Reactions to Receiving a Gift—Maternal Scaffolding and Cultural Learning in Berlin and Delhi

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This study shows how Berlin (*n* = 35) and Delhi (*n* = 28) mothers scaffold a common and highly scripted social situation, namely gift giving, and enable cultural learning in 19-month-olds. Using modeling and prompting to encourage appropriate responses, mothers took culture-specific directions during scaffolding that were in line with the broader cultural model as assessed by maternal socialization goals (SGs). Whereas Berlin mothers prioritized autonomous SGs, Delhi mothers emphasized autonomous and relational SGs to similar degrees. During scaffolding, Berlin mothers focused on maximizing positive affect and acknowledging the gift, whereas Delhi mothers prompted toddlers to acknowledge the giver more often. Furthermore, there were differences in toddlers' behavior in line with these culture-specific scripts guiding gift giving.

Maternal Scaffolding: The Interpersonal Mediation of Cultural Scripts

By 18 months, key sociocognitive skills—such as joint attention, imitative learning, and establishing shared intentional relations—have emerged and toddlers are proficient cultural learners (Tomasello, Carpenter, Call, Behne, & Moll, 2005). As a consequence, maternal scaffolding practices are highly informative for toddlers' cultural learning. Because toddlers in their 2nd year have not fully developed emotional-cognitive scripts for many conventional social situations (e.g., gift giving), primary caregivers play an important role in structuring these situations to facilitate cultural learning. Drawing on the work of Vygotsky (Reiber, 1931/1997) and Rogoff (2003), our basic assumption is that through maternal scaffolding and other coregulatory processes, caregivers coherently organize toddlers' attention, emotional experience, and behavior. Furthermore, we propose that these processes are increasingly internalized as cultural scripts that are subsequently used to guide future experiences and behaviors.

Cultural Models and Their Implications for Child Development

The ecocultural model of child development (Keller, 2007; Keller & Kärtner, 2013) provides a useful framework for analyzing similarities and differences in maternal scaffolding across different cultural contexts. According to this framework, cultural models—defined as shared meanings and practices—have evolved as adaptations to specific constituents of the ecosocial environment, most importantly the economic system, family composition, and degree of formal education. The model describes different ecosocial contexts, which give rise to specific cultural models that inform socialization strategies and that are composed of caregivers' socialization goals (SGs), ethnotheories, and parenting behavior. In the present study, we compare educated urban middle-class families from Berlin and Delhi. Both cultural contexts are similar with respect to the degree of formal education and economic level but differ in family composition: Whereas urban middle-class families in Western

societies typically live in two generation households, including the parents and the child, Delhi families often live in households including members of the extended family. Comparing families from these two cultural contexts can be informative for understanding how different cultural scripts emerge.

Previous research on educated urban middle-class families in Berlin and Delhi has revealed that each culture has different priorities during mother–infant interactions: Psychological autonomy and sensitizing children for their internal mental states are key features of Berlin mothers' cultural model, whereas Delhi mothers focus more on interpersonal relationships and social responsiveness. For instance, German mothers prioritize SGs associated with psychological autonomy, such as individuality, independence, and the primacy of internal mental states, whereas Delhi mothers emphasize autonomous and relational SGs, for example, interpersonal responsibilities associated with social roles and proper demeanor, to similar degrees (Kärtner et al., 2007; Schröder, Kärtner, Keller, & Chaudhary, 2012). When interacting with their children, Berlin mothers focus on objects and prioritize children's internal mental states and autonomous initiatives, whereas Delhi mothers more strongly emphasize toddlers' social responsiveness. This tendency manifests consistently at different ages and in different situations, such as playing with 3- and 18-month-olds or requesting objects from 18-month-olds (Keller, Borke, Chaudhary, Lamm, & Kleis, 2010). Thus, while Berlin middle-class families represent a typical psychologically autonomous cultural model, in Delhi the cultural model is composed of autonomous and relational features and, therefore, is referred to as autonomous–relational (Chaudhary, 2004; Kağitcibaşi, 2007; Keller, 2007; Wang & Chaudhary, 2005). As a consequence, we hypothesize that Berlin mothers prioritize autonomous SGs, and Delhi mothers emphasize autonomous and relational SGs to similar degrees. As it comes to the key features of the cultural models outlined above, the different emphases on sensitizing children for internal mental states and their social context should inform the way in which mothers structure and scaffold conventional social interactions that guide children's attention, experience, and behavior.

Giving and Receiving Gifts

Receiving a gift is a social event that is guided by specific cultural conventions; it is therefore an interesting candidate for analyzing the processes by which toddlers are enculturated into their sociocultural environment. Although reactions to receiving a gift seem natural and intuitive, they are highly scripted (Wooten & Wood, 2004). During the 2nd year, receiving gifts is a social situation that has nascent meaning and rudimentary cultural connotations for toddlers. By processes of maternal scaffolding toddlers learn what is important when receiving a gift (Glüer, 2013): Do I thank the giver? Do I focus on the gift? How excited am I supposed to be when receiving a wrapped gift? What am I supposed to feel and how do I show this once I have unwrapped the gift?

The basic processes by which mothers scaffold toddlers' behavior and experience are attention regulation, mirroring, and if toddlers do not show affective and behavioral responses, scaffolding culturally scripted behavior by initiating appropriate responses through modeling and prompting (Malatesta & Haviland, 1982; Rogoff, 2003; Quinn, 2005). According to Gergely and Watson (1999), mothers mark their affect-mirroring expressions by producing an exaggerated version to make them distinguishable from genuine affective responses. In the case of affect mirroring, Gergely and Watson argue that this leads to an increased awareness of toddlers' own affective states. When absent, we suggest that modeling desirable affective responses in a distinct way (e.g., saying "Oh! What's this?!") has a stage-like function that initially constitutes and then accentuates appropriate affective responses and affect-expressive behavior in toddlers. Concerning toddlers' behavioral responses, mothers may either model appropriate behavior or they may explicitly prompt toddlers to show specific behavior (e.g., "Look what she got for you!" "Say thank you!").

