THREE



Playful Creatures

Learning Morality in Peer Play

Playing "Mom Spanking Children"

On a November afternoon, after children came back from school, MC spotted this elaborately coordinated pretend play:¹

Chang Ah-yin [8-year-old, a leader figure in her play group] played "mother." She was running around "spanking" all the children. Three younger children, two siblings Wang Su-chun and Wang Ah-fa and another girl Wang Mei-yu were going back to Ah-yin. Ah-yin ran out and they all ran away yelling: "Mother is coming!"

They ran all the way to the center before they discovered Ah-yin wasn't chasing them. They came back. Among them, Mei-yu didn't go all the way and just as they got back she yelled: "Mother is coming!" Off they went again, laughing and yelling. They returned again. "Mother" (Ah-yin) wasn't in sight. Su-chun sneaked around trying to see her.

Suddenly Su-chun's little brother Ah-fa yelled: "Mother is coming!" And Su-chun jerked to a stop. This was repeated several times. Finally, Ah-yin called Su-chun to "come home." Su-chun walked over to her.

Two boys, Wang Yi-kun and Liang Wei-lin, were kneeling in front of Ah-yin, laughing and moaning: "Oh mother, I don't dare do it again. Please don't spank me."

Ah-yin was getting some rocks from under a basket. Su-chen picked up a stick and walked over to the kneeling children and pretended she

¹ CO #314, 11/20/1959.

was striking them, saying: "Oh, you dead child. What are you kneeling here for?"

Su-chen walked over to Wei-lin and repeated this. Wei-lin stood up (angrily) and said: "Why do you hit me?" He hit Su-chen back. Su-chen just smiled. Wei-lin knelt down again and took up his refrain of "Oh Mother, don't hit me."

Su-chen: "Oh, you dead child! What are you kneeling here for?"

They both turned around and said: "Well, it's your 'mother' that told us to." Ah-yin came back with two rocks on a "plate" and a stick in her hand. She lifted the stick as if to hit them and they jumped up and pulled on her and said: "Oh, please don't hit me." Then they each grabbed a rock and ran away. Su-chen stood laughing.

Ah-yin: "Oh, those two dead children!" She put away her "plate."

Yi-kun and Wei-lin came back with several children behind them, waving the stolen rods and saying: "We're here! We're here!" Ah-yin jumped at them and they all ran away.

Ah-yin to Su-chen and another girl: "Follow me! Let's go!" They ran off and MC stopped the observation as there were fifteen kids running in all directions (Figure 3.1).

Teeming with childish laughter and directive speech acts, this episode mimics everyday "crime-and-punishment" scenes. It shows us how children, the least powerful members of local society at that time, turned mocking parental authority and discipline into their own entertainment. In the meantime, this vignette points to the importance of peer groups in learning morality: Peer groups are a source of moral knowledge, an emotional community, and a crucial social space for rehearsing, negotiating, and creating moral norms. In this spontaneous episode, children creatively re-enacted what happened in their real life in dramatized ways, enriched their pretend play repertoire, merged reality and fantasy, blended performed emotions with actual feelings, and blurred the boundary between cooperation and conflict.

A systematic analysis of the world of peer play highlights the importance of child-to-child ties, revealing general patterns of children's social

Playing "Mom Spanking Children"



Figure 3.1 A group of children playing Source: Photo by Arthur Wolf.

networks and behavioral directions. Examining children's playful world, both in ethnographic detail and with scientific rigor, can illustrate the common scenarios and key features of children's social world. 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. Through a human–machine hybrid approach of "reading" texts, I take a close look at teasing behavior to compare human and artificial intelligence. While computational techniques can uncover latent patterns of children's social life, even state-of-the-art AI algorithms lost to young children in making sense of pretend play. Children's sensibilities in discerning layered intentions, sentiments, and meanings not only shed light on the nature of human morality but also inspire me to reflect on ethnographic epistemology.

Rediscovering Child-to-Child Ties via Social Network Analysis

Western notions of "peer groups" tend to emphasize same-age children who are not related to each other via kinship ties. But I adopt a broader, anthropological definition that includes both same-age peer groups and mixed-age groups, including siblings and cousins (Goodwin and Kyratzis 2012). In fact, in a close-knit community such as Xia Xizhou, most children were connected via kin relations, and many interacted in mixed-age play groups. To examine peer groups in Xia Xizhou children's social world, let us first take a look at their social network patterns, because these patterns will give us a systematic overview of who they were hanging out with in everyday life.

I focus on Child Observation (CO), the systematically and naturalistically collected fieldnotes on children's behavior, to perform social network analysis. Network analysis sheds valuable light on peer interaction in the following ways: A total of 436 people appeared in the CO corpus, including 260 children: Thirty-five adolescents between the ages of twelve and eighteen and 221 children younger than twelve. But among a total of 1,678 episodes in the CO corpus, nearly three quarters (n = 1,231) involve children exclusively (ages below 18), with no adults at all. Even among the remaining 447 episodes, oftentimes adults were merely present, not actually interacting with children. Contrary to the predominant focus on parent-child ties and parenting in Chinese studies, this pattern highlights the previously obscured part, child-to-child ties. Also, this rate of adult presence (about one quarter) is even lower than the average rate of mother presence in the equivalent CO data of the original Six Cultures Study (32-41 percent) (Weisner et al. 1977: 174). This crosscultural comparative perspective highlights the importance of peer relations in Xia Xizhou children's world, which prompts us to go beneath childrearing discourses and delve into children's actual social life.

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² The only exception is Taira, Okinawa (mother present in only 9 percent of observations).

Rediscovering Child-to-Child Ties

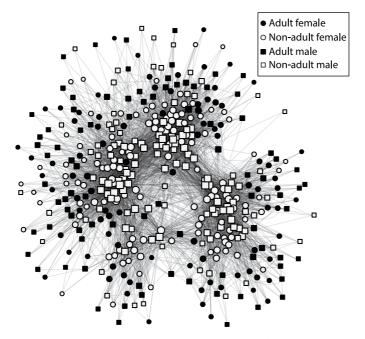


Figure 3.2 Child Observation co-occurrence network (including both children and adults)

Second, co-occurrence network analysis, based on first computing who appeared together in a given observation and then aggregating co-occurrence counts across all observations, confirms the primacy of child-to-child ties in this corpus.

Figure 3.2³ portrays the entire CO network. Each node in the network represents a person, each edge (line) between two nodes represents the co-occurrence of these two people; the size of each node is calculated based on its "weighted degree centrality," that is, the node's direct connections weighted and aggregated, the weight assigned to each

³ Analysis in Figures 3.2 was performed in R programming language (packages: igraph and qgraph) and visualized based on the Fruchterman–Reingold layout algorithm.

Table 3.1 Number of behavioral-interaction entries grouped by age status and behavioral direction

Age status	Behavioral role	Number of entries
Child	Initiator	10,800
Child	Recipient	10,988
Adolescent	Initiator	188
Adolescent	Recipient	156
Adult	Initiator	1,008
Adult	Recipient	752

connection (a pair of people) equal to the frequency of co-occurrence between that pair of people. Black nodes represent adults and white nodes represent children (below the age of eighteen). The nodes at the center are the ones with stronger connections in the network. This graph shows that children occupied a central position and that adults were at the periphery.

