnography, however, did not stem from lacking access to children's life. Instead, when anthropologists of the Wolfs' generation conducted village ethnographies, children were "roaming

[21] I use quotation marks for "the Chinese family" because the studies of culturally Chinese families have created an influential discourse in the body of sinological anthropology literature: Many foundational works in this field looked at Taiwan, Hong Kong, and elsewhere to study "the Chinese society" because anthropologists could not enter the PRC for fieldwork.

[22] Shaming is an enduring socialization technique in Chinese child socialization, as research in different time periods and regions demonstrates (Fung 1999; Xu 2017: 179–80).

around, playing everywhere and anywhere" (Diamond 1969: 34).[23] But anthropologists have looked past children. The problem reflects a persistent behaviorist influence since the SCS project and the mainstream assumption in sociocultural anthropology, of children passively "assimilating" culture.

At that Golden Age of sinological ethnography, the "assimilating culture" assumption worked hand in hand with "the synchronic bias" that motivated ethnographic research in Taiwan (Harrell 1999): Many anthropologists, like the Wolfs, were looking past Taiwan to search for and recover "traditional Chinese society" (pre-1895, before the Japanese rule). They saw parents and the kinship community as the guardian of Chinese traditions, and they ignored schooling or other aspects of children's life that might have introduced different thoughts from parents' beliefs. That is why, in his draft manuscript, Wolf asserted this conviction (n.d.: 37): "while [Xia Xizhou] had already undergone substantial change by 1958, family life was not radically different than what it had been when the Japanese occupied Taiwan in 1895. What I recorded is therefore the closest we will ever come to a detailed account of children's lives in late traditional [imperial] China."

The "synchronic bias" on Chinese society and culture has largely disappeared in anthropology today, and social change has become the focus in our field, especially changes in family life[24] and moral values.[25] But this "assimilation" assumption about children still persists.

[23] In a recent interview, anthropologist James Watson said: "[I]f I look at the photographs from our research in the New Territories over the long term, they are littered with children, kids, everywhere. Every ritual, every family shot, there are waves of kids. If you look at the photos we have of village events, there are rafts of children of every age. Every family had multiple kids. And there are kids managing kids. 10 year old girls carrying their brothers around, all day long" (J. L. Watson, R. Watson, and Yan 2019).

[24] See recent edited volumes: Brandtstädter and Santos (2011); G. Santos and Harrell (2016); and Yan et al. (2021).

[25] Ethnographies on Chinese society have become a vital part of the new anthropology of morality and ethics (see a brief review in Laidlaw 2017).

Together with the entrenched idea of the "innocent child" in Chinese thought (Bai 2005; Kinney 2004; Xu 2020a), a simplistic view of human nature,[26] naïve assumptions about childhood learning have likely contributed to the paucity of research on child development in recent anthropological studies of Chinese family and morality (for a critique, see Stafford 2013).[27]

The Wolf Archive preserves systematic, ethnographic record of a historical world that no longer exists. It portrays the life of over 200 young children in a patrilineal village with an entrenched son preference, at a particular historical point in Taiwan, before massive transformations of family values took place in this patriarchal society: peak fertility, a hybrid school system built under Japanese colonial rule but incorporated into the Chinese authoritarian system, and on the verge of rapid economic growth and industrialization. My reanalysis brings "the invisible child" into the center stage to understand the socio-moral life of the so-called "traditional Chinese family." In contrast to the "child-training" paradigm in sinological anthropology that prioritizes parenting, my work centers on children's experience and highlights the role of peer interactions. I challenge popular discourses about children and childrearing, that is, obedience, passivity, and the "innocent child," to examine children's actual behaviors and thoughts that are far more complex and multifaceted than any childrearing precepts can encompass. To redress the "synchronic bias" underlying the Wolfs' works, I demonstrate how children's moral sensibilities about authority, punishment, and violence are influenced by schooling, policing, and gangsters in the historical context of Taiwan's Martial Law Era.

[26] The philosophical phrase, *ming ming de* (literally, "bringing the brilliant virtue to light"), is a pithy expression of Chinese thought that emphasizes the inborn goodness. This phrase is from a neo-Confucian classic, *da xue*, "The Great Learning." Some translated the phrase as "manifesting one's bright virtue," see www.acmuller.net/con-dao/greatlearning.html.

