The Culture of Communication: Understanding how Culture Infuses Everyday Interactions

Catherine S. Tamis-LeMonda
New York University

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Communication

Language & gestures are universal, culturally organized features of social life and primary vehicles for enculturation and learning.
Communication is a cultural expression

- *How* to communicate (through gaze and gesture, body contact and movement, language)
- *What* to communicate about (the purpose of communication and the content of communication)
Culture infuses communication
Language to teach about the world

Karasik, Tamis-LeMonda & Adolph (2014). *Dev Science*
The Whitings

- Naturalistic observations of children in their everyday behavior settings
- Examined the customary practices of parents in Mexico, India, Kenya, New England, Okinawa, and the Philippines
Schieffelin and Ochs: Kaluli and Samoan
The communication accommodation continuum

Child-centered

✓ Talk about what is of interest to the infant and high responding to infant
✓ Use of a special register in infant-directed speech
✓ Engage infants as conversational partners and accommodate to infant communications and needs

Situation-centered

✓ Parents talk about what is relevant, rather than the interests of infant
✓ Use of adult register when addressing infant
✓ Responsibility on infants to figure out what is going on around them and how to enter ongoing activities

Shieffelin & Ochs, 1986
Levine: The Gusii of Kenya

• Subsistence farmers, with household responsible for growing food for survival

• Children expected to assist with household chores, cultivation, and food-processing from an early age
Levine: Gusii of Kenya

• Child obedience and responsibility valued and expected: Aided survival and permitted mothers to complete chores
• Mother goal is to prevent crying and arousal
• Little verbal stimulation; much time feeding, holding, and lulling infants to sleep
Mayan communities

Rogoff, 1990, 2003
Rogoff: Learning through observation
Our Research: Communication as a Window into Culture

• How is culture expressed in communications between parents and children from different ethnic/racial communities in the United States?
• How do cultural practices promote specific skills and ways of thinking and acting in children?
Socializing Culture: Three Sets of Studies

1. Socializing culture through modes & style of communication (infancy & toddlerhood)
2. Socializing cultural values and expectations through story narratives & play (preschool)
3. Socializing cultural expectations around academic achievement in stories (1st grade)
General Methods
NYC Participants

• Mexican immigrants
• Dominican immigrants
• Chinese immigrants
• African American
NYC Participants

• Mothers recruited from hospitals and clinics
• Home visits at 14 months, 2 years, 3 years
• Laboratory visits at 4 and 5 years, 1st grade
• Note: All videos openly available at databrary.org
Why these groups: demographics

- Mexican, Dominican, Chinese large immigrant groups in the United States, low SES
- African American: contrasting low SES sample with a long history in the United States; native, 3rd generation
  - attempt to avoid the SES-ethnicity/race confound
Why these groups: Cultural views

• Chinese and Confucian values
  – Achieving “perfection” (particularly in academics)
  – Familial piety (role of parent strong)
  – Humility & emotional restraint

Luo, Tamis-LeMonda & Song, 2014, *Early Childhood Research Quarterly*
Why these groups: Cultural views

• Chinese parents hold high expectation for and feel low satisfaction with children’s school performance in comparative studies

• Emphasis on “self improvement”
  – parental high negative feedback focused on failure as a way to learn and improve (Ng & Pomerantz)

Luo, Tamis-LeMonda & Song, 2014, Early Childhood Research Quarterly
Why these groups: Cultural Views

• African American:
  – Parents schooled in “individualistic” United States
  – Aware of academic risks; discrimination
  – Childrearing goals of high self-esteem and high “leadership” to protect children from risks
  – A focus on “self enhancement”

Ng, Tamis-LeMonda, et al., 2012. Social Dev
Why these groups: Cultural Views

• Mexican (recent immigrant group)
  – Values of respect and obedience
  – Learn through observation & guided participation
  – But, mothers express high concern that their children “learn language” (Tamis-LeMonda, et al., 2009)

• Dominican
  – Contrasting Latine group (in US longer)
Why these groups: Academics

- Children from Latine and African American households display disparities in school readiness and subsequent academic performance (“at-risk” minorities)
- Children from Chinese households excel in school, despite being from immigrant and low-income families (the “ideal” minority)
Study 1: Infancy & Toddlerhood