Culture-Specific Scripts of Receiving Gifts: Relative Emphases on Inner Experience and Social Responsiveness

Even if mothers in different cultural environments scaffold the gift-giving situation using similar processes, namely attention regulation, mirroring, modeling, and prompting, the different cultural models should critically shape the course along which toddler's experience and behavior is guided. Based on the hypothesis concerning cross-cultural differences in maternal SGs outlined before, we hypothesized that for Berlin mothers, the main focus of scaffolding gift reception is on emphasizing toddler's subjective experience and on maximizing toddlers' positive affect. More specifically, we hypothesized that Berlin mothers direct toddler's

attention toward the gift by looking at the gift longer themselves, acknowledging the gift more frequently and more joyfully and excitedly, and prompting the toddler to acknowledge the gift more often than Delhi mothers. Delhi mothers should follow a different path accentuating other aspects of the general script when scaffolding toddler's experience and behavior. More specifically, we hypothesized that Delhi mothers emphasize the social dimension of this situation more strongly than Berlin mothers by drawing toddler's attention to the giver, by acknowledging the giver more often themselves, and by prompting the toddler to explicitly acknowledge the giver. On an individual level, we furthermore hypothesize that there are the same associations between the relative emphasis on autonomous over relational SGs and maternal behavior, more specifically more acknowledgments of the gift (i.e., more frequent and more joyful and excited acknowledgments, more prompts) and less acknowledgments of the giver (i.e., less frequent acknowledgments and prompts).

Beyond these hypotheses that focus on the different scaffolding styles employed by Berlin and Delhi mothers, we focus on toddlers' behavior as well. In the analyses, we explore, first, whether there are cross-cultural differences in the way in which toddlers from Berlin and Delhi behave in this highly scaffolded situation, and second, we analyze the dynamics of the mother–child interaction, more specifically whether toddlers' affective and behavioral responses are contingent on maternal scaffolding or whether behavior is also shown spontaneously. If shown spontaneously, this would suggest that toddlers already began to internalize parts of the culture-specific scripts that guide behavior and experience during the gift-giving situation.

Method

Participants

In Berlin and Delhi, local research assistants recruited families in cooperation with pediatricians and hospitals. Of the 38 families from Berlin and 39 families from Delhi that participated in the present study, complete data were available from 35 Berlin and 28 Delhi families. In all other cases either toddlers were uneasy or unwilling to participate ($n_{Berlin} = 3$, $n_{Delhi} = 4$) or there were technical problems ($n_{Delhi} = 7$).

On average, toddlers in the Berlin sample were 19 months and 2 days ($SD = 6.68$ days) of age and toddlers in the Delhi sample were 19 months and 6 days ($SD = 10.38$ days) of age, $t(61) = -1.89$, $p < .10$. Gender was balanced across the samples (Berlin: 45.7% female, Delhi: 50.0% female). The toddlers were either the only child (Berlin: 71.4%, Delhi: 44.4%) or they had one (Berlin: 20.0%, Delhi: 55.6%) or two (Berlin: 8.6%, Delhi: 0.0%) siblings, $\chi^2 = 9.60$, $p < .01$. Mothers from Berlin were significantly older ($M = 33.7$ years, $SD = 4.19$ years) than mothers from Delhi ($M = 28.7$ years, $SD = 3.08$ years), $t(73) = 5.33$, $p < .001$. Mothers in both samples had similar educational attainment with an average of 15.7 years of formal education (Berlin: $M = 15.66$ years, $SD = 3.49$ years; Delhi: $M = 15.86$ years, $SD = 1.15$ years). The parents in both samples were living together in all but two Berlin families. The nuclear family was the dominant family type in the Berlin sample (94.3%), whereas cohabitation of the extended family was the dominant family type in the Delhi sample (66.7%), $\chi^2 = 29.38$, $p < .001$. As a consequence, there were more people living in the Delhi households ($M = 5.63$ people, $SD = 2.26$ people) than in the Berlin households ($M = 3.37$ people, $SD = 0.69$ people), $t(61) = -5.61$, $p < .001$. All extended families in the Delhi sample had at least one grandparent living in the same household. Other family members living in the household typically included the parents' siblings (25.9%).

Procedure and Coding

In 2004 and 2005, two female experimenters from the respective cultural context visited the families at home. Home visits lasted about 2 hr and were part of a larger longitudinal study, in which assessments were scheduled when children were 3, 19, 36, and 48 months old. After one of the experimenters had given an overview of the visit and the tasks, the mothers answered questionnaires regarding sociodemographic information and SGs, while the other experimenter established rapport with the toddler. Toward the end of this session, the experimenter gave a wrapped gift to the child after mothers were told that they could have a look at the gift together with the child before the next task started. The situation was conceived of as a quasi-experimental behavioral observation involving both mother and child. All assessments were video-recorded by the second experimenter.

Autonomous and Relational SGs

Mother's SGs were assessed with a questionnaire that covers the essential aspects of the two central

cultural dimensions, that is, psychological autonomy and hierarchical relatedness (Kärtner, Keller, & Chaudhary, 2010) in two scales: (a) autonomous SGs refer to the toddlers' self-confidence and assertiveness (four items: during the first 3 years of life, children should develop self-confidence, develop assertiveness, develop a sense of self-esteem, and develop a sense of self), and (b) relational SGs refer to social responsiveness (five items: learn to help others, care for the well-being of others, cheer up others, learn to obey parents, and learn to obey elderly persons). Mothers were asked to indicate how important these SGs were for them on a 6-point Likert scale (I agree . . . 1: *completely* to 6: *not at all*). Internal consistencies were medium to high for both scales within both samples (the four Cronbach's αs ranged between .74 for the autonomous SGs scale in Delhi and .81 for the autonomous SGs scale in Berlin).