Zooming into the child-only co-occurrence network, modularity analysis shows that children formed four "cliques." I compared and contrasted the patterns of which children appeared together with those of the village women's groups detailed in Margery Wolf's book (1972: 42–52). The boundaries within these two types of groups diverge to a great extent. Children's groups, examined at a co-occurrence level, did not align with their mothers' groups, hence their social life manifests a certain degree of autonomy.

Moreover, in the CO corpus, beyond co-occurrence patterns, at a behavioral level, children interacted with peers a lot more than with adults. Analysis of the behavioral-interaction network shows that, among all behavioral-interaction entries (N=12,119) coded from the CO corpus, children (ages <12) were the main actors, as both initiators and recipients, far outnumbering adults (eighteen years old and above) and adolescents (ages 12–18), see Table 3.1. The subsequent behavioral analysis in the rest of the book focuses on children below the age of twelve.

Last but not the least, family ties are an important factor in structuring peer networks. Homophily, the principle that nodes in a network, for example, people, tend to have links to other nodes with similar attributes, is a robust mechanism and an important parameter in social network analysis (McPherson, Smith-Lovin, and Cook 2001). In plain language, it means that birds of a feather flock together. Both in cooccurrence network and in behavioral-interaction network, household number is the strongest predictor of homophily among all demographic variables. This means that children who are from the same household, mainly siblings and sometimes cousins too, tend to be present together – in co-occurrence network, and tend to actually interact together – in behavioral-interaction network, and this kinship/sibling effect is more pronounced than the effect of other demographic factors, such as gender.⁵

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A hallmark of these children's peer world is playfulness. They climbed on the big banyan tree and shook its branches. They fought for the swing in the school playground, giggling. They enjoyed reading comics. They craved for snacks in the village shops and bargained with their mothers and grandparents for pocket money. They made cakes and dishes from mud. They stamped on lush green rice paddies. They were having fun and being creative even in the most mundane moments. They were children, the playful creatures.

- ⁴ The probability for two people from the same household to have a tie in cooccurrence network is 0.886. The probability for two people from the same gender to have a tie is 0.240 (Exponential Random Graph Model).
- ⁵ Correlation coefficient of assortativity score r = 0.580, meaning that 58 percent of the ties in the network are between children in the same household, a fairly high number (computed via iGraph in R); in contrast, the equivalent measure of the effect of gender is r = 0.259, meaning that 26 percent of the ties in the network are between children from the same gender.

This playful nature can also be examined quantitatively. I coded each episode in the entire CO corpus along the dimension of scenario type, including play, sibling care, housework, schoolwork, shopping/errands, and other work (e.g., helping with agricultural work). One episode can include multiple scenario types, and I found a total of forty-one combinations: for example, "play & sibling care" is one type of combination. Across all the episodes, "play" was the top scenario type, found in 1,602 episodes, including episodes that contain more than one scenario type. Within the contexts of spontaneous observation, children were always playing, even when they were also doing something else. The location data in the CO corpus, available in 1,672 episodes, offer useful insights on where children were hanging out with peers: They were most frequently observed near or inside someone's house (1,041 episodes), at or near school (221), and in village yards (123, including small yards in a house complex, big yards, and squares). They also gathered along various types of paths (79 episodes), inside or by the three village stores (74), by the irrigation ditch that runs from the main road through the village (40), by trees/gardens (35, including the big banyan tree, the guava tree, bamboo grooves, and vegetable gardens), by the river (24), by the temple near the village entrance (6), and at the paper factory of the big Wang house (2).

NLP analysis of CO texts sheds further light on children's playful world. In the cleaned and preprocessed CO corpus, the word "play" appeared over 4,000 times, as the third highest-frequency word, only next to "say" and "go." Going beyond this superficial level of text-analysis, for example, word frequency counts, topic modeling efficiently reveals in-depth patterns of play: As described in Chapter 2, I used LDA topic-modeling algorithms to extract a set of latent "topics" that would otherwise have been difficult to quickly discern through manual coding. Inferring from the particular cluster of word distribution and

⁶ Compared to the raw corpus, the cleaned and preprocessed corpus transformed all words to lowercase, removed punctuation, numbers and special symbols, excluded common stopwords and reduced a word to its lemma form.

representative texts automatically generated by the algorithms, one can see that quite a few topics among this list resemble particular types of games and interactions, or a mixture of different games and interactions (see Appendix). I interpreted these "latent topics" as the following: playing hopscotch with tiles, playing card games with rubber bands as currencies, playing "marble" games using rocks, playing house, playing near water (ditches, pump) while washing clothes or vegetables, climbing trees, riding tricycles, jumping rope, playing ball, picking flowers, chasing one another or hide and seek, playing in the mud, and so forth. The underlying pattern of this machine-learning topic classification suggests that children's play is the most natural hallmark and overarching feature of these texts.

Manual classification and coding offers precise information on the kind of games children engaged themselves in: The most frequent type of game was hopscotch (161 times), followed by throwing rubber bands (109), ball games (96), card games, (79), playing house (75), playing with sticks (70), chasing/tag (65), playing in/around the trees (46), playing with cans or kick-the-can game (45), riding trikes or bikes (44), playing tops (37), playing in or with mud (37), marbles (32), hide and seek (31), jumping rope (30), maze-games (28), dueling games (28), fishing (26), picking flowers (24), and so forth. This list of play activities validates, to a considerable extent, the latent "topics" generated in topic modeling. Due to its naturalistic nature, each episode in CO usually contains multiple categories of games and scenarios, for example, "hopscotch, fighting, teasing." This pattern also aligns with topic-modeling results, that one latent "topic" might include several types of play settings or content. There are some differences between this manual coding and topic modeling though, "teasing" being one example, which I will discuss later in this chapter.

⁷ Topic-modeling method won't generate an explicit name of any "latent topic," so the researcher still needs to interpret the meanings of such high-frequency word-collections, and sometimes such algorithm-generated "topics" are hard to interpret.

In general, three features characterize Xia Xizhou children's playful world: First, they played quite spontaneously, even in the middle of doing work, which means that, in their world, play and work were not distinctly separable. Second, play really mattered to children. Lastly, a good sense of humor saturates their play. The first point, spontaneity, suggests a certain degree of unpredictability in their social world. Children surprise you with their ingenious creativity. As an observer, you never knew which exact direction their peer interaction might be going, which became a great source of enjoyment for me while reading through CO. For example, children might be cleaning some chairs and wood boards, but all of a sudden they might invent a game of throwing the cleaning cloth around, with elaborate rules to compete over which child threw the cloth higher.⁸

Children took the matter of play very seriously. Sometimes they showed keener interest in play than in work (their assigned duties), even if the content of the game-play was quite similar to that of work assigned to them. The following episode of "playing house" offers a glimpse into the special charm of play:

The children were playing house. Cheng Ling-li (a 6-year-old boy) came up with a pan of sand. He said to a 10-year-old girl Chang Chun-ling: "Here. Here is the sand." Chun-ling & Wang Shi-ling (a five-year-old girl) were cutting up vegetables. Chun-ling said: "Alright." Chun-ling's mom walked out just then and saw Chun-ling and said: "No wonder I couldn't find the pan! What? Did you go all the way to the river to get that sand? You stupid! When you are playing you will do whatever anyone tells you right away. If I asked you to do it, you wouldn't do it even if it were in front of the door!" Chun-ling smiled and looked a little guilty.