Socializing culture through modes of communication
Cultural communication in infancy

Do mothers from different ethnic backgrounds differ in:

– **How** they communicate:
  
  • Through the use of language or gesture
  • Their responsiveness to infants’ vocalizations & gestures
  • Behaviors that emphasize authority & obedience

– **What** they communicate:
  
  • Whether communications function to inform or regulate
Methods

• Mothers and infants videorecorded during different tasks, including:
  – Sharing wordless number book
  – Sharing wordless emotion book
  – Stringing beads
  – 3-bag (book, grocery, cottage) in Dallas sample

• Infants assessed on multiple skills (language, gestures, fine motor)
Behavioral coding

• From videorecordings
• Onsets and offsets of mother and infant gestures and vocalizations coded using Interact and Datavyu software
Mothers’ Referential Communications

• Referential communications teach “what” or about the world
  – Provide information or ask about activities, events, objects
    • E.g., using hands to indicate how big or small object is
    • E.g., “That’s a red ball”, “Are you stirring the food?”
Mothers’ Regulatory Communications

• Regulatory communications teach “how” to act in the world
  – Guide attention and action
    • E.g., “pointing” where to place next bead, how to stir with spoon
    • E.g., “Look at that!”, “Put it there.” “Don’t do that”
Referential language & gestures
Regulatory language & gestures

Bead-stringing at 14 months
Regulatory language & gestures

Bead-stringing at 14 months
14-Month Infant Measures

• *MacArthur Communicative Development Inventories (MCDI)*:
  – Size of infant gesture vocabularies
  – Receptive vocabulary size
  – Productive vocabulary size
2 Year Infant Measures

• *Fine Motor/Action Skills:*
  – Mullen Scales of Infant Development: Fine Motor and Visual Reception Subscales
    • “Put this one in”
    • “Put them together”
    • “Put another one in there”

• *Receptive & Productive Language*
  – Mullen Scales of Infant Development subscales
Culture and communication in infancy

• Hypotheses:
  – Mexican mothers will use and respond to gestures more than Dominican and African American mothers
  – Mexican and Dominican (Latino) mothers will use more regulatory language than African American mothers who will use more referential language (teaching “what” vs. teaching “how”)
Culture and communication in infancy

• Hypothesis
  – Cultural differences in mother communication will play out in children’s emerging skills
  – Specifically, mothers’ gestural communications will relate to infants’ gestures and fine motor skills; mothers’ referential language will promote language skills
Findings: Mothers’ communications

Mothers of different cultural communities differ in their use of gestures and language
Referential-Regulatory language & gestures

• Referential language higher in African American mothers than in Latine mothers
• Regulatory language higher in Latine mothers than African American mothers
• Gestures highest in Mexican mothers

Kuchirko, Schatz, Fletcher & Tamis-LeMonda (2020). *Journal of Child Language*
Tamis-LeMonda, Song et al. (2013) *Dev Science*
Mothers’ Gestures to 14-Month Olds

Tamis-LeMonda, Song et al. (2013). *Dev Science*
Mothers’ Gestures during Beadstringing

Luo & Tamis-LeMonda (2016), *Infancy*
Mothers’ Responses to Infant Gesture with Referential Language

Tamis-LeMonda, Song et al. (2013). *Dev Science*
Findings: Culture & Infant Skill

Cultural differences in mothers’ communication relate to children’s communications and emerging skills
14-Month Skills
Infants’ Gestures at 14 Months
Standardized MacArthur

Tamis-LeMonda, Song et al. (2013). *Dev Science*
Infants’ Gestural Responses at 14 Months to Mothers’ Referential Language

Kuchirko, Tafuro, & Tamis-LeMonda (2018), *Infancy*
Infants’ Language Production at 14 Months: Standardized MacArthur

Tamis-LeMonda, Song et al. (2013) *Dev Science*
2-Year Skills
Infants’ Fine Motor/Action Assessments Standardized

Tamis-LeMonda, Song et al. (2013) Dev Science
Infants’ Expressive Language Assessments Standardized