[27] My own work (Xu 2017) was among the few that focused on child development, but it focused on urban middle-class children.

Rereading Fieldnotes with a New Methodology

The Wolf Archive is unprecedented. Ethnographic analyses on Chinese and Taiwanese childhood before and at his time were rare enough and mostly based on anecdotal reflections.[28] The systematicity and richness of this archive, with its sheer volume and its interdisciplinary methods, also set up a standard that is hard to reach for ethnographers today. To honor Arthur Wolf's legacy of studying human behavior with scientific rigor, I took advantage of new computational methods and technological tools today to reanalyze this archive. Anchored in ethnographic "close reading" of texts, the book ventures into new territory by integrating results from computational "distant reading," including NLP (natural-language-processing) methods, social network analysis, and fine-grained behavioral coding. Extending my effort to advocate methodological pluralism in anthropology (Xu 2019), this new approach of text reading also reaffirms the inherently humanistic nature of ethnography. The humanistic nature manifests in the intersubjective experience that made the texts (fieldnotes) possible, in the human expertise essential for constructing and interpreting "machine-reading" patterns and numbers, and in the layers of human biases in knowledge production.

An Extraordinary Archive

When Arthur Wolf first arrived at Xia Xizhou in 1958, the village was home to more than 600 people, including over 200 young children (ages below twelve). Most villagers descended from southern Fujian Chinese migrants who had settled in the area during the eighteenth and nineteenth centuries. The majority of villagers were connected through kinship ties. The village also included some recent immigrants, one new

[28] Mostly anecdotal ethnographic reflections, for example, Ward (1985): 173–200; and Skinner (2017): 74–76.

family from Jinmen (Quemoy) and a couple of mainlanders' (*waishengren*) households. In terms of economic prospects, most families were still poor by Taiwan's standards at that time, with a mixture of farming and factory work income. From this ordinary site, the Wolf's team collected extraordinary records, the most systematic archive of Chinese and Taiwanese children's everyday life. My reanalysis focused on the following types of data:[29]

(1) Naturalistic observations of children's social interactions at home, inside the village, and at the elementary school outside the village, consisting of three types: Spontaneous Child Observation (CO) includes 1,678 episodes of timed observations, average 250 words, and 2.5 minutes per episode); and situation-elicited observation (SO) includes 173 episodes of children's interactions in focal situations (not timed, average ninety-five words per episode).[30] Both types of observations, following the SCS field guide, were supposed to focus on a focal group of children (ages 3–11), but with a much larger sample ($n = 64$) than the individual site in the SCS ($n = 24$). In addition to these two, Wolf added a new method beyond the SCS guide, Mother Observation (MO, 160), 160 episodes of mother–child interactions interspersed with researcher–mother dialogue (MO).
(2) Interviews with children and mothers: Child interview (CI, seventy-nine children) about hypothetical scenarios of social interactions; mother interview (MI, forty-three mothers) about their child-rearing beliefs and practices. These two interviews used standardized protocols from the SCS. In addition, there is a collection of

[29] The book also uses a few episodes from fieldnotes indexed by letter G ("general"), as they are mentioned in the Wolfs' previous publications. These "G" data are general observations of the village life focused on adults. They are still in Wolf's private library, but I did not scan them or analyze them as part of this project.
[30] According to Wolf's draft manuscript (n.d.: 14), his team had recorded over 2,000 SO episodes, but I did not see that many SO fieldnotes when I visited the Wolf library.

nonstandardized, spontaneous interviews (SI) with children and mothers, eighty-three episodes in total.

(3) Projective tests adapted to local context, to elicit children's spontaneous storytelling: One is the Thematic Apperception Test (TAT, ninety-two children), with a set of nine pictures portraying ambiguous social interactions; the other is Doll Play (DP, forty-six children), with a set of dolls representing family figures. Wolf designed these new stimuli distinct from the SCS project.

