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BRIEF REPORT

Distant Lands Make for Distant Possibilities: Children View Improbable Events as More Possible in Far-Away Locations

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Young children often deny that improbable events are possible. We examined whether children aged 5–7 (N = 300) might have more success in recognizing that these events are possible if they considered whether the events could happen in a distant country. Children heard about improbable and impossible events (Experiments 1A, 1B, and 2) and about ordinary events (Experiment 2) and either judged whether the events could happen in a distant country or locally (Experiments 1A and 2) or with their location unspecified (Experiment 1B). Children were more likely to judge that extraordinary events could happen in a distant country than when the same events were described locally or with location unspecified; also, older children were more likely to deny these events could happen when they were local compared with when their location was unspecified. We also found some evidence that manipulating distance affects judgments more strongly for improbable events than for impossible one. Together, the findings show that children's assessments of whether hypothetical events are possible are affected by the geographic context of the events. The findings are consistent with accounts holding that children normally assess whether hypothetical events are possible by drawing on their knowledge of the ordinary world but further suggest that children modify this approach when considering events in distant lands.

Keywords: causality, possibility, extraordinary events, geographic context, conceptual development

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Could a person drink onion juice or have a zebra as a pet? These events could happen but are very implausible. You are unlikely to have met anyone who drinks onion juice or to have heard of anyone owning a pet zebra. But what if we consider whether these events could happen in a distant country? Now they might seem more plausible. It is difficult to be sure about what goes on elsewhere, and perhaps there are places where people drink onion juice and have pet zebras. The people in this distant country may have different customs or preferences, or the physical environment may present different challenges and opportunities. Thinking about the world at large may prompt us to broaden our assessments of what is likely or possible.

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This example may help us understand a striking phenomenon in young children's thinking. Young children often deny that improbable or unusual events are possible (Shtulman, 2009; Shtulman & Carey, 2007). For example, when 4- to 8-year-olds are asked whether a person could drink onion juice or own a zebra for a pet in real life, they deny that such events are possible. This finding has now been replicated numerous times and with many different kinds of improbable events (Cook & Sobel, 2011; Lane, Ronfard, & El-Sherif, 2018; Lane, Ronfard, Francioli, & Harris, 2016; Nancekivell & Friedman, 2017; Nolan-Reyes, Callanan, & Haigh, 2016; Shtulman & Phillips, 2018; Weisberg & Sobel, 2012). Moreover, it echoes work demonstrating that young children often treat social conventions as if they were immutable laws (e.g., Chernyak, Kushnir, Sullivan, & Wang, 2013; Komatsu & Galotti, 1986; Lockhart, Abrahams, & Osherson, 1977; Miller, Custer, & Nassau, 2000). For instance, preschoolers claim that a person cannot defy the conventions of wearing gender-specific clothing or eating food with utensils (Browne & Woolley, 2004; Kalish, 1998; Levy, Taylor, & Gelman, 1995).

Children's inclination to deny the possibility of improbable events is also remarkably robust. Four-year-olds who are given practice at differentiating improbable events from impossible

events in one limited context still claim that improbable events are impossible in the real world (Shtulman & Carey, 2007). Five-year-olds who are encouraged to imagine improbable events unfold in their mind still claim the events are impossible in the real world (Lane et al., 2016). Six-year-olds who are prompted to contemplate how improbable events might occur still deny that such events are possible, either when provided with an explanation by the experimenters (Woolley & Ghossainy, 2013) or when asked to generate their own explanation (Nancekivell & Friedman, 2017).

However, some kinds of support do help children differentiate improbable events from impossible ones. When preschoolers are shown one improbable event and one impossible event and decide which is possible, they successfully choose the improbable one (Shtulman & Carey, 2007). When preschoolers are told a story containing several improbable events and asked to select an ending for it, they prefer to end the story with another improbable event rather than an impossible event (Weisberg & Sobel, 2012). And when preschoolers read about improbable events with their parents, preschoolers whose parents speculate on mechanisms that would allow the events to occur go on to affirm the possibility of those events at higher rates than preschoolers whose parents do not provide this kind of input (Nolan-Reyes et al., 2016).