As MC noted at the end of this observation, Chun-ling's mom wasn't really mad, despite such moralistic scolding. Perhaps adults were amused by the seriousness of "playing-house" games. Children are indeed born to

⁸ CO #567, 1/12/1960.

⁹ CO #783, 02/14/1960.

find pleasure in play: They can transform every moment or occasion, however mundane it is, into entertainment. This playfulness permeated various kinds of everyday life scenarios, be it housework, sibling care, or school time. And it was often accentuated by humor, humoring themselves and others, as the following observation at a second-grade classroom¹⁰ illustrates:

A girl (Chin-yen, 8-year-old) had a plastic bottle of tea in her hand. Another girl Peng Ah-lien said to her: "Give me a drink." Chin-yen countered: "No, I won't. I already have plums in it. How could I give it to you? (The school children put a certain type of plums in their water jugs to give the water a nice flavor. They relish this.)"

Ah-lien: "Well, then don't." She didn't look up from her work.

A boy named Wang Kuei-min lifted his head and said: "What? What did you say? Did you say you had plums in it?"

Chin-yen: "Yes, I have plums in it!"

Kuei-min started teasing her: "What? You say your grandmother is in it? (This is a play on the Taiwanese words from plum & grandmother.")" The children all laughed, including Chin-yen herself.

Chin-yen cursed Kuei-min: "Copulate with your mother."

Kuei-min kept teasing her: "You put your grandmother in it? What did you say? What?"

Chin-yen wouldn't pay any more attention to Kuei-min, but Kuei-min asked again a few times, laughing.

Lin Shu-hui (an eight-year-old boy) who sat next to Chin-yen smiled and said: "She said she put plums in it."

Kuei-min turned to laugh at him: "What? You put your grandmother in it?" They all laughed again and Shu-hui said it back to Kuei-min: "You put your grandmother in!" The two boys teasingly said this back and forth a few times and finally stopped and went back to their schoolwork.

This spontaneously playful world, punctuated by the spirit of humor, became an important space where children learned to navigate their social world and develop intimate moral understanding.

¹⁰ CO #1241, 04/13/1960.

¹¹ Mui (plum) & A-mah (grandmother).

Drama and Ritual: Mimicking Adult Social Norms

We all have played games mimicking adult life when we were young, but we rarely wonder why. Like many Chinese girls, I used to dream of becoming a bus attendant. In the old days before automatic ticketing systems were invented, the bus attendant, usually a woman, carried a special purse, inside of which was a set of tickets neatly attached to a clipboard. When a passenger got onboard, she would pull out one paper-ticket, tear it into two halves, give the passenger one half, and save the other half as a receipt. Playing "bus-attendant" was my favorite game when I was five or six: At home I would put chairs in a row, carry a little red purse with a handful of well-organized paper-notes, and start yelling "Tickets! Tickets!" It turns out that, as documented in the fieldnotes, Taiwanese children shared a similar curiosity as the younger version of me.¹²

On an early autumn morning, three children were playing a busriding game. Pai Yanyan, a seven-year-old girl, played the driver, eight-year-old girl Chang Ah-ying played the bus attendant, and eight-year-old boy Wang Teng-kuo played the passenger. They all sat on a big tree branch that had fallen, the "driver" started the bus by shaking the tree, the "attendant" was saying "Beep! Beep!" and the "passenger" seemed quite content: "Oh, it bounces nicely." After a while, Wang Teng-kuo's little brother, five-year-old Teng-chih came up, holding a leaf and said: "I want to ride too. Here's a ticket." The "driver" did not want to let him in, but he insisted: "This is the station now." Eventually the "attendant" let him ride the "bus:" She broke his "ticket" (the leaf¹³) in half, gave half back to him, threw the other half away. Teng-chih sat next to his older brother.¹⁴

¹² In the late 1950s and early 1960s Taiwan, "bus-attendant" (*chezhang xiaojie*) was a popular profession for young women.

¹³ Leaves were a very common "currency" in Xia Xizhou children's games.

¹⁴ CO #200, 9/3/1959.

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This detail, breaking the "ticket" in half, brought back my memory of watching bus attendants in awe. There was some mysterious aura, an aura of authority and order, associated with the scene of bus-attendants issuing tickets. To my naïve eye, what they were doing seemed like a fun and elegant ritual. That might help explain why Xia Xizhou children also invented this bus-riding game with entertaining yet realistic features: They brought the most interesting or strange parts of the adult world into their own life. By mimicking those dramas in ritualistic ways, they got to experience, to a certain degree or through vicarious forms, the intriguing charm of those adult social norms that had fascinated them.

While playing "bus attendant" feels authoritative and cool, playing "police catching gamblers" – a realistic scene in Taiwanese society during the Martial Law Era, adds a layer of dangerous excitement in the fantasy of hierarchy, control, and punishment.

Wang Shi-ling (4-year-old boy), Wang Chin-yun (4-year-old girl), Chen Min-hua (4-year-old girl) and Wang Ah-chu (6-year-old girl) were playing a gambling game with cards. They were just pretending to gamble. There were some adults in the front room gambling.

Someone banged on the kitchen door and said: "Open the door."

Ah-chu walked over to the door and looked out the hole and asked: "Who is it?"

The child's voice repeated: "Open the door."

Shi-ling walked over and asked: "Who is it?"

Ah-chu said: "It is Chen Min-chin (Min-hua's older brother)."

Shi-ling: "Where is he?"

Ah-chu: "He has gone."

[This went back and forth for a while, that Min-chin naughtily knocked on the door and then ran away as soon as someone came to answer. A group of children came over to join this game. Eventually Wang Ah-chu's little brother opened the door and "policemen" broke in.]

Min-chin and another boy Wang Chao-min (Shi-ling's six-year-old big brother) came up and said: "I'm the policeman! Give me twenty dollars! Give me twenty dollars!" They held out their hands to all the "gamblers."

The girls all screamed and yelled: "No. No."

The two "policemen": "Alright! I'm going to catch people now." [Some chasing and wrestling ensued. An adult called from another room,

telling children not to fight. Children stopped for a moment but resumed the game soon.]¹⁵

This episode not only juxtaposes "real gambling," adults in the front room, with "pretend gambling," children in the back room, but also embeds the gambling game within a larger game of "playing police." This snapshot of peer play tells us that children did not just keenly observe adults' social dramas. They also developed some understanding of adult moral norms. Gambling for money was quite common in the village, and some households even provided a formal venue, although gambling was illegal under the Criminal Code of the Republic of China at that time. Children probably knew that gambling was wrong and that those caught by police would be punished. For example, in a Doll Play session, a seven-year-old boy came up with this tragic story of gambling: 16

Dad (doll) and mom (doll) were gambling for fun (not for money), but the police came and took them away anyway. They were put to jail because they did not have money to give to police. They didn't have food to eat. They were so hungry and so thin. When they came home, grandma (doll) cried. Police told them that if they gambled again, they would be sentenced to five years in prison.

In real life, children who were subjugated to adult surveillance and punishment also keenly rehearsed socio-moral dramas where the target of authority's gaze and normative regulation was themselves. In peer play they not only got to reverse that hierarchical positioning and experience what it was like to be the authority. They reenacted these humiliating scenarios in a comical manner. Besides mocking parental authority, as the vignette in the beginning of this chapter illustrated,

¹⁵ CO #648, 02/02/1960.