Gift Task

Before the task started, mothers were told that the child will receive a gift for participating in this study and that they could look at the gift together before the next task begins. Then, the experimenter got the wrapped gift, a picture book that was typical for the respective cultural context, out of her bag that was stored in the opposite corner of the room. While walking toward the child and the mother, the experimenter held the gift in front of her saying, "Look! I brought something for you! This is for you! Take it and have a look at it together with your mummy!" While saying this, she handed over the gift to the child. Once the child took the gift, the experimenter sat nearby and watched the mother and the child opening and looking at the gift. There was no time limit set. The behaviors of the dyads were recorded using a video camera and then divided into three stages for coding: gift giving (receiving), opening, and after the gift is open (open). The gift-giving stage was defined as the time starting when the researcher gave the gift to the child until the child's or parent's first manual attempt to unwrap the gift. The opening stage was defined as the entire time the gift was being unwrapped, whereas the stage after the gift was opened was defined as the time from when the wrapping was fully removed from the book until the dyads opened the book. Prior to behavioral encoding, bilingual research assistants translated the taped interactions from Hindi into written English transcripts. Behaviors exhibited during these stages

were coded using INTERACT version 8 (Mangold International GmbH, Arnstorf, Germany).

Gaze behaviors. Because gaze is a strong indicator of overt attention, gaze direction was coded throughout the task. Gaze was coded separately for both mother and toddler as directed at either (a) the giver, (b) the gift, (c) the partner (mother or child), or (d) somewhere else. Changes in gaze were coded when mother or child looked at the giver, the gift, the partner, or somewhere else for longer than 0.5 s. The final scores for mothers' and toddlers' gaze was the relative duration of looking at the giver, the gift, and the partner.

Acknowledgment of the gift and the giver. Acknowledgments of the gift and the giver were defined as behavioral signs of overtly directed attention expressing recognition or appreciation. These included verbal comments made by the mother or toddler about the researcher or gift, as well as meaningful vocalizations and nonverbal responses (i.e., emotions, gestures, and facial expressions). In a first step, each acknowledgment episode was coded with on- and offset. A new episode began if no acknowledging behavior occurred for 0.5 s or if the subsequent behavior was not relevant to the immediately preceding behavior. Acknowledgments were coded separately for both mother and child, and they were further coded as either acknowledgments of the gift (e.g., smiling at the gift, making wide eyes, saying "ooh," or "wow, what's this?") or the giver (e.g., thanking the giver, smiling at or nodding to the giver).

In a second step, each acknowledgment episode for both mother and child was evaluated regarding three further categories: (a) *Modeled behavior*: Coders decided for each episode whether maternal acknowledgments were either genuine or whether they functioned as a model for the child. Criteria for modeling were an exaggerated or childlike tone of voice or exaggerated facial expressions or gestures while altering gaze between the gift or giver and the child. For children, it was coded for each episode whether they performed a behavior that was either just modeled or explicitly prompted by the mother (see prompted acknowledgments below) or not. (b) *Joy* and (c) *Excitement*: For each episode, raters coded the emotional intensity of joy and excitement displayed during acknowledgments of the gift or the giver. Joy and excitement were individually rated on a 6-point Likert scale. Score of "0" indicated the complete absence of the emotion, but a score of "5" indicated the greatest emotional intensity displayed. Scores greater than "3" were only assigned if the emotion was displayed through

multiple behavioral modalities (e.g., "Wow" combined with a broad smile or "What is it?" with hands to cheeks).

To summarize, there were three important dimensions along which acknowledgments were differentiated, namely who (mother or child) acknowledges what (gift or giver) and how (modeling and level of joy and excitement). The final scores for mothers' and toddlers' acknowledgments of the gift and the giver were (a) the absolute frequencies of episodes, (b) the relative frequency of episodes that were modeled by mothers (mother's score) or that were responsive to mothers' modeled behavior or explicit prompts (toddler's score), (c) the mean intensity scores for joy, and (4) the mean intensity scores for excitement.

Prompting toddlers' acknowledgments of the gift or the giver. During the whole sequence, we coded verbal prompts given by the mother instructing the toddler to acknowledge either the gift (e.g., "Look how nice!") or the giver (e.g., "Say thank you!"). Motivating the child to open the gift was coded separately from motivating the child to acknowledge the gift. The three final scores for motivating acknowledgments were the absolute frequencies of episodes, separate for opening the gift and motivating to acknowledge the gift and the giver.

Two research assistants that were blind to the hypotheses coded the recorded behaviors. Reliability was calculated for 30% of the videos from each cultural group. Event-based agreements for timed-event sequences that are similar to timed-event alignment kappas (see Bakeman & Quera, 2011) were calculated using Mangold INTERACT Software version 8. Data were compared by category with both frequency and duration of the scores simultaneously considered. For each category, at least 95% overlap in duration of paired codes and no more than a 2-s delay of onset and offset times were required. A Cohen's kappa value of at least $\kappa = .60$ per code and dyad was defined a priori as the minimum criteria for achieving reliability, with values ranging from $\kappa = .72$ to .77 for stage onsets and offsets, $\kappa = .68$ to .78 for acknowledgments and maternal prompts, and $\kappa s \geq .90$ for maternal and toddlers' gaze.

Results

In the first part of this section we will present the data regarding cross-cultural similarities and differences in autonomous and relational SGs. In the second part of this section, we will provide descriptive information regarding the gift task before we test the hypotheses concerning; first, culture-specific ways of scaffolding this specific social situation of receiving a gift and, second, relations between maternal SGs and scaffolding styles on an individual level. Finally, we analyze whether culture-specific scaffolding practices manifest in toddlers' behavior, and we explore the temporal dynamics of the mother–child interaction.