(4) Demographic and household information for all community residents. Each individual was assigned a unique number by Wolfs' team, a participant's ID. In each episode of fieldnote, individual names were replaced by these IDs, and these IDs are consistent across all fieldnotes. In addition to participant IDs, each episode of fieldnotes is also indexed by the event information (date, time, and location).

Arthur Wolf's capable research assistants made great contribution to such efficient data collection within two years of fieldwork. Under Wolf's supervision, two Taiwanese research assistants, MC and MS, collected the bulk of observational and interview data. In their late adolescence, these two women lived with the Wolfs, spoke Hokkien, and became children's trusted friends. Seen as "Older Sister Chen" by children and a confidant of village mothers, MC's role was especially crucial, which I will discuss in more detail in Chapter 1. She collected most of the timed COs, a core part of this archive. Given MC's good relations with children's mothers, Wolf designed a new task for her, to conduct MO, and he was quite pleased to see that mothers' words (in MI) largely matched their behaviors (in MO), thanks to MC's excellent work as an ethnographer. Margery Wolf served the role of "administer and scribe" (M. Wolf 1990a: 344), typing observations and interviews up into fieldnotes. These English texts constitute the bulk of the Wolf Archive. A male research assistant Mr. Huang Chieh-Shan, at that time a college

student from the nearby town Shulin, worked with Arthur Wolf from 1959 to 1960 on weekends and during the summer.[31] He was in charge of the two projective tests, Doll Play and TAT, and these transcripts were the only Chinese documents preserved in the archive.

Transcription and Coding

The demand of processing this massive data archive at a time of limited computing capacity was one reason Arthur Wolf delayed his analysis. That is also why Margery Wolf's work on women and childrearing used only a tiny portion of these data, presented sporadically (1972, 1978). My team digitized all the above types of fieldnotes using OCR software and built a database through the Python programming language to organize the notes. This database allows for flexibly referencing across and linking different types of fieldnotes, that is, indexing by person ID, fieldnote ID,[32] fieldnote type (see List of Abbreviations), and fieldnote date.

My reanalysis of this archive respects the SCS/Wolf mixed-methods approach but also explores new ground. Although I integrate different types of fieldnotes to write this book, I approach CO, timed observations of children's interactions, as the core basis. Such systematic, naturalistic observation remains the SCS's most enduring legacy (LeVine 2010: 520). The data collection approach of Wolf's research assistants made the CO in his archive even richer and rarer. According to the SCS field guide, CO should focus on a predefined set of social situations and the target child in a selected sample. Wolf's RAs reported "everything the subject [target child] did and said and most of what the other people present did

[31] According to my phone interview with Mr. Huang in May 2021, Mr. Huang later became an important collaborator in Wolf's famous "Taiwanese household registers" project and the coauthor of the book *Marriage and Adoption in China, 1845–1945*.

[32] Under a given type of fieldnotes, each entry was assigned a unique ID in Python environment, starting from #0.

and said" the moment they saw the target child without waiting for a specific situation to occur (Wolf n.d.: 13). Also, while the SCS field guide designed CO as "short excerpts of behavior rather than extended interaction sequences," Wolf's RAs did much better than that, by violating the instructions and recording extended behavioral sequences faithfully (Wolf n.d.: 13). Therefore, in contrast to situation-elicited short observations and standardized interviews based on a set of a priori themes, the content of CO, children's spontaneous social life, recorded in striking detail, lends itself to examining new themes and developing new conceptual interests.

Wolf's analysis of CO[33] followed the original SCS protocol, which focused on these behavioral domains: succorance, nurturance, responsibility, self-reliance, achievement, obedience, dominance, and sociability. It used a behaviorist "antecedent–consequent" coding scheme and focused on the target sample of sixty-four children (3–11 years) (J. Whiting 1966). I broadened the analytical scope and coded all children's (0–11 years) behavior recorded in CO, as every episode included behavioral details of all the present people, rather than merely focused on a particular target child. I also designed a new behavioral grading system that includes over thirty behaviors in everyday cooperation and conflict. Some of these categories are similar to the SCS themes, but I took into account behavioral intention, for example, distinguishing "leading," a cooperative act, from "dominating," a coercive act, and "playful teasing," a cooperative act, from "aggressive teasing." For each behavior between a specific pair of people in a given episode, I coded the behavioral theme, people's IDs, and their respective role (initiator or recipient). I assigned a score according to a binary (0.5 and 1) or tripartite (0, 0.5, and 1) grading standard that evaluates behavioral intensity.[34]

[33] He explained this protocol in his draft introductory chapter (n.d.: 35), but he did not get a chance to write up the actual analysis and result.