Tamis-LeMonda, Song et al. (2013) *Dev Science*
A cultural lens

• Gestures convey important spatial information that may support specific skills
• Mexican mothers’ relatively high use of gesture & regulatory language may reflect a cultural emphasis on respect
Respeto during dyadic play

• Current collaboration with Margaret Owen, Raul Rojas-Villareal, et al.
• How do mothers convey the cultural value of respect in everyday play?
• Does such an emphasis support (or hinder) toddler language learning?
Dallas Participants

• 128 Mexican heritage (Spanish-speaking) immigrant mothers & their 2.5-year-olds
• Dallas Preschool Readiness project (PI’s Owen & Caughy)
Saying goodbye is always tough to do. The DPREP study has been visiting you and your child for the last 11 years, and we have gained so much valuable information on child development through this research. This is the last year of the DPREP study, and we will miss you all greatly! If you have any questions or want to contact us in the future, please call Adriana Villa Baird 972-883-4827.

It's a new year and we are still facing many of the challenges 2020 brought us. While we are in uncertain times, we are starting this year reflecting on the many memories we have visiting your homes and getting to know you and your children. Your involvement in the DPREP study has helped to advance developmental research - thank you! We wish you and yours a safe, healthy, and prosperous new year!

Dr. Margaret Owen
University of Texas at Dallas

Dr. Margaret Caughy
University of Georgia

These play sets were used at the beginning of the study so we could observe parent-child relationships. The "Head Shoulders Knees and Toes" task measured children's regulation skills - their ability to listen to instructions and respond quickly and accurately! This activity measured children's language abilities. The Woodcock Johnson allowed us to exercise math and language questions with your child.
Ratings of respeto

- Global ratings in Mexican dyads
  - Focus on the dyad
  - Mothers’ calm authority
  - Toddlers’ affiliative obedience

- Parent calm authority is not “parental control”:
  - Characterized by positive demeanor on the part of adults that is met by a child who is happy to please

Language coding

- Children’s utterances (responsive and spontaneous) & different words
- According to “authoritarian” interpretation, respeto should relate negatively
- According to a cultural interpretation, respeto should relate positively

Respeto uniquely predicts child word types

Respeto uniquely predicts children’s *responsive* (not spont) utterances

Interim summary:
The “whats” and “hows” of communication

• Language & gesture convey information about the world and how to act in the world
• Cultural values infuse communications and play out in infants’ & toddlers’ emerging skills
Study Set 2: Preschool

Socializing cultural values through stories
Socializing culture through stories

• Do mothers of different ethnic backgrounds emphasize different “lessons” when sharing wordless books with children?

• How do these differences relate to the themes expressed in children’s independent storytelling?
Book-Sharing Task at Age 4

“Please share this book with your child”
Narrative Coding Scheme

• The book is divided into a main episode which consists of a main event (problem) followed by 7 plans of action (attempts) to solve the problem; 6 failed and 1 successful.

**Problem**
(frog escapes from the jar)

**Plans of Action**
(attempts to find the frog)
Findings: Mothers’ messages in stories

Mothers from different cultural communities emphasized different aspects of the story
Same Picture, Different Stories
## Coding story content

<table>
<thead>
<tr>
<th>Content</th>
<th>Content</th>
</tr>
</thead>
</table>
| Individual goals         | “He is look for frog in the forest.”  
                          | “The boy is looking for the frog everywhere.”                            |
| Negative consequences    | “The dog was chased by bees.”  (after barking at a beehive)             |
                          | “The jar is broken!”  (after the dog jumped out of the window)          |
| Emotions                 | “The boy is scared.”                                                      |
                          | “The boy is happy.”                                                       |

Luo, Tamis-LeMonda et al. (2015). *J Lang Literacy*
Ethnic Differences: Story Content

Luo, Tamis-LeMonda et al. (2015). *J Lang Literacy*
Ethnic Differences: Story Content

Estimated marginal means of frequencies

- Individual goals
- Negative consequences
- Emotions

Luo, Tamis-LeMonda et al. (2015) *J Lang Literacy*
Ethnic Differences: Story Content

Luo, Tamis-LeMonda et al. (2015) *J Lang Literacy*
Ethnic Differences: Story Content