Autonomous and Relational SGs

In order to determine whether the two cultural groups differed in terms of their SGs, we computed a repeated measures analysis of variance (ANOVA) with the SGs (autonomous and relational) as the within-subjects factor and cultural group (Berlin or Delhi) as the between-subjects factor. This analysis yielded a significant main effect of SG, $F(1, 61) = 13.58$, $p < .001$, $\eta^2 = .18$, collapsing across cultural group, autonomous SGs were emphasized significantly more ($M = 4.65$, $SD = 1.05$) than were relational SGs ($M = 4.07$, $SD = 1.02$). There was also a significant SG × Cultural Group interaction, $F(1, 61) = 42.80$, $p < .001$, $\eta^2 = .41$. Inspection of the means indicated that the relative emphases on autonomous and relational SGs differed between the two cultural groups: Berlin mothers placed greater emphasis on autonomous SGs and emphasized relational SGs to a lesser degree than did Delhi mothers (see Table 1). Within cultures, Berlin mothers emphasized autonomous SGs significantly more strongly than relational SGs, $t(34) = 8.04$, $p < .001$, whereas Delhi mothers had a tendency to emphasize relational SGs more strongly than autonomous SGs, $t(27) = -1.82$, $p < .10$.

Maternal Scaffolding—Modeling and Prompting Appropriate Behavior

Duration of Gift Task and Phases

During the gift task, there was no time limit given and, on average, Berlin mother–child dyads spent more time overall (Berlin: $M = 85.25$ s, $SD = 23.05$ s; Delhi: $M = 45.77$ s, $SD = 15.56$ s), $t(61) = 7.75$, $p < .001$, and on each of the three phases, namely receiving (Berlin: $M = 21.35$ s, $SD = 9.12$ s; Delhi: $M = 13.95$ s, $SD = 6.57$ s), $t(61) = 3.61$, $p < .01$, opening (Berlin: $M = 37.10$ s, $SD = 20.05$ s; Delhi: $M = 16.06$ s, $SD = 12.99$ s), $t(61) = 4.82$, $p < .001$, and gift opening (Berlin: $M = 26.79$ s, $SD = 13.85$ s; Delhi: $M = 15.76$ s, $SD = 8.95$ s), $t(61) = 3.65$, $p < .01$, before they opened and started reading the book.

Table 1

Cross-Cultural Similarities and Differences in Maternal SGs and Scaffolding Style—Modeling and Prompting Appropriate Behavior

	Berlin	Delhi	Statistics
Maternal SGs			
Autonomous SGs, M (SD)	5.05 (0.82)	4.14 (1.10)	$t(61) = 3.75$***
Relational SGs, M (SD)	3.71 (1.02)	4.52 (0.84)	$t(61) = -3.35$**
Maternal acknowledgments of the gift			
Overall, M (SD)	7.74 (3.19)	3.00 (1.47)	$t(61) = 7.26$***
While receiving (% at least once)	97.1	50.0	$\chi^2 = 19.96$***
While opening (% at least once)	94.3	57.1	$\chi^2 = 12.42$***
When open (% at least once)	85.7	92.9	$\chi^2 = 0.80$
Maternal acknowledgments of the giver (% at least once)	20.0	32.1	$\chi^2 = 1.21$
Maternal prompts to			
Acknowledge the gift (% at least once)	77.1	42.9	$\chi^2 = 7.75$**
Open the gift (% at least once)	94.3	67.9	$\chi^2 = 7.54$**
Acknowledge the giver (% at least once)	8.6	53.6	$\chi^2 = 15.44$***

Note. $n_{Berlin} = 35$, $n_{Delhi} = 28$. SGs = socialization goals. **$p < .01$. ***$p < .001$.

Maternal Gaze

There was a distinct and cross-culturally consistent pattern for how mothers divided their visual attention between the toddler, the gift, and the giver across the three different phases of the gift task (see Figure 1, left). To analyze maternal gaze, we computed a repeated measures analyses of variance (ANOVAs) with Target (toddler, gift, and giver) and Phase (receiving, opening, and gift open) as the within-subjects factor and Culture (Berlin vs. Delhi) as the between-subjects factor. The analysis yielded a significant main effect of Target, $F(2, 118) = 485.02$, $p < .001$, $\eta^2 = .89$, which was qualified by a significant Target × Phase interaction, $F(4,$

236$) = 27.45$, $p < .001$, $\eta^2 = .32$. There were no main or interaction effects with Culture. As the paired comparisons of the estimated marginal means for Target indicate, all three scores differed significantly from each other, indicating that mothers across cultures looked at the gift most of the time ($M = 0.74$, $SE = .02$), followed by looking at the toddler ($M = 0.22$, $SE = .02$) and the giver ($M = 0.01$, $SE = .00$), $ps < .001$. Post hoc t tests for the Target × Phase interaction showed that mothers were looking at the gift the longest in Phase 2 (opening: $M = 0.85$, $SD = 0.18$), followed by Phase 3 (gift open: $M = 0.78$, $SD = 0.17$) and Phase 1 (receiving: $M = 0.59$, $SD = 0.27$), all $ts > 2.48$, $ps < .05$, whereas mothers were looking at the toddler significantly
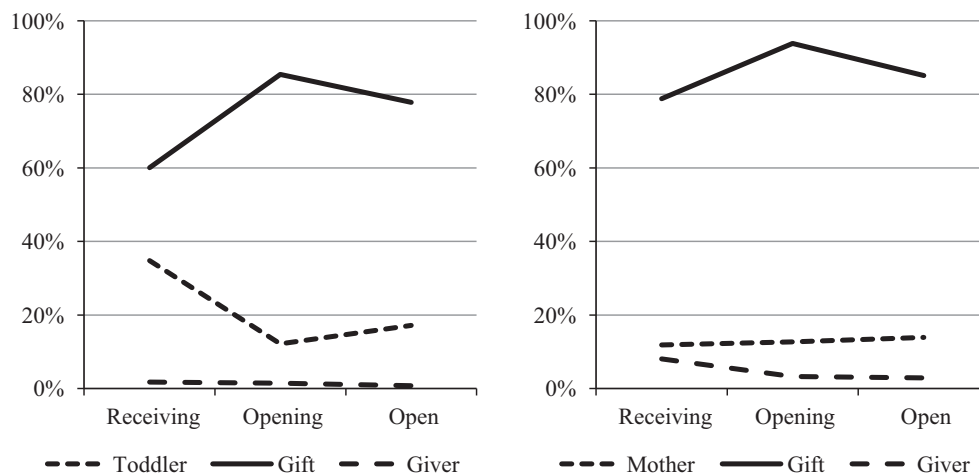

Figure 1. Maternal (left) and child (right) gaze (% of time) at the gift, the giver, and the partner.

longer in Phase 1 (receiving: $M = 0.36$, $SD = 0.27$) as compared to Phase 2 (opening: $M = 0.12$, $SD = 0.17$), $t(61) = 6.93$, $p < .001$, and Phase 3 (gift open: $M = 0.17$, $SD = 0.16$), $t(61) = 4.55$, $p < .001$.