Here, we explore another factor that might help children differentiate improbable events from impossible events: distance. We propose that children might have more success in recognizing that improbable events are possible if they consider whether these events could happen in a distant country. This proposal might seem counterintuitive. When children say an event cannot happen, this suggests they believe it cannot happen *anywhere,* including distant countries. However, adults think that improbable events are more likely to occur in distant contexts than near contexts, judging, for instance, that rare diseases are more likely to afflict those who live far away than those who live nearby (Wakslak, 2012). There is also precedent for the efficacy of manipulations of distance on children's reasoning. Children are more likely to recognize the validity of unbelievable arguments if they pretend the premises are true of another planet (Dias & Harris, 1988, 1990; Richards & Sanderson, 1999). For example, the argument "all cats bark; Rex is a cat; Rex barks" is valid, but it contradicts known facts about cats. When preschoolers are asked to verify the conclusion, they typically deny that Rex barks, privileging their beliefs about cats over the logical entailments of the argument. However, if preschoolers are told that they are going to hear stories about another planet, then they accept that Rex barks, effectively quarantining their prior beliefs about cats and focusing instead on the argument structure.

A similar effect may occur when children consider whether improbable events are possible. Children may typically decide whether a hypothetical event is possible by calling to mind actual events—either events they have experienced or events they have learned about through testimony—and deciding whether these events are sufficiently similar to the hypothetical event. This strategy is consistent with claims that children think about extraordinary events and entities by drawing on their knowledge of the ordinary world (e.g., Cook & Sobel, 2011; Lane & Harris, 2014) and is also broadly similar to use of the availability heuristic (Tversky & Kahneman, 1973). In deciding whether it is possible to drink onion juice, for instance, children may call to mind other juices that people drink and assess whether onion juice is sufficiently similar. Asking about distant lands could lead children to modify this approach in several ways.

One possibility is that children could recognize that their memories and background knowledge are unlikely to be informative about places they have never visited or learned about. Consistent with this, young children know that other countries differ from their own. They know that people in other countries subscribe to different norms (Conry-Murray & Turiel, 2012) and speak differently than people in their own country (DeJesus, Hwang, Dautel, & Kinzler, 2018; Weatherhead, Friedman, & White, 2018). Hence, thinking about distant lands could lead children to instead assess possibility by relying on their causal knowledge. For example, they might realize that drinking onion juice does not violate any causal principles of which they are aware.

Another possibility is that thinking about distant lands might lead children to call to mind a wider range of events. For example, to consider whether people drink onion juice in a distant land, children may call to mind more exotic juices than they normally encounter (e.g., guava juice), which might then shrink the gap between the known event and the target event. Thinking about distant lands could also lead children to be more lenient in granting that the known event resembles the target event. Hence, children might still call to mind a familiar juice, like apple juice, but decide that people in other countries might find onions as tasty as apples or that onions in other countries might be as juicy as apples in their own country. This kind of event-based reasoning may or may not be constrained by children's causal knowledge. For example, in calling to mind a wider range of events than they normally would, children might limit themselves to events that fit with their causal knowledge. But they could also conceivably call to mind events that contradict this knowledge.

We investigated children's judgments about what is possible in a distant location. In Experiments 1A and 1B, we examined children's judgments about improbable and impossible events, and in Experiment 2, we also examined their judgments about ordinary events. If asking about a distant country prompts children to call a wider range of events to mind or to be more lenient in analogizing known events to hypothetical events, this manipulation should increase judgments that improbable events can happen. Also, if asking children about a distant country makes them more likely to draw on their *causal* knowledge, this manipulation should affect children's judgments for improbable events to a greater degree than their judgments for impossible events or ordinary events, as children's possibility judgments are generally consistent with their causal knowledge—they typically deny the possibility of impossible events and affirm the possibility of ordinary ones.