[34] A majority of themes were graded according to a binary system, for example, dominating: A score of "0.5" means mild dominating, a score of "1" means severe

I developed this system through the convergence of deductive, top-down and inductive, bottom-up qualitative coding processes: I combined well-established concepts in current scholarship, for example, typical prosocial behaviors such as resource sharing, helping, and comforting (Dunfield 2014) and salient topics in the corpus and local context, for example, tattling, sibling care, and "dirty looks." I identified over 12,000 behavioral interactions among more than 200 children in CO episodes. Such granular-level behavioral coding provided the foundation for quantitative analysis of each behavior and for comparing or aggregating different behaviors. It also facilitated triangulation with demographic and other data, for example, comparing actual behavior with children's answers to interviews and constructing a personality database for all the children. The book focuses on a subset of all behaviors I coded from CO. Statistical analyses of these behavioral and demographic data were run in R programing language.

I also approached projective tests differently from my predecessors, making what I consider better use of those data. First of all, Wolf adapted the projective tests to suit the local context, so these tests yielded more and better data than what the SCS produced. General projective tests at that time, invented in Western psychology, were designed to elicit fantasy and assess personalities, and were used by anthropologists when the "Culture and Personality School" was still popular.[35] But Wolf hired local artists to design culturally appropriate prompts that the child participants would find more familiar: They used a series of nine drawings for TAT, each drawing a sketch of children interacting with other children

or repeated dominating. A few themes that have a reactive dimension were graded according to a tripartite system, for example, sharing: A score of "0" means no sharing despite being asked to, a score of "0.5" means mild sharing or sharing with some hesitation, and a score of "1" means generous or repeated sharing.

[35] For a historical account, see Lemov (2011). The movement certainly influenced sinological anthropologists at that time: For example, G. W. Skinner brought projective tests to his fieldwork in Sichuan as part of the plan to study Chinese social personality but had no opportunity to use them (Skinner 2017: vii).

and/or adults; for DP, they used a set of eight dolls representing family figures in a farmhouse setting.[36] But Wolf's team did not translate TAT and DP transcripts into English and did not consider these data very important, because he thought these materials were too realistic, reflecting children's actual life instead of disclosing their fantasies. However, I found children's narratives fascinating, illuminating their rich emotional and moral experience and imaginations. I coded these transcripts based on a few themes, such as child fighting, sibling conflict, family relations, authority, and punishment. These story-telling data provide a rare opportunity to see the local world through children's eyes.

NLP and Social Network Analysis

I used natural-language-processing (NLP) methods, especially computational and machine-learning approaches to textual data, and social network analysis (SNA), which studies patterns of relationships between individuals through a network approach, to analyze CO.[37] This section provides an overview of these methods and the detailed procedures and content will appear in individual chapters. In NLP framework,[38] my team treated one entry of fieldnote, an observational episode, as one document and the entire CO texts as a corpus. We transformed the CO corpus into "clean" texts after common preprocessing steps.[39] I then explored patterns of common words and their clusters, through word

[36] The Wolf Archive preserved an incomplete copy of the TAT stimuli, with four out of nine drawings missing. None of the dolls were preserved.

[37] All the NLP analyses were performed in Python environment. Social Network Analyses were performed in a mixture of Python and R environment.

[38] For more details on how to apply NLP methods in social science research, consult Grimmer, Roberts, and Stewart (2022).