Luo, Tamis-LeMonda et al. (2015) *J Lang Literacy*
Findings: Children’s stories

Cultural differences in mothers’ themes related to children’s storytelling themes
Independent Storytelling Task at age 5

“Can you tell me a story? ”
Mother Book-Sharing Style at Age 4

Child Storytelling Style At Age 5

Luo, Tamis-LeMonda et al., (2015) *J Lang Literacy*
Study Set 2: Preschool

Socializing academic skills through play
Block Play at age 4 Years

• Blocks contained graphics on each side that enabled teaching of: (1) literacy; (2) math; (3) construction; (4) body parts/colors

Tamis-LeMonda et al. (2012) Merrill Palmer Quarterly
Mothers’ Teaching During Block Play at age 4 Years

• Coding of mothers’ spontaneous use of gestures and language to teach concepts:
  – # intervals mothers taught each concept at
  – Basic levels (“This is letter A”; This is “1”) and advanced levels (“D O G spells dog”; 1 + 1 = 2)
4 & 5 Year Child Measures

- **Early One Word Picture Vocabulary Test (EOWPVT):** Productive vocabulary at 4 years
- **WPPSI Block Design:** Spatial math skill
- **Block-building Skills:** Model replication
- **Woodcock Johnson Subtests**
  - Applied Problems & Quantitative Reasoning (math)
  - Letter Word Identification (language/literacy)
  - Passage Comprehension (receptive language)
Findings: Mothers’ teaching

Mothers from different cultural communities used the blocks to teach different concepts
Mothers’ Teaching of Advanced Literacy Concepts

Tamis-LeMonda et al. (2012) *Merrill Palmer Quarterly*
African American Mother Teaching Advanced Literacy

4 Year Block Play
Mothers’ Teaching of Advanced Constructive Play

Tamis-LeMonda et al. (2012) Merrill Palmer Quarterly
Mothers’ Teaching of Advanced Math

Tamis-LeMonda et al. (2012) Merrill Palmer Quarterly
Chinese Mother Teaching Advanced Math
Findings: Children’s pre-academic skills

Cultural differences in mothers’ teaching mapped to children’s skills in language/literacy and math
Children’s Skills at 4 and 5 Years
EOWPVT Developmental Trajectory

<table>
<thead>
<tr>
<th>Ethnicity</th>
<th>Age 4</th>
<th>Age 5</th>
</tr>
</thead>
<tbody>
<tr>
<td>African American</td>
<td>109.91</td>
<td>108.70</td>
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<tr>
<td>Dominican</td>
<td>104.68</td>
<td>103.77</td>
</tr>
<tr>
<td>Mexican</td>
<td>94.25</td>
<td>94.66</td>
</tr>
<tr>
<td>Chinese</td>
<td>98.44</td>
<td>102.98</td>
</tr>
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</table>
## Applied Problems Developmental Trajectory

<table>
<thead>
<tr>
<th>Ethnicity</th>
<th>Age 4</th>
<th>Age 5</th>
</tr>
</thead>
<tbody>
<tr>
<td>African American</td>
<td>41.98</td>
<td>56.19</td>
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<tr>
<td>Dominican</td>
<td>40.95</td>
<td>55.17</td>
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<tr>
<td>Mexican</td>
<td>37.77</td>
<td>55.33</td>
</tr>
<tr>
<td>Chinese</td>
<td>49.34</td>
<td>66.91</td>
</tr>
</tbody>
</table>
Children’s WPPSI Block Design
5 years

Mean

African American  Dominican  Mexican  Chinese

**
Children’s Woodcock Johnson Quantitative Skills 5 years

![Bar chart showing age equivalence in months for African American, Dominican, Mexican, and Chinese children. Chinese children have a significantly higher age equivalence.]

**Note:** Significance level indicated by "**".
Children’s Success at Block Building

Suh, Liang, Ng, & Tamis-LeMonda (2019). Front in Dev Psych
Study 3: 1st Grade

Socializing academic expectations through stories
Parental Socialization around School Grades

How do parents of different ethnicities socialize their children about school grades?

– What counts as a good grade?
– What causes a grade and what should follow?