DP #508. This is a summary of the participant's answers, with the researcher's questions and prompts omitted.

Drama and Ritual: Mimicking Adult Social Norms

another common game that mimicked authority-child dynamics was playing "school." It was common for teachers to punish students, using a ruler to hit the students' hands, for example. In one of such play sessions, several children were playing the teacher ranking students and punishing the ones that did not get a good grade, with a strong-willed girl leader Pai Yan-yan (seven-year-old) as "Teacher."¹⁷

Wang Mei-yu (5-year-old girl) asked: "What grade did I get?" "Teacher" (Pai Yan-yan) didn't answer. The other children were all standing in a line, and "Teacher" walked away from them. They all followed her.

"Teacher": "All of you can't come and look." They all stopped.

"Teacher" knelt in front of House 116 and started to write grades on the ground. She wrote 4 grades.

[Then "Teacher" slowly announced the grades, calling each child out and having them stand in their respective "steps," according to the grades, A plus, A, etc. A 4-year-old boy Wang Ah-fa got A, Wang Mei-yu was told to stand next to Ah-fa, then Ah-fa's older sister, and 6-year-old Wang Su-chun on "the third step" next to Mei-yu. Finally Liang Chi-lan (5-year-old girl) was called, and she got A plus.]

They all stood in a line and Chi-lan asked: "Who is the best one? Who is the best one?"

"Teacher" told Chi-lan: "You can hit them." This implies that Chi-lan was the best.

Su-chen protested: "No."

"Teacher" re-affirmed: "She [Chi-lan] is A plus."

Chi-lan hit Mei-yu and Ah-fa.

"Teacher" corrected Chi-lan: "Ah-fa shouldn't be hit. He is the same as you."

[Ah-fa got A, Chi-lan got A plus, perhaps A was the cut-off point for punishment?]

Chi-lan asked: "Doesn't he have to be hit?" "Teacher" shook her head. Chi-lan turned back to Ah-fa and said: "Alright, I'll let you hit me back." Chi-lan put her hand out and Ah-fa hit it.

¹⁷ CO #651, 2/2/1960.

Chi-lan hit Su-chen and Su-chen was a little angry and said: "Nah! Pai Yan-yan [the real name of "Teacher"]! I know you are smarter! [This is a sarcastic remark]"

"Teacher" ignored Su-chen: "Now, let's start over again. Come over here." "Teacher" walked a bit and sat down: "Now let us start." The children followed her. Su-chen kept repeating: "Nah! Pai Yan-yan! I know you are smarter." "Teacher" sat and drew something, ignoring Su-chen, but looking a little angry. (MC)

Another type of comical dramas, and a frequent genre of Xia Xizhou children's pretend play, is mimicking festive social events and religious rituals in the adult world, including banquets, weddings, and *bai-bai* – Taiwanese folk religious festivals, worshiping local gods and deities. Children must have found certain social norms in their community perplexing and absurd. They played those scenes out to entertain themselves. For example, how do young children make sense of adults' drinking and banqueting, so common and spectacular in the local scene? An ingenious drama is to "play drunk," mimicking what usually happened after banqueting. On a spring afternoon, a group of children staggered around the yard, pretending to be drunk, all laughing. Under a six-year-old girl's leadership, they managed to act out the most illuminating and laughable details, for example, drunk adults holding onto each other, one's arm around another's neck, pushing around.¹⁸

Xia Xizhou adults, like many in rural Han society, could go out of their way to show hospitality, for example, overtly competing to host the same guest. In a hilarious observation, ¹⁹ two little girls (both five-year-old) each had a hold of another girl's arms and were pulling her in different directions. One suggested to another: "Let's pretend she is a guest and we all want her to go to our own house." They two started acting and laughing: "Come on. Let's go to my house." This little drama immediately evoked my own memory, about one Chinese custom that

¹⁸ CO #1455, 05/10/1960.

¹⁹ CO #616, 01/22/1960.

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baffled me ever since I was young: During Lunar New Year and other festive occasions, my parents and their friends and relatives would give each other gifts, usually cash in red envelopes. Typically, this gift-giving action was the last step in a friendly visit, when the guest was about to leave: Saying goodbye at the door, the guest would suddenly pull out a red envelope and push it towards my mother's hand, and my mother would say no, start "fighting" to reject the gift, and the guest and her would go on back and forth for quite a few rounds. Till today I never doubted my mother's sincerity and humility, or the guests' good intention. But I still find it amusing – the overt action of "gift-giving and rejecting" as well as the underlying logic of creating or escaping indebtedness.

In their pretend play, young children showcased rich and precise knowledge about *bai-bai* rituals. One scenario of playing *bai-bai* involves "cooking" and preparing offerings for gods. This game was often mixed together with playing house. Children made altars. They used wood-sticks as makeshift incense sticks. They used new moon shaped mud-cakes as divining blocks – in real rituals a main tool for divination is a set of two half-moon-shaped wooden blocks.²⁰ They made rice cakes (with mud) and other food offerings. They even made clothes for different gods.²¹

An even funnier version of playing *bai-bai* is to mimic religious processions. To kill their boredom while on babysitting duties, children used their younger siblings as stage props for their *bai-bai* dramas. They improvised to use the baby carriage as the ride for their "gods processional." They carefully arranged chairs as the gods' sedan chairs and they remembered the exact positions of individual chairs. They put mudcakes on top of the baby carriage as food offerings and tie the baby onto the chairs as a god in procession.²²

Such rituals with divining blocks were part of my own childhood experience. Growing up in Hunan, China, I used to accompany my mother to temples and got to know those divining procedures and devices well.

²¹ CO #370, 12/03/1959.

²² CO #1187, 4/6/1960.

In another observation,²³ three bored children, while making faces to each other, started mimicking "gods walking," a common scenario in local rituals:²⁴

Wang Shih-huang (5-year-old) stood up and said: "I'm going to walk like a god." He walks stifflegged. Wang Chao-min (6-year-old) jumped down and walked funny too. Chao-min's little sister Shi-ling stood up and followed them. They marched in circles. Shih-huang had two sticks, one of which looks like a chicken leg. Shi-ling also has a stick.

Chao-min's grandmother came out and scolded him: "Sore Feet! (He has had bumps on his feet.) If you don't stop walking around like that either you or your sister is going to cry (e.g., get hurt)." They ignored her.

Grandmother: "Didn't you hear me? I don't care. If you won't stop playing now, don't cry loud later." Nobody paid any attention to her.

Grandmother: "I know who is going to cry first ... Shi-ling! You are going to cry first and then Chao-min will be the second one. You are both crybabies." Nobody listens to her.

A three-year-old boy Wang Min-ho came up with a pan and asks Shihhuang: "Give me the chicken leg." Shih-huang probably didn't hear. He kept marching in the circle. Min-ho grabbed the stick from him. Shih-huang didn't say anything and kept marching. Then Min-ho started marching and banging the pan.

An important part of cultural transmission and learning is to develop knowledge and sensitivity about social norms in the local society. Like other games presented in this section, in this episode, children brought a local religious custom into their own world. They performed truthful details in this pretend play: strange motions of marching, loud noise to signal the gods' coming (banging the pan as if the pan were a gong). They blended humor and seriousness, and probably expressed a mixture of curiosity and mockery. To a child's eye, some norms and customs likely

²³ CO #61, 08/12/59.