Mothers' Acknowledgment of the Gift

As hypothesized, Berlin mothers acknowledged the gift significantly more often ($M = 7.74$, $SD = 3.19$) than Delhi mothers ($M = 3.00$, $SD = 1.47$, see Table 1). On average, Berlin mothers' acknowledgments of the gift were more joyful ($M = 2.80$, $SD = 0.49$) than Delhi mothers' ($M = 2.20$, $SD = 1.15$), $t(61) = 2.79$, $p < .01$. Furthermore, mothers in both cultural contexts showed similar degrees of excitement when acknowledging the gift (Berlin: $M = 2.31$, $SD = 0.87$; Delhi: $M = 2.33$, $SD = 0.92$) and most often showed modeling instead of genuine responses (Berlin: $M = .82$, $SD = 0.22$; Delhi: $M = .82$, $SD = 0.28$). To analyze the anatomy of the cultural scripts more closely, we analyzed the frequency of maternal acknowledgments of the gift per phase, namely receiving, opening, and when open. Because about half of the Delhi mothers did not acknowledge the gift at all in the first two phases, we cross-tabulated dichotomized scores (i.e., acknowledging the gift at least once vs. not acknowledging the gift) per phase. The results show that in each of the three phases most Berlin mothers acknowledged the gift at least once, whereas most Delhi mothers acknowledged the gift once the gift was open, but fewer mothers did so when receiving and opening the gift (see Table 1).

Mothers' Acknowledgment of the Giver

Overall, only one fourth of the mothers acknowledged the giver at all during the gift task. Therefore, analyses were based on dichotomized scores, and there were no differences in the percentage of mothers who did so at least once between the two cultural contexts (see Table 1).

Prompting Toddlers' Acknowledgments of the Gift and the Giver

As hypothesized, significantly more Berlin mothers explicitly prompted their child to acknowledge (77.1%) or open (94.3%) the gift as compared to mothers from Delhi (42.9% and 67.9%, respectively, see Table 1). On average, Berlin mothers prompted their children significantly more often ($M = 2.83$, $SD = 1.67$) to acknowledge the gift than mothers in Delhi ($M = 1.93$, $SD = 1.68$), $t(61) = 2.11$, $p < .05$.

The picture reverses as it comes to requests to acknowledge the giver: More than half of the Delhi mothers prompted their child to acknowledge the giver, but only three Berlin mothers (8.9%) did so (see Table 1).

Relating SGs to Maternal Scaffolding

A more direct way of testing the influence of culture on socialization practices is to directly link maternal SGs to maternal scaffolding during the gift task. To account for individual response styles we computed the relative emphasis on autonomous SGs (i.e., autonomous minus relational SGs) and correlated this difference score with the main scores for maternal behavior. As expected, the more mothers emphasized autonomous over relational SGs, the more they acknowledged the gift, $r = .50$, $p < .001$, the more they motivated their children to open the gift, $r = .28$, $p < .05$, and the less they motivated their children to acknowledge the giver, $r = -.43$, $p < .001$. There was no significant correlation between maternal SGs and whether mothers explicitly motivated children to acknowledge the gift, $r = .17$, $p = .18$.

Toddlers' Behavior—Cultural Differences and the Dynamic of the Mother–Child Dyad

Toddlers' Gaze

Similar to their mothers, toddlers showed a cross-culturally consistent pattern in how they divided their visual attention among the mother, the gift, and the giver across the three different phases of the gift task (see Figure 1, right). To analyze toddlers' gaze, we computed a repeated measures ANOVAs with Target (mother, gift, and giver) and Phase (receiving, opening, and gift open) as the within-subjects factors and Culture (Berlin vs. Delhi) as the between-subjects factor. The analysis yielded significant main effects for Target, $F(2, 122) = 900.18$, $p < .001$, $\eta^2 = .94$, and Phase, $F(2, 122) = 16.36$, $p < .001$, $\eta^2 = .21$, which was qualified by a significant Target × Phase interaction, $F(4, 244) = 27.45$, $p < .001$, $\eta^2 = .17$. There were no main or interaction effects with Culture. As the paired comparisons of the estimated marginal means for Target indicate, toddlers' gaze at the gift ($M = 0.86$, $SE = .02$) differed significantly from both gaze at mother ($M = 0.07$, $SE = .01$) and gaze at giver ($M = 0.05$, $SE = .01$), ps $< .001$. Post hoc t tests for the Target × Phase interaction showed that toddlers looked at the gift the longest in Phase 2

(opening: $M = 0.94$, $SD = 0.16$), followed by Phase 3 (gift open: $M = 0.85$, $SD = 0.18$) and Phase 1 (receiving: $M = 0.79$, $SD = 0.18$), all $ts > 2.10$, $ps < .05$, whereas toddlers looked at the giver significantly longer in Phase 1 (receiving: $M = 0.08$, $SD = 0.12$) as compared to Phase 2 (opening: $M = 0.03$, $SD = 0.10$), $t(62) = 2.31$, $p < .05$, and Phase 3 (gift open: $M = 0.03$, $SD = 0.06$), $t(62) = 2.30$, $p < .01$.