Ng, Tamis-LeMonda, Ruble & Sze (2017), *Child Dev*
Methods

• Immigrant Chinese and African American mothers and their 1st graders
• Storytelling with four pictures
  “B” grade as ambiguous
Procedure

The four pictures were presented to mothers

“Here are four pictures of a child. We would like you to tell your child a story using these pictures. There is no correct order and you can tell the story in any way you like. I’ll be back in about 5 minutes.”
Hypotheses

Basis in socialization goals and role of parent (recall the different cultural foci):

• Chinese focus on *self improvement*
• African American focus on *self enhancement*
Hypotheses

These cultural emphases will result in Chinese (vs. African American) mothers:

• Evaluating the B grade more negatively
• Emphasizing lack of effort as cause of B grade
• Asking for more effort after the B grade (vs. African American mothers praising and rewarding children)
• Explicitly offering lessons about school grades
Codes: Evaluation of a B grade

• Positive
  “B is good”; “She gets a B, and her mommy was so happy about that!”

• Fair
  “B is so-so”; “He got a B, a B is okay, right?”

• Negative
  “B is bad”; “She looked like she was sad because she received a B only.”
Codes: Cause of a B grade

• Exertion of Effort
  “He studied for his test, and worked very hard on his test, so he got a B.”

• Lack of Effort
  “Do you know why she got a B? Because she didn’t study and practice, and played too much.”
Codes: Implications of a B grade

• Reparation
  “Because he got a B only, the grade is not good enough, so he had to study harder.”

• Reward
  “He got a B for doing his good test and mommy rewarded him an ice-cream cone.”
Codes: Opportunity Education

• Direct Reference (to causes of grades)
  “This little boy, just like you, he studied very hard on his test and he got a good grade.”
  “This is you, Lidia. You are working hard, right? But you get a B only because you play and eat all day.”

• Didactic Coda (ending lessons)
  “So you need to study hard and get an A, okay?”
Findings: Mothers’ messages around academic performance

Mothers from the two cultural communities to different stories and showed different evaluations of the “B”
Evaluation of a B grade

Chinese

- Negative: 46%
- Fair: 16%
- Positive: 19%
- None: 19%

African American

- Negative: 15%
- Fair: 5%
- Positive: 67%
- None: 13%

Ng, Tamis-LeMonda et al. (2017) Child Dev
Cause of a B grade

- **Exertion of Effort**
  - Chinese: 20%
  - African American: 30%

- **Lack of Effort**
  - Chinese: 40%
  - African American: 10%

**p < .01**
Implications of a B grade

![Bar chart showing the percentage of Chinese and African American students choosing Reparation and Reward.](chart)

* Chinese: Reparation (25%) vs. Reward (40%)
* African American: Reparation (10%) vs. Reward (50%)

* $p < .05$  
** $p < .01$
Opportunity Education

- **Direct Reference**
  - Chinese: 60%
  - African American: 30%

- **Didactic Coda**
  - Chinese: 20%
  - African American: 10%

* $p < .05$
Summary

• Culture infuses communication in infancy & toddlerhood:
  – Latine emphasis on regulatory language; African American emphasis on referential language
  – Mexican emphasis on gestures as a mode of communication
  – Regulatory language and gesture use in Mexican dyads may be behavioral manifestations of respeto
  – Respeto supports toddler language
Summary

• Culture infuses communication in preschool:
  – African American emphasis on individual goals
  – Latine emphasis on emotions
  – Chinese emphasis on norms/morals & negative consequences
  – African American emphasis on literacy; Chinese emphasis on teaching math
Summary

• Culture infuses communication in 1st grade:
  – African American emphasis on self enhancement (B is a good grade and deserves a reward)
  – Chinese emphasis on self improvement (B is a poor grade and requires reparation)
Conceptual Take Aways

• Culture infuses communication
  – Through the “hows”, “whats”, and “whys” of communicative exchanges
  – Cultural messages are embedded in interactions at all ages, in all contexts

• Cultural practices play out in children’s emerging skills
Methodological Take Aways

• As researchers, we can creatively harness even identical materials & setups to examine how caregivers convey cultural values

• “Micro-analysis” of the forms and content of gestures and language offer a valuable window into “the culture of communication”
Thank you!

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• Administration for Children and Families
• Robinhood Foundation
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Special Thanks to…

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