The most common gods seen as giant puppets in street parades were *Qiye* (Seventh Lord) and *Baye* (Eighth Lord), very popular in Taiwanese and Chinese folk religion. The former is very tall and played by a man on stilts, so he walks awkwardly (personal communication with Stevan Harrell, October 2022).

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seemed puzzling or awkward, others exciting and fascinating, and still others dangerous. Children must have carefully observed those scenes in local society, that's why they could enact all of them vividly. They then imitate, creatively reenact, and mock those norms and customs. These amusing moments highlight the crucial role of peer play in learning about the adult moral world.

Cooperation, Conflict, and Coalition: Constructing Peer Norms

Additionally, and often simultaneously, during peer play, children learn to navigate cooperation and conflict and construct their moral rules. In the same episode²⁵ presented earlier, the five-year-old boy Wang Shihhuang started bossing the others around, right after mimicking ritual processions. He invented a new game and made these rules: When Min-ho was banging the pan, Chao-min and his little sister Shi-ling should lie down on the floor. When Min-ho stopped, they should get up. But conflict emerged while they were playing this new game:

After Min-ho left, Shih-huang pointed his stick to the two, ordering them to get up, which they complied. Shih-huang continued to march in a circle, and commanded them to get up again. This time, the girl Shi-ling did not comply, despite Shih-huang repeatedly threatening: "Get up. If you don't get up, I'll cut your head off!" Shih-huang lowered his stick until it was really near Shi-ling's neck and then he jumped up. Shi-ling's brother Chao-min came and took the stick away. Shi-ling sat down and cried.

This short vignette encapsulates several general features of peer interactions in naturalistic settings: First, negotiating rules, a key part of collective action, was a common situation where children spontaneously organized to coordinate and cooperate. Second, cooperation could easily evolve into disagreement and conflict, and the direction was hard to predict. Third, because children often appeared in playgroups, multi-agent

²⁵ CO #61, 08/12/59.

Table 3.2 A sample of high-frequency behaviors						
requency	Rehavior	Frequency	Rehavior			

Behavior	Frequency	Behavior	Frequency	Behavior	Frequency
Leading Following	1,550 1,028	Dominating Submitting	718 365	*Scolding Physical	856 512
Not-following	432	Not-submitting	233	aggression Verbal aggression	314

Note: *"Scolding" is different from pure verbal aggression as the former includes actual content of blame, accusation or teaching, while the latter is just an expression of anger and usually in the form of swearing.

dynamics was a frequent scene, in 548 out of all 1,678 episodes, which adds to the complexity and uncertainty of social interactions. In this vignette, for example, three-child cooperation – one boy leading and a brother-sister dyad following – quickly morphed into dominance, submission, and non-submission, which then escalated into brother protecting his sister against the aggressive playmate.

To situate this vignette within the entire CO corpus, let us look at some numbers (Table 3.2). Leading was the most frequent behavior in the corpus. It means one child making a noncoercive attempt to lead another child, for example, Shih-huang suggesting a new game rule to the other two children. Correspondingly, the target child could willingly follow or not follow. Dominating was also a frequent theme. It means attempting to change another's behavior through coercive means, including violence or threatening with violence. Shih-huang's later attitude towards Shi-ling is an apt example. The target child might submit to such coercion or not submit. ²⁶ In situations of domination and conflict, scolding was the most frequent behavior, followed by physical aggression and verbal aggression (i.e., cursing).

 $^{^{\}rm 26}\,$ There might be other responses to dominating, for example, tattling.

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Besides establishing and negotiating game rules, cooperation and conflict also arose in the contexts of resource access, exchange and distribution. These experiences are ubiquitous across cultures and they facilitate the emergence of fairness in early childhood (Xu 2019). In contemporary urban middle-class communities parents and educators often make great effort to promote explicit teachings on resource sharing and link it to character development (Xu 2014), In contrast, Xia Xizhou children, in the context of multi-child families and communal spatial arrangements, often figured out the rules among themselves.

Sometimes the shrewd or domineering child gets a larger share. A group of children were collaborating around the fruit tree, one in the tree picking fruit and then throwing it down, the others waiting on the ground to pick it up. A thirteen-year-old boy Cheng Chen-yu told the other children to take turns picking up the fruit. After a while, the children forgot whose turn it was. Chen-yu ended up getting the most. He gave some to the children who asked for a share, but his pockets were full of the riper fruits.²⁷

Playing favoritism was quite common, for example, in a card game, the dealer giving a thicker card to her sibling and a thinner card to a neighbor's child. But when a third-party witness was around, this child would try to act like a fair arbiter and side with the victim. ²⁸ When disagreement occurred between two parties, the third-party child would improvise some "ostensive detachment" method (Boyer 2020) to show impartiality: Two children both wanted some seeds from a boy. The boy handled the situation smartly, taking some seeds out of his pocket and throwing them on the ground one after another. ²⁹

Children not only evoked principles of fairness to motivate resource sharing and exchange favors, they also relied on coalitional tactics. An

²⁷ CO #21, 7/30/1959.

²⁸ CO #792, 02/15/1960.

²⁹ CO #245, 9/14/1959.

indirect mechanism is gossip behind one's back. Gossip is an important strategy in facilitating reputation-based cooperation (Számadó et al. 2021). Stories of conflict frequently figured into children's gossip, through which they discerned the reputation of other social partners, both children and adults, and simultaneously constructed their own reputation. The following conversation³⁰ is one among many examples.

A boy Wang Chin-feng complained to another boy Yang Ching-min: "That Chen Min-chin is a real cheater. Every-time we play rubber bands with him he never will give them up when he loses. If you keep on asking for them he starts to cry. He only knows how to cry. Cry is his best method." Ching-min suggested: "Why don't you go tell his mother? If you go tell her, it doesn't do any good. She will just scold you."

More explicit coalitional dynamics abound in peer world. On a November afternoon, an eight-year-old boy Wu Chao-lai tried every means in order to ride four-year-old Wang Chin-yi's tricycle. After Chin-yi rejected him, Chao-lai walked over to Chin-yi's older brother Tian-yi, and an elaborate maneuver began:³¹

Chao-lai to Tian-yi (quietly): "You go tell your little brother to let's play on the bicycle and we'll give him this (a hoop). Alright?" Tian-yi went over to Chin-yi and suggested this.

Chin-yi: "No." Chao-lai looked unhappy. After a while he said to Tian-yi again: "Why don't you go tell him again and say if he'll let me I'll be his good friend." Tian-yi: "I don't know."

Finally, Chao-lai went up to Chin-yi and said (quietly): "If you'll let me play on your bike, I'll be your good friend." Chin-yi: "No!"

Chao-lai had 40 cents in his hand and showed it to Chin-yi, saying: "If you let me play I'm going to buy something later and I'll let you have some." Chin-yi: "No! I don't want it."

Chao-lai looked dejected and walked off, he called a five-year-old girl Li Mei-yi and said: "Would you go buy something for me?" Mei-yi agreed.

³⁰ CO #808, 02/16/1960.

³¹ CO #307, 11/15/1959.

Chao-lai gave her 20 cents and told her to buy some candied fruit. She ran off.