Toddlers' Acknowledgments of the Gift and the Giver

Consistent with our hypotheses, Berlin toddlers' acknowledged the gift more often than the Delhi toddlers to a marginally significant degree (see Table 2). On average, acknowledgments of the gift were significantly more joyful in Berlin than in Delhi, whereas the level of excitement was similar in the two cultural contexts (see Table 2). To further analyze the temporal structure of the cultural scripts, we analyzed the frequency of toddlers' acknowledgments of the gift for each of the three phases. Because more than half of the toddlers in both cultures acknowledged the gift at least once in each of the phases, we computed a repeated measures ANOVA with number of acknowledgments as the dependent variable, Phase (receiving, opening, and when open) as the within-subjects factor, and Culture (Berlin vs. Delhi) as the between-subjects factor. The analyses yielded a marginally significant main effect for Culture, $F(1, 61) = 2.80$, $p < .10$, $\eta^2 = .04$, and no other significant main or interaction effects. On average, Berlin toddlers acknowledged the gift more often than toddlers in Delhi across phases.

If one looks at the dynamics of the mother–child interaction, one finding is that 42% of the Berlin toddlers' acknowledgments were directly following a maternal model or an explicit maternal prompt, a percentage that was significantly lower than for the Delhi toddlers (63%, see also Table 2). This means that more than half of the Berlin toddlers' acknowledgments of the gift were shown spontaneously. Another way of looking at the dynamic of the mother–child dyad is to look at who, from the beginning of the gift-giving episode, is the first to acknowledge the gift (including prompting the other to acknowledge the gift). In 59.6% of all episodes, it was the mother who was the first to either model or prompt the acknowledgment of the gift, and there were no differences between cultures (Berlin: 62.9%, Delhi: 54.5%), $\chi^2 = 2.21$, *ns*.

As hypothesized, a significantly higher percentage of the Delhi toddlers (54%) acknowledged the giver at least once as compared to the Berlin toddlers (14%), $\chi^2 = 11.08$, $p < .01$. To account for the fact that a higher number of mothers in Delhi prompted their child explicitly to acknowledge the giver (see Table 1), the percentages are reported separately for toddlers' spontaneous and prompted (following a maternal prompt within 3 s) acknowledgments of the giver. As reported in Table 2, there were no significant differences in spontaneous acknowledgments of the giver and, on average, 14% of the toddlers did do so at least once. However, there were significant differences when looking at prompted acknowledgments: Although nearly half of the Delhi toddlers were prompted to acknowledge the giver and did do so, the same applied to only two Berlin toddlers. When looking at who was the first to acknowledge the giver (including prompting the other to acknowledge the

Table 2
Toddlers' Acknowledgments of the Gift and the Giver—The Emergence of Culture-Specific Scripts

	Berlin	Delhi	Statistics
Toddlers' acknowledgments of the gift			
Overall, *M* (*SD*)	4.89 (3.55)	3.61 (2.15)	$t(61) = 5.36^{\dagger}$
Following mothers' model or prompt (relative frequency)[a]	0.42 (0.39)	0.63 (0.39)	$t(58) = -2.17$*
Joy, *M* (*SD*)[a]	2.53 (0.74)	2.08 (0.71)	$t(58) = 2.38$*
Excitement, *M* (*SD*)[a]	2.03 (1.08)	2.35 (0.81)	$t(58) = -1.25$
While receiving, *M* (*SD*)	2.09 (1.70)	1.29 (0.98)	$t(61) = 2.21$*
While opening, *M* (*SD*)	1.40 (2.08)	0.96 (1.20)	$t(61) = 0.99$
When open, *M* (*SD*)	1.40 (1.26)	1.36 (1.34)	$t(61) = 0.13$
Toddlers' acknowledgment of the giver			
Spontaneous acknowledgments (% > 0)	11.4	17.9	$\chi^2 = 0.53$
Prompted acknowledgments (% > 0)	5.7	42.9	$\chi^2 = 12.42$***

Note. $n_{Berlin} = 35$, $n_{Delhi} = 28$. [a]$n_{Berlin} = 34$, $n_{Delhi} = 26$, because three toddlers did not acknowledge the gift once. $^{\dagger}p < .10$. *$p < .05$. ***$p < .001$.

giver) from the beginning of the task, a similar pattern was found for both cultures: In 76.7% of all episodes, the mother was the first to either model or prompt the first acknowledgment of the giver (Berlin: 72.7%, Delhi: 80.0%), $\chi^2 = 0.19$, ns.

*Relations Between Maternal and Toddlers'
Acknowledgments of the Gift and the Giver*

One further way of looking at the dynamic of the mother–child dyad is to correlate corresponding behavioral categories between mother and child. The findings are straightforward: The more mothers acknowledged or prompted acknowledgments of the gift, the more often toddlers acknowledged the gift, $r = .39$, $p < .001$ (Berlin: $r = .32$, $p = .07$, Delhi: $r = .52$, $p < .01$). Furthermore, the more often mothers acknowledged or prompted acknowledgments of the giver, the more often toddlers did do so, $r = .63$, $p < .001$ (Berlin: $r = .53$, $p < .01$, Delhi: $r = .63$, $p < .001$).

To summarize, Berlin toddlers showed more acknowledgments of the gift in all three phases that, on average, were also more joyful. Delhi toddlers, in contrast, acknowledged the giver significantly more often. Overall, more than half of the acknowledgments were either prompted or modeled by the primary caregivers and, more generally, mothers were the first to either acknowledge or prompt the toddler to acknowledge the gift or the giver in more than half of the episodes. Finally, acknowledgement scores were significantly correlated between children and mothers.

Discussion

This study focused on the way in which Berlin and Delhi mothers scaffold a common and highly scripted social situation, namely gift giving for 19-month-old toddlers and, by doing so, enable cultural learning of cognitive-emotional scripts that are informed by the respective cultural models. The first conclusion of the present study is that it is a fundamental commonality between the two cultural contexts that mothers use the gift-giving situation as an opportunity to socialize toddlers into important cultural scripts. More specifically, the data show that mothers were actively involved and turned the gift-giving situation into a training arena for enculturating toddlers: They modeled appropriate behavior by exaggerated acknowledgments of the gift, and they prompted toddlers to explicitly acknowledge the gift and the giver. Thus, modeling

and prompting were the main processes through which mothers regulated toddlers' attention, experience, and behavior.