[39] These "preprocessing" steps include transforming all words to lowercase; removing punctuation, numbers, and special symbols; excluding common stopwords such as "the," "a," and "an"; and reducing a word to its lemma form. "Lemmatizing" a corpus means grouping together inflected forms of a word as a single item, for example, replacing "gone," "goes," and "went" with "go."

frequency and word co-occurrence analyses. Going beyond such surface features, I used topic modeling, a popular form of unsupervised machine-learning technique, to explore latent topics and their patterns of distribution in the corpus (see Appendix). In collaboration with a data scientist, I also used BERT (Bidirectional Encoder Representations from Transformers), a type of large language models (LLM) developed by Google and based on deep learning methods, to quantify this corpus according to the topics I was interested in. In addition to NLP methods, I conducted two types of social network analysis on CO data, treating each person as a node and defining a certain connection between two persons (nodes) as an edge: The simpler one is co-occurrence network, based on which people were present in a given observation as well as demographic information. The more complex one is behavioral network that integrated behavioral coding results – theme, score, people, and direction (initiator and recipient) – with demographic data.

I used this human–machine hybrid approach for multiple purposes:

(1) Conceptual insights: Computational analysis guided by my human expertise revealed systematic patterns of children's social life that would have been difficult to detect through the human eye, for example, peer social network structures, demographic influence on behavior, and latent topics in the texts.
(2) Epistemological reflections: Comparing machine versus human intelligence, I found that the limits of computer algorithms illustrate the subtlety and complexity of children's moral psychology, inspiring me to reflect on the nature of ethnographic knowledge.
(3) Methodological dialogues: Social network analysis is increasingly popular in child development research (Neal 2020), but these fieldnotes provide rare, naturalistic materials in a non-Western, historical context to analyze children's networks and interpret them in light of ethnography. Similarly, with the rising "text-as-data" trend of computational text analysis across social and cognitive sciences

(Grimmer, Roberts, and Stewart 2022; Jackson et al. 2021), my book offers critical insights into the benefits and limitations of using this "big-data" approach to interpret ethnographic fieldnotes.

Taken together, computational and quantitative analysis can complement ethnographic interpretation to generate multiple levels of insights from this corpus. For me, without first-person fieldwork experience, these textual, network, and behavioral patterns are helpful to reconstruct the lives of children through texts. But above all, from the original data collection to my reanalysis and writing, this journey involves several layers of transcription, translation, and interpretation. Reconstructing this ethnography involved comparing and integrating different types of fieldnotes and incorporating all other available data sources, such as the Wolfs' previous works,[40] ethnographies in the larger Haishan area,[41] and oral history interviews.[42] It involved discerning and reassembling the perspectives and voices of various actors: the anthropologists, or "foreigners" in children's words, the research assistants, and the children and adults. Moreover, I infused my own voice into this assemblage, my decade-long experience of studying children, and my personal memories of becoming a Chinese daughter and mother.

Book Outline

I arrange the content chapters in the following order: Chapter 1 portrays the unusual journey of reconstructing an ethnography, establishes my own voice, and sets the tone for subsequent chapters. Each of Chapters 2 to 5 weaves together interview, observation, and projective tests materials, and combines "close reading" with patterns from computational

[40] Including Arthur's draft introductory chapters and other documents.
[41] These ethnographies were produced by the Wolfs' students and associates.
[42] Formal or informal interviews with Stevan Harrell, Myron Cohen, and Huang Chieh-Shan.

analysis. Chapter 2 deconstructs the myths of "parenting" from children's perspective. Chapter 3 shifts to the world of peer play. Chapter 4 highlights how gender shapes children's moral experience. Chapter 5 presents an important case study of a brother–sister dyad to examine sibling relationships. Through examining different aspects and factors of children's moral life, these four chapters together establish the thesis of "'unruly' children."

Chapter 1 presents my "alternative fieldwork," how I make sense of my predecessors' fieldwork and fieldnotes. I introduce Xia Xizhou in its historical–cultural context, including its colonial history and changing kinship, economy, and schooling system. I contextualize the multiple boundaries, identities, and relationships between the researched and the researchers. I recover the experience of native research assistants, not just as mediators between anthropologists and children, but as lively characters participating in children's moral development journey. I expose the challenges of reconstructing this ethnography and the puzzles I encountered. I reveal the inherent ethical dimension of actions and interactions that made ethnographic knowledge possible. I also draw from my own experience and expertise to discern the voices, silences, and voids in this archive.