Chao-lai walked past Chin-yi and said: "See? I told Mei-yi to buy something for me and I'm not going to give you any." Chin-yi just looked at him.

Tian-yi was putting a brick on the rice rake to make it stand up. When he took the brick off it would fall down. Chao-lai called it a trap. Tian-yi's big brother, 9-year-old Chin-huang also had a rake and they were trying to trap unwary passersby.

Chao-lai to Chin-huang: "I'll play on your side." He ran over and sat down by Chin-huang. He showed Chin-huang how to put the brick on it using the rake. Just as Chin-yi came by on the trike they took the brick off and the rake came down on Chin-yi's head. Everyone laughed and Chin-yi just looked confused, not knowing exactly what happened. He rode on.

Tian-yi yelled: "Cut him off. Cut him off." Chao-lai: "Alright." He ran over and put the rake in front of Chin-yi. Chin-yi couldn't pedal over it, so he jumped off the bike, pulled it over the handle and rode on.

Mei-yi came back with Chao-lai's candy and gave it to him, saying: "It was 2 for 10 cents." The other kids ran up. Chao-lai gave one to Mei-yi and ate one himself.

Chin-yi: "I'll let you ride now." He ran over to Chao-lai repeating his offer. Chao-lai agreed and gave him a candy. Chao-lai got on the trike.

It is hard to tell why Chin-yi eventually changed his mind, just for the candy or also because of the concerted alliance against him. But the most striking part in Chao-lai's persistent attempts was the various strategies: from direct requests to indirect mobilization, his proposals from reciprocal favor exchange to friendship to material goods, and his manipulative efforts, from touting to helping others in order to isolate and pressure Chin-yi. This episode illustrates the broad spectrum of moral sensibilities children were developing in peer play. In everyday life, different sensibilities were often entangled together, for example, respect for fairness and promise of reciprocity wrapped under Machiavellian scheming, even just in a five-minute event.

Human versus Machine: Reading Moral Sensibilities and Layered Intentionality in Playful Teasing

Children not only spontaneously mixed together the brighter side of morality, often associated with cooperation, with the darker side, conflict and dominance. They even cleverly manipulated that boundary, creating a gray area that mixes aggressive and affiliative elements, therefore blending into the whole spectrum of moral sensibilities. Playful teasing is a particularly prevalent activity that blurs the boundary of cooperation and conflict. Playful teasing seems so natural to children, showcasing the rich social cognition abilities that are developing in a young age. Yet it is also challenging to accurately and thoroughly "read" children's playful teasing, especially the kind of ambiguous pretend-play that weaves reality into fantasy, due to the layered intentionality and complex moral sensibilities underneath the behavior. Therefore, playful teasing provides a unique angle to connect the two themes of this book, how children learn morality and how anthropologists (re-)interpret fieldnotes – or more broadly, how we interpret human behavior via text. I explore different methods to figure out their relative merits and limitations. I compare how children spontaneously "read" and enacted it, to how AI text-analysis algorithms stumbled over recognizing it, and how ethnographers interpreted it ("got" it) but with much effort. By doing so, I venture into methodological and epistemological experimentation to explore the nature of human learning and explain why children deserve more attention from anthropologists.

Teasing is a quintessential example of this gray-area behavior, a communicative process that mixes elements of aggression, humor, and ambiguity (Shapiro, Baumeister, and Kessler 1991). Teasing is ubiquitous in childhood across all cultures (Schieffelin and Ochs 1986), with deep evolutionary roots, that is, seen in nonhuman primates (Eckert, Winkler, and Cartmill 2020). Playful teasing is a really prominent theme in the CO corpus. It occurred 936 times, the third most frequent behavior, only

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next to "leading" and "following." Another type, "aggressive teasing," occurred 405 times. Aggressive teasing is easier to discern, as explicit cues of aggression are present³² and the teaser's intention, that is, to dominate the target person rather than to have fun together, is obvious.³³ In contrast, playful teasing is much more ambiguous for the communicative partner to interpret: "For playful teasing to be successfully interpreted as affiliative rather than aggressive, the teaser, to some extent, has to understand the recipient's expectations and predict their likely reaction. Likewise, the recipient needs to draw accurate inferences and correctly identify the teaser's intent as affiliative, looking beyond any mildly abrasive behavioral elements" (Eckert et al. 2020). For example, in a Taiwanese fishing village in the 1980s, anthropologist Charles Stafford observed a group of sisters and cousins "hitting each other, quite hard, trying not to react amidst the laughter," a playful game with the purpose of learning how to "take punishment" (1995: 52). Imagine, a game like this could have evolved into a fight, had some of the participants failed to make the correct inferences about the purpose of the game and the intentions of the other participants.

Although playful teasing can become a challenge to the communicative partners, different types of evidence, not just the prevalence of this behavior itself, reveal that Xia Xizhou children understood its playfulness. In other words, they "got it."³⁴ In Child Interview, seventy-four children (ages 3–12) responded to this hypothetical question: "Suppose another boy (girl) your age makes fun of you, what would you do? What if he/she says you are stupid?" Forty-six children's answers indicated they would not take that seriously (62%),³⁵ including reactions such as

³² For example, hitting a child hard while making fun of the child, in contrast to hitting lightly with a tree leave (playful teasing).

³³ I adopted a behavioral science classification according to Eckert et al. (2020).

There were, of courses, exceptions to this general pattern, when children misunderstood or overreacted to benign teasing, or when children overdid their teasing, which then led to conflicts.

³⁵ Binomial test p = 0.047.

laughing back, ignoring, "not a big deal," and so forth, and only twentyeight children (38 percent) said they would resort to aggressive means such as hitting, tattling to authority, social exclusion, and so forth. Their answers in the teasing scenario posed a contrast with those in physical aggression scenario, which they took as a much more serious offense and would therefore react more aggressively (see Chapter 2). They were able to discern the nature of such interactions in the spectrum from cooperation to conflict. They were sensitive to their social partners' intentions and they could react in a reciprocal manner.³⁶ Moreover, the various playful scenarios in CO texts, some of which I presented in this chapter, all show that children were able to detect each other's layered moral intentions in contexts and communicate effectively despite ambiguities in the meanings of speech and behavior. Behavioral analysis also supports this ethnographic insight: When a child initiates a playful teasing interaction, playful teasing is the most common reaction of the recipient, about 10 times more frequent than aggressive teasing, and much more frequent than other aggressive reactions.

While children could spontaneously and effectively understand playful teasing, when it comes to "reading" texts via Artificial Intelligence (AI) algorithms, the story is more complicated, which prompts us to ponder how humans learn about and make sense of the social world. On one hand, unsupervised topic-modeling method did generate quite a few "latent" textual-patterns that suggest ecologically valid topics, namely, topics that are largely consistent with the "scenario type" results from my manual coding of CO episodes: for example, child fighting, which was discussed in Chapter 2, and the various games children played, which I presented earlier in this chapter. On the other hand, none of the latent "topics" identified via topic-modeling algorithms looks like teasing, despite the actual prevalence of teasing in children's reality. High-ambiguity of playful teasing scenarios, due to features of human

³⁶ For more details see Xu (2020b).

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psychology, that is, layered-intentionality, and human sociality, that is, complex coordination, might help explain why machine-learning techniques such as topic modeling failed to capture its saliency.