The second conclusion of the present study is that, beyond these basic similarities, mothers from Berlin and Delhi set different pathways in structuring this social situation that are consistent with their broader cultural models. Generally, the hypothesized differences regarding Berlin and Delhi mothers' cultural models were supported by cross-cultural differences in the relative emphases on autonomous and relational SGs. Against this background, the pattern of Berlin mothers can best be characterized as the maximization of positive affect with a focus on the gift: Berlin mothers modeled more and more exaggerated and joyful acknowledgments of the gift than Delhi mothers, and they significantly more often prompted toddlers to open and to acknowledge the gift.

By modeling exaggerated expressions of joy, Berlin mothers provided toddlers with important blueprints of etiquette and appropriate behavior. When looking at the episodes, it was striking that many toddlers initially do indeed attend to the wrapped gift but show only minimal manifestations of joy or excitement. Thus, maternal affect-expressive behavior does not only have the function of mirroring toddlers' affect, leading to processes of mutual amplification as described by Lavelli and Fogel (2005), but maternal expressive behavior also plays an important role in initially constituting toddlers' experience of joy and excitement to begin with. The finding that the vast majority of maternal expressive behavior is modeled and exaggerated and not genuine further supports this interpretation.

This pattern of emphasizing toddlers' subjective experience and maximizing positive affect associated with the gift fits two key themes of parenting in prototypically psychologically autonomous cultural contexts. First, it presents evidence for a focus on the world of objects and the material aspects of social situations (Keller, 2007). Second, the fact that Berlin mothers invest more energy in establishing and maintaining positive affect supports the basic assumption that mothers focus on sensitizing toddlers for subjective mental states (Kärtner, 2015; Keller, 2007; Keller & Kärtner, 2013).

Besides this general emphasis on inner experience as a key frame of reference, positive affect plays another fundamental role that is at the core of the cognitive-emotional script of giving and receiving gifts in cultural contexts that are oriented toward psychological autonomy. Generally, one of the roles associated with receiving a gift is express-

ing the acknowledgment of the giver. However, how this acknowledgment of the giver manifests in "appropriate" behavior critically depends on the culture's idea concerning the nature of social relationships. Given the voluntary and contractual view of social relationships that characterizes the cultural model of Berlin mothers, strong and genuine positive emotions, such as joy and delight, are the best evidence for "true" acknowledgments of the gift and thereby also of the giver. As elaborated by Wooten and Wood (2004), for U.S. American adults, authentic joy validates the gift as the ideal gift that delights. It attests to the giver the individualized suitability and the distinctive appropriateness of the gift for this person, given the specific relationship with the giver.

Consistent with the core themes of their cultural model, Delhi mothers emphasize the social dimension of the situation more strongly and directly by explicitly prompting their toddlers to acknowledge the researcher significantly more often than mothers in Berlin. Furthermore, even if Delhi mothers acknowledge the gift generally more often than the giver, they acknowledge the gift in a less joyful way and most frequently during the last phase when the gift is unwrapped. This may indicate that the function of acknowledging the gift is different: Encouraging toddlers to acknowledge the gift once it is open may be less about focusing on toddlers' inner experience but more about expressing gratitude in an indirect way. Thus, these findings suggest that Delhi mothers follow a cognitive-emotional script that is guided by the core idea of showing gratitude by direct and explicit social reference. Overall, one main conclusion of this study is that mothers use the gift giving as an important occasion and as a training ground for teaching toddlers lessons about complex cultural scripts that are intimately linked to broader cultural models.

The third main conclusion of the present study is that these different emphases have an influence on children's experience and behavior, and set different pathways for development. When looking at toddlers' behavior, it is interesting to see that in both cultural contexts, toddlers acknowledge and show affective responses toward the gift and the giver. Furthermore, there are already significant differences that follow the respective cultural model: Berlin toddlers acknowledge the present more often and more joyfully, whereas Delhi toddlers acknowledge the giver more often following maternal prompting. In the present study, toddlers' behavior is, deliberately and by design, highly structured by maternal scaffolding. Therefore, it is difficult to dif-

ferentiate whether toddlers' behavior is purely reactive to maternal scaffolding and coregulation or whether toddlers' behavior is, at least in part, spontaneous and already guided by an emerging cognitive-emotional script of the gift-giving situation. To approach this question, we accounted for the mother–child dynamics in three different ways. First, we analyzed the percentage of toddlers' acknowledgments that were directly (i.e., within 3 s) preceded by a maternal model or prompt; second, we looked at the percentage of dyads in which the mother was the first to either model or prompt the acknowledgment of the gift and the giver; and third, we computed the correlations between maternal and child acknowledgments and prompts to acknowledge the gift and the giver. Across analyses, we found that mother and child behavior were contingent on each other; in more than half—and depending on the category, up to 80%—of the acknowledgments, it was the mother who modeled, initiated, or was the first to show the respective target behavior. Based on these results, we conclude that most, but not all, of the child behavior was responsive to maternal behavior, that is, following the maternal model or prompt. In the remaining cases, toddlers' behavior was spontaneous. Thus, these data suggest that within this highly scaffolded gift-giving situation, there are spontaneous behavioral responses of the toddlers that might be driven by emerging cultural scripts that are based on internalized prior experience and that lead to culture-specific response patterns.

We are well aware of the limitations of this approach concerning ultimate conclusions about whether child behavior during gift giving is already driven by internalized scripts. To follow up on this issue, future studies should contrast gift giving with and without maternal scaffolding. Additionally, studies should focus on older toddlers' spontaneous behavior during gift-giving situations that are not scaffolded by caregivers. This limitation, however, was necessary to reach the study's main goal of analyzing maternal scaffolding as a critical condition that enables cultural learning of complex cognitive-emotional scripts at the formative age during the 2nd year. Overall, gift giving seems to be an appropriate candidate for better understanding how cultural scripts are transmitted from mother to child for a number of reasons: First, gift giving occurs in most cultures, and receiving a gift is associated with similar normative expectations, namely acknowledgment of the gift and the giver. Second, it integrates attentional, affective, and behavioral processes and responses that follow a certain etiquette. Third, scaf-

folding occurs in multiple modalities, including verbal prompts, marked affective responses, and behavioral re-enactments. Finally, receiving a gift has more conventional elements than other routine cultural practices that have been analyzed so far such as, for instance, mother–child play or maternal demands.