Chapter 2 reflects on a key assumption about the "traditional Chinese family," the "child-training" paradigm that emphasizes parenting and overlooks children. The chapter draws from interview and observational data with mothers and children to contrast an important local cultural model of parenting, preventing children's fighting, with the reality of prevalent fighting and conflict among children. It uncovers the experiences of "disobedient children" departing from the parental ideal of training obedience. After debunking the myths of Chinese parenting, I explain the inefficacy of parental punishment through the lens of children's socio-moral cognition. These findings remind anthropologists to pay more attention to the ethical experience and reflections of young children, the punished.

Departing from parent–child relation, Chapter 3 delves into the world of peer interactions. I present general patterns of children's social networks and behavioral directions, highlighting the importance of child-to-child ties. A close look at children's peer interactions illustrates the common scenarios and key features of this humorous, playful world and examine how peer play facilitates children's moral learning. In peer play children are developing what I call "the spectrum of moral sensibilities": They are learning about and engaging in cooperation and care, conflict and dominance, and creating gray areas in between. This poses a stark contrast to the imagery of "the innocent child" permeating in historical and philosophical views of Chinese childhood that fixate on the brighter side of human nature in moral cultivation. Moreover, through deciphering children's pretend play, I illuminate "reality-based fantasies" and argue that these nonelite children, often relegated to history's silent margins, have a much richer inner life than my predecessors assumed. Lastly, while computational techniques uncovered latent patterns of children's social life, young learners' sensibilities in discerning layered intentions and moral sentiments defeat AI algorithms. This sheds light on the mystery of human sense-making and inspires reflections on ethnographic epistemology.

Turning to the issue of gender, Chapter 4 tells stories of mischievous, naughty, and fierce boys and girls. Systematic behavioral analyses reveal gendered patterns in children's moral experience, for example, boys initiate dominance, verbal and physical aggression more than girls, but girls assert themselves in more subtle ways, such as through tattling and scolding. I further explore how children's learning of authority, aggression, boyhood, and violence is shaped by their family life as well as the larger historical trends. The chapter also examines how young girls understand their own situations and defend themselves. Despite the entrenched son preference in this community, girls are far from passive or submissive. To honor Arthur Wolf's legacy on marriage and adoption and offer new insights on young girls' emotional experience, which was not addressed in Wolf's previous works, I present the case of an adopted daughter: An

"unruly" girl who defies parental commands, asserts her own will, and negotiates love–hate relationships with different family members.

Chapter 5 presents an untold tale of an older brother and his younger sister. While their mother was the protagonist in Margery Wolf's classic ethnography, *A Thrice-Told Tale*, the story of these children was obscured. Childhood sibling relation in "the Chinese family" was rarely studied by anthropology, yet it is an important relation that shapes children's moral development. I delineate systematic patterns of this sibling dyad's social network positioning, uncover their distinct personalities, and trace their nuanced dynamics of care, rivalry, and coalitional maneuvers. This chapter is a unique narrative: In addition to illuminating childhood sibling relation, it simultaneously rediscovers the voices of these two children from ethnographic omissions and silences. Therefore, this case study echoes the dual themes of the entire book, children learning morality and anthropologists reconstructing an ethnography.

To sum up, my book traces how children learn morality in a patriarchal rural Taiwanese community during Taiwan's Martial Law Era. Through analyzing a historically significant fieldnotes archive, this book creates new linkages between anthropology, psychology, and Chinese studies, and incorporates computational approaches into ethnographic interpretation. The book contributes to understanding "becoming moral," humanity's key puzzle that has inspired recent interdisciplinary synergy, by highlighting the role of peer learning beyond parent–child transmission. From a cognitive anthropology approach, this book centers on children's complex experience and offers a revisionist account of "the traditional Chinese family" and "Chinese childhood," therefore challenges the entrenched moral values these popular imageries embody. Moreover, fusing different epistemological and methodological perspectives, the book draws from children's socio-moral sensibilities to reflect on anthropological knowledge itself. Children can teach anthropologists about ethnographic epistemology. Their minds hold the key to understanding human sense-making.