Beyond topic modeling, I collaborated with a data scientist to use a more advanced machine-learning technique called Bidirectional Encoder Representations from Transformers (BERT) to analyze CO texts. A popular large-language-model AI, BERT is built from massive language data as a training source, known for its ability to capture a deeper understanding of language context, and suitable for flexible, "supervised" text-analysis (González-Carvajal and Garrido-Merchán 2021). Recall that unsupervised topic modeling automatically classifies texts without prior data training, or in other words, researchers did not feed any structural information to the algorithms, regarding specific themes (word-clusters) the machine should search for. In contrast, we put together a list of core themes as well as keywords under each theme to "supervise" BERT algorithms. BERT then assigned weights/scores of each text under the different themes specified by us human researchers. Two of these themes are "cooperation" and "conflict," in line with the central questions of my ethnographic inquiry. Through evaluating similarity between texts (each CO episode as one text), our models performed well in general, successfully identifying the main themes and their respective saliency in each observation.³⁷ But it still mis-evaluated, or got "confused" by, a certain type of observations, that is, elaborate situations where children pretended to dominate or even assault others, but for the purpose of mutual entertainment.

A typical form of playful teasing, these pretend-play scenarios apparently looked like "conflicts" but the actual atmosphere was "cooperation." Such observational texts are complex enough to challenge AI techniques such as BERT. A revealing example is the vignette I presented in the beginning of this chapter, about a group of children playing

³⁷ For detailed methodology and results, see (Hernandez and Xu in prep).

"mom spanking her children." While the algorithms calculated "conflict" as the most salient theme, more so than "cooperation," children clearly knew it was just a game, not real conflict. When documented in texts, the pretended scenes of hitting and spanking, accompanied by scolding/cursing "You dead child!" and pleading "Don't beat me, mom!", can confuse language AI algorithms. Yet children correctly interpreted each other's intentions and signals during this episode. They quickly responded and aptly cooperated to act out a complex game. They laughed out loud in that hilarious game. They injected ingenious creativity into peer play. These young minds beat the most sophisticated and trendy AI algorithms in many cognitive tasks, especially tasks that require innovatively acting upon the world (Gopnik 2022).

Another layer of this human-machine hybrid experiment is the comparison between the human interpreter and the AI algorithms to decode, or even decipher, the same materials. Third-party interpretation of playful teasing, especially the kind of pretend-play that involves multiple children and elaborate coordination, can be quite difficult. Text-analytics programs were much faster at processing large amounts of fieldnotes and automatically detecting patterns. Despite so, the human researcher's ethnographic expertise proved irreplaceable in deciding what kind of patterns to extract, and in actually comprehending the meaning of texts, especially those texts about ambiguous social interactions. Through manual coding at a document level (each episode as a unit), I coded ninety-six CO episodes in which teasing was a main scenario type, and it ranked as the third most frequent scenarios in the entire corpus.³⁹ At a more granular level, identifying one behavior typically within one sentence or across a few sentences, I was able to discover plenty of playful teasing behaviors distinct from actual aggression, as reported earlier.

³⁸ CO #314, 11/20/1959.

³⁹ The type of scenario that has the highest frequency is playing hopscotch, 161 episodes; the second highest is playing rubber bands, 109 episodes.

However, interpreting the layered intentions of children's pretend play through texts was not an easy task for me. I relied on the excellent work of MC, the first-hand ethnographer and participant observer. In other words, MC had keener insights about the meaning of behaviors than I was, because of her immersive experience. MC got to know these children well, had participated in many of their games, and therefore understood each child's idiosyncratic personality and the various formats and cues of their pretend play. Thanks to her faithful documentation, these observational texts contained a wealth of subtle details that helped me to "simulate" those scenarios, as if I were the present observer. I had to exercise my raw effort, spending much time to contemplate how exactly a linguistic or behavioral cue should be interpreted. I also drew from my scholarly expertise developed over years of training: my knowledge of child development and my sensitivity to meaning-interpretation in naturalistic social life. Last but not the least, I used my human commonsense that AI research has yet to fully decipher (Choi 2022), let alone to completely incorporate. I was once a child and had similar or relatable experience; I am a mother on a wondrous journey, witnessing the magic of child development, attuning myself to children's experience, and still trying to comprehend the child's enigmatic mind.

Taken together, I leaned on all these "sense-making" experiences, devices, and efforts to interpret the meaning of ambiguous behavior in its context and to develop knowledge – to *learn* – about the social world in question. After all, these CO texts were written *by* ethnographers, from MC to Margery and Arthur Wolf, and perhaps also mostly *for* ethnographers. Underlying such texts there is unstated but shared knowledge among ethnographers about human psychology in social contexts that language AI programs are still catching up with. In deciphering children's playful teasing, the ethnographic method, the slow and hard-to-standardized way of "close-reading" to gain *deep knowledge*, can "outperform," in some aspects, AI algorithms that are trained by 3.3 billion

words and powered by *deep-learning* neural networks. And this leads us to the mystery of human learning, a final point I want to make from this human–machine comparison: Interpreting pretend-play teasing from texts was an effortful adventure to me and also posed challenges for some machine-learning algorithms. For children, however, detecting and creatively enacting such "playful teasing" seems so effortless. Why are children, despite their young age, so natural at it?

Playful teasing tends to require more "mind-reading" skills on the part of both parties in this communication (Eckert et al. 2020). Indeed, from infancy onward, human children develop a sophisticated and consistent "theory of mind" (ToM) by attributing their desires, beliefs, and emotions to themselves and to others (Wellman 2014).40 These basic ToM abilities and foundations are present in early childhood across cultures, playing an important role in cultural transmission and social learning, that is, learning from other people (Barrett et al. 2013). Second, across many cultures and from an early age, children draw from perceptions and inferences of mental states in contexts to make moral judgments (Barrett and Saxe 2021). As we see in CO episodes, children attribute moral intentions and judgments to specific persons: Wang Chin-feng gossiped to his friend that another boy was a "cheater," not complying to game rules; Wang Yi-kun complaining that old man Bei-guang was mean - punishing his grand-daughter for no good reason. Moreover, children's socio-emotional intelligence and moral sensibilities are attuned to and shaped by the experience of living with other human beings: They learn from other people around them, and they learn effectively from the history of interacting with social partners. They are exceptionally good at extracting the right kind of patterns and inferring causal relations. They can bring in all that information, at the current

⁴⁰ The debates over exactly when and how children develop ToM have a long history and many crucial questions remain, especially concerning the domain-general versus domain-specific learning mechanisms. For a review see https://iep.utm.edu/theomind/.