Later in development, the cultural scripts of giving and receiving gifts are further differentiated to reflect important dimensions such as the kind of relationship, the context within which gift giving occurs, the value, and the appropriateness of the gift (Mayet & Pine, 2010). Future research could address how these more fine-grained variations in the more general script outlined here are scaffolded by others and in the end, actively constructed by older children independently.

To conclude, this study focused on the way in which mothers scaffold a common and highly scripted social situation, namely gift giving, to enable cultural learning in toddlers. We demonstrated that mothers actively use this situation for socializing toddlers into relevant cultural scripts. Through modeling and prompting appropriate behavior, mothers set different and culture-specific courses in scaffolding and coregulating this social situation that were in line with the broader cultural model and that had implications for child experience and behavior.

References

Bakeman, R., & Quera, V. (2011). *Sequential analysis and observational methods for the behavioral sciences*. Cambridge, UK: Cambridge University Press.

Chaudhary, N. (2004). *Listening to culture: Constructing reality from everyday talk*. London, UK: Sage.

Gergely, G., & Watson, J. S. (1999). Early socio–emotional development: Contingency perception and the social-biofeedback model. In P. Rochat (Ed.), *Early social cognition: Understanding others in the first months of life* (pp. 101–136). Mahwah, NJ: Erlbaum.

Glüer, M. (2013). *Joy in toddlers: An empirical study on toddlers' emotion socialization when receiving a gift [Geschenkfreude im Kleinkindalter: Eine empirische Studie zur emotionalen Sozialisation von Kleinkindern in einer Geschenksituation]*. Hamburg, Germany: Diplomica.

Kağitcibaşi, C. (2007). *Family, self, and human development across countries. Theory and applications* (2nd ed.). Mahwah, NJ: Erlbaum.

Kärtner, J. (2015). The autonomous developmental pathway: The primacy of subjective mental states for human behavior and experience. *Child Development, 86*, 1298–1309. doi:10.1111/cdev.12377

Kärtner, J., Keller, H., & Chaudhary, N. (2010). Cognitive and social influences on early prosocial behavior in two socio-cultural contexts. *Developmental Psychology, 46*, 905–914. doi:10.1177/1754073911421383

Kärtner, J., Keller, H., Lamm, B., Abels, M., Yovsi, R., & Chaudhary, N. (2007). Manifestations of autonomy and relatedness in mothers' accounts of their ethnotheories regarding childcare across five cultural communities. *Journal of Cross-Cultural Psychology, 38*, 613–628. doi:10.1177/0022022107305242

Keller, H. (2007). *Cultures of infancy*. Mahwah, NJ: Erlbaum.

Keller, H., Borke, J., Chaudhary, N., Lamm, B., & Kleis, A. (2010). Continuity in parenting strategies—A cross-cultural comparison. *Journal of Cross-Cultural Psychology, 41*, 391–409. doi:10.1177/0022022109359690

Keller, H., & Kärtner, J. (2013). Development—The cultural solution of universal developmental tasks. In M. Gelfand, C.-Y. Chiu, & Y.-Y. Hong (Eds.), *Advances in culture and psychology* (Vol. 3, pp. 63–116). New York, NY: Oxford University Press.

Lavelli, M., & Fogel, A. (2005). Developmental changes in the relationship between the infant's attention and emotion during early face-to-face communication: The 2-month transition. *Developmental Psychology, 41*, 265–280. doi:10.1037/0012-1649.41.1.265

Malatesta, C. Z., & Haviland, J. M. (1982). Learning display rules: The socialization of emotion expression in infancy. *Child Development, 53*, 991–1003. doi:10.2307/1129139

Mayet, C., & Pine, K. J. (2010). *The psychology of gift exchange*. Internal report. Retrieved from http://karenpine.com/research/psychology-of-gift-exchange/

Quinn, N. (2005). Universals of child rearing. *Anthropological Theory, 5*, 477–516. doi:10.1177/1463499605059233

Rieber, R. W. (Ed.), (1997). *The collected works of L. S. Vygotsky, Vol. 4: The history of the development of higher mental functions*. New York, NY: Plenum. (Original work published 1931)

Rogoff, B. (2003). *The cultural nature of human development*. New York, NY: Oxford University Press.

Schröder, L., Kärtner, J., Keller, H., & Chaudhary, N. (2012). Sticking out and fitting in: Culture-specific predictors of 3-year-olds' autobiographical memories during joint reminiscing. *Infant Behavior & Development, 35*, 627–634. doi:10.1016/j.infbeh.2012.06.002

Tomasello, M., Carpenter, M., Call, J., Behne, T., & Moll, H. (2005). Understanding and sharing intentions: The origins of cultural cognition. *Behavioral and Brain Sciences, 28*, 675–735. doi:10.1017/S0140525X05000129

Vygotsky, L. S. (1997). *The collected works of L. S. Vygotsky, Vol. 4: The history of the development of higher mental functions* (R. W. Rieber, Ed.). New York: Plenum. (Original work published 1931)

Wang, Q., & Chaudhary, N. (2005). The self. In K. Pawlik & G. d'Ydewalle (Eds.), *Psychological concepts: An international historical perspective* (pp. 325–358). Hove, UK: Psychology Press.

Wooten, D. B., & Wood, S. L. (2004). In the spotlight: The drama of gift reception. In C. C. Otnes & T. M. Lowrey (Eds.), *Contemporary consumption rituals: A research anthology* (pp. 213–236). Mahwah, NJ: Erlbaum.