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moment of teasing, to help make inferences about a person's intention, and evaluate their social partners and situations. Not only so, they lean on those inferences to update their own expectations and predict others' behaviors: In cognitive science terms, as a new wave of research suggests, children are, naturally, Bayesian learners (Gopnik and Tenenbaum 2007; Ullman and Tenenbaum 2020). 41 Lastly, children actively explore the social world, and in this process construct new, surprising and even unpredictable "realities": like a scientist, the child thus creates a wider space of possible hypotheses to sample and test (Gopnik 2020: 8). The rich and sometimes hilarious pretend-play scenarios in Xia Xizhou are a good example, combining patterned interactions and unexpected "surprises," mixing randomness with creativity. 42 Cognitive scientists are amazed and intrigued by children's developing mind: "Children take the plethora of ambiguous information coming in through their senses and turn it into meaningful, abstract, structured representations" (Gopnik and Bonawitz 2015: 75). With the rising trend of making AI more humanlike, computer scientists are turning to the question of child development, and together with psychologists, advancing the vision of teaching AI to learn like children (Frank 2023). With the fast development of language AI, discerning features of children's playful teasing might become easier for newer algorithms. But regardless, these algorithms still operate through extracting statistical patterns of natural language properties based on enormous amounts of training data and their impressive linguistic competence is still dissociated from social cognition (Mahowald et al. 2023). In comparison, detecting statistical regularities is just one of

⁴¹ A definition of Bayesian learning: "current knowledge is represented as a set of hypotheses with a probability distribution (prior probabilities, or shortly priors). Learning consists in observing evidence and reestimating probability distribution of the hypotheses given the observed evidence (thus creating posterior probabilities)" (www.lancaster.ac.uk/fas/psych/glossary/bayesian_learning/).

⁴² My interest in children's pretend-play is also inspired by the psychologist and philosopher Alison Gopnik's recent work: https://psychology.berkeley.edu/ news/what-babies-tell-us-about-artificial-intelligence.

many tools for children: They learn in multiple and flexible ways about the social world, drawing upon limited amounts but various kinds of "training data," and innovatively act upon it (Yiu et al. 2023). We do not know the full details of children's learning algorithms yet, but we do know that studying children is the key for deciphering many mysteries of humanity.

Human children are the best learners of all beings. The kind of pretend-play teasing I presented is just one example showcasing how they learn. But this specific example can shed much valuable light on anthropological epistemology. The way children learn to discern layered intentions and moral sentiments is exactly the foundation for deep knowledge and "thick description" of social life – for the thing called "ethnography." Yet in ontological and epistemological reflections anthropologists rarely draw inspiration from children. ⁴³ We look past them. If anthropologists truly want to understand human sensemaking, perhaps it is time for us, like those AI researchers, to take children's developing minds seriously.

What Is It in Play?

Everyday play facilitates children's emerging moral understanding, about normativity and about right and wrong (Wright and Bartsch 2008). In Xia Xizhou, the seemingly "unruly" children – in parents' eyes – learned various kinds of norms, including constructing their own moral rules, in everyday peer play. For example, they mimicked adult society dramas, they negotiated cooperation and conflict in gameplay, they enlisted third-party support to defend justice, and they gossiped to gauge other people's reputations and establish their own.

Xia Xizhou children's playful world opened my eyes to new questions concerning family, morality, cultural transmission, and learning: First,

⁴³ One anthropology colleague added this comment when reading a draft of this chapter: "Maybe they (anthropologists) don't want to admit how child-like they are in a cultural context not their own." children in many societies spend more than half of the time in each other's company with no adult present, for example, Mayan children in Guatemala and Aka children (ages 5–12) in Central Africa (Ellis, Rogoff, and Cromer 1981; Hewlett et al. 2011). However, studies of the so-called "traditional Chinese family" have long prioritized parent–child ties and parenting in transmitting values and shaping moral personhood. A systematic analysis of Xia Xizhou children's social networks and behavioral interactions highlights the importance of peer ties. This study also urges us to redress certain assumptions in the study of Han families and societies and look carefully into *who* children learn from and *how* and *what* they learn.

In a similar vein, recent studies of social learning and cultural evolution have highlighted the significance of peer learning, departing from the previous focus on vertical (adult–child) modes of knowledge transmission (Lew-Levy et al. 2023; Qiu and Moll 2022; Stengelin et al. 2023). Children not only learn from their peers, but create subcultures, new traditions, and moral norms (Morin 2015). The story of Xia Xizhou children thus contributes rare and systematic ethnographic evidence to this emerging, interdisciplinary conversation.

Moreover, in their playful world, Xia Xizhou children were developing a whole spectrum of moral sensibilities. Coordination easily evolved into conflicts, and shrewd manipulation and domination sometimes co-existed or even motivated cooperative behavior. How these complex inclinations were often entangled together in children's daily life calls into question the imagery of "the innocent child" that permeates Chinese moral discourses. ⁴⁴ This insight also affirms the unique value of "close-reading" children's life in naturalistic contexts. Anthropologists have become increasingly focused on morality and ethics "as an intrinsic

⁴⁴ Historical representations of Chinese childhood tend to fixate on the "good" and "innocent" (see Hsiung 2005: xi; Bai 2005: 1–20), and Chinese views of childhood emphasize the bright side of human nature in moral cultivation (Bai 2005; Kinney 2004).

dimension to human activity and interpretation" that cannot be simply reduced to "interest, compulsion, obligation, competition, or imitation" (Lambek 2010b: 40). But few have looked carefully into children's world to interrogate the fundamental question: Where do such complex moral sensibilities come from? On the other hand, the booming psychological research of early moral development so far has predominantly relied on controlled experiments (c.f., Xu 2017). Ethnographic "close-reading" is much needed to illuminate how children use their rich social cognition to navigate the inherently ambiguous and unpredictable moral world.

Children's social cognition, including emotional and motivational processes, is the anchor point of this ethnography, where critical reflections on several different lines of scholarship meet and intersect. In sinological anthropology, classic works showed that adults saw small children as very passive, without much imagination, and anthropologists thought children would inevitably assimilate such adult attitude from early on (Ward 1985: 189, 195). Even Arthur Wolf himself expressed this impression that Xia Xizhou children had impoverished fantasy, because their responses to projective tests were repeating what had happened at home instead of more creative storytelling (n.d.: 34). But through carefully examining their peer play in observational texts, my reanalysis brought into light children's complex imaginations and emotions, especially in pretend-play. Although societies and communities vary in the kind and amount of opportunities for fostering children's pretend play (Edwards 2000; Lancy 1996: 92), Xia Xizhou children did enjoy many kinds of pretend play during their free time. Their pretend play often contained realistic elements, as real life has imposed constraints on young children's imagination in every society (Harris 2021). Notably, their "reality-based fantasy" was not simply copying what they observed, but creative reenactment and even deliberate mockery. These non-elite, rural children, often relegated to silent margins in history, had a much richer inner life than previous work once assumed.

I was fascinated by the kind of playful teasing scenarios that blend rich moral sentiments, because children seemed exceptionally good at it. This behavior contains important "meta-communicative" properties (Bateson 2000 [1972]: 185) and is predicated upon "shared intentionality" that underpins unique human sociality and culture (O'Madagain and Tomasello 2022; Tomasello and Carpenter 2007). Even infants before the age of two are able to process the complex social intentions in playful teasing, differentiate teasing from superficially similar but serious behavior, and they find teasing more fun (Colle et al. 2023). At a time when scientists are ambitiously striving to teach machines to read human situations and make moral judgments (Jiang et al. 2022), I wonder if machines can ever simulate a young child's mind to learn morality through playful teasing. Taking inspiration from children's developing socio-moral sensibilities, I combined and compared human and artificial intelligence to decipher such playful teasing and interrogate the nature of meaning-interpretation, ethnographic epistemology, and human knowledge.

Children's play indeed points to the deepest mysteries of human learning, and this chapter opens up more questions than it answers. In the next chapter I turn to another important aspect of children's moral life and peer learning, that is, gender. I explore boys' and girls' overlapping and differential moral worlds, worlds that are often taken for granted but easily overlooked.