Experiment 1A

Method

Participants. We tested 120 children aged 5–7 years (M_{age} = 6;5; range = 5;0–7;11; 53 girls). We also tested a sample of 4-year-olds in this experiment, but many of them responded incorrectly in the warmup trials or struggled to identify their country even after the experimenter corrected them and repeated the question. Four-year-olds were therefore dropped from the final sample; see the online supplemental materials for further information about

their performance. To assess the effects of age on children's possibility judgments, we split our sample into two age groups. Children's median age was 6;5 children this age and younger were placed in the younger group ($n = 62$), and children aged 6;6 and older were placed in the older group ($n = 58$). The same age criterion was used in Experiment 1B and Experiment 2 as the median age in these experiments was also 6;5. In all experiments, we adhered to a stopping rule of 20 children per age-in-years per condition. All studies reported in this article were approved by the Office of Research Ethics at the University of Waterloo under the project name and number "Social Understanding in Children," ORE#20042.

Procedure. Children first completed a warmup task requiring them to make simple judgments about possibility. Children saw clipart pictures of a cardboard box and four items (pencil, elephant, swimming pool, strawberry) and were asked if each item could fit in the box. In all experiments, pictures were shown on a laptop computer.

Next, children were asked what country they live in. After children responded correctly, the experimenter reiterated where children lived and noted "there are many other countries in the world and some of them are very far away." If children said "I don't know" or were silent, the experimenter informed them that they lived in Canada and then repeated the question. If children failed a second time, the experimenter corrected them again and continued with the task. If children answered the question by naming their city, the experimenter accepted their answer but also provided their country name (i.e., "That's right! Waterloo is in Canada, and we live in Canada"). We also used these location comprehension procedures in Experiment 2.

Next children were either told they would be asked about events "here in Canada" (local condition) or about events "in a country very far away" (distant condition); equal numbers of children in each age group were randomly assigned to each of these between-subjects conditions. Then, across six trials, children were shown clipart pictures of three improbable events and three impossible events and asked whether each could happen in Canada (local condition) or a distant country (distant condition); most events were adapted from previous studies on children's understanding of possibility (e.g., Nancekivell & Friedman, 2017; Shtulman, 2009; Shtulman & Carey, 2007).

Counterbalancing. In Trial 1, a girl had a pet zebra (improbable) or unicorn (impossible) in her bedroom. In Trial 2, a boy had a house made of toothpicks (improbable) or clouds (impossible); in Trial 3, a boy drank onion juice (improbable) or ate lightning (impossible); in Trial 4, a girl rode a hippopotamus (improbable) or a dragon (impossible); in Trial 5, a girl stood on a rope (improbable) or on a rainbow (impossible); and in Trial 6, a boy had a beard growing to the ground (improbable) or wings (impossible). In each condition, half the children at each age saw improbable versions of the events in Trials 1, 4, and 6 and impossible versions in Trials 2, 3, and 5; these pairings were reversed for the other half of the children.

Results and Discussion

We examined the proportion of trials in which children judged improbable and impossible events could happen. To derive proportions for each child, we scored their "yes" responses 1, "no" responses 0, and any "maybe" responses as 0.5 and averaged across these scores; trials in which children said "I don't know" or remained silent were not scored or averaged. Table 1 shows the mean ages, age ranges, and proportion scores for younger and older children from each condition for all experiments. For data from all experiments, see https://osf.io/6mh72/; also see the online supplemental materials for analyses suggesting the main findings were not subject to item effects.

An analysis of variance (ANOVA) with the within-subjects factor event type (improbable, impossible) and the between-subjects factors location (local, distant) and age group (younger, older) revealed main effects of event type, $F(1, 116) = 115.39$, $p < .001$, $\eta_p^2 = .50$, which resulted because children were more likely to say that improbable events could happen than to say that impossible events could happen. There was also a main effect of location, $F(1, 116) = 13.33$, $p < .001$, $\eta_p^2 = .10$, as children were more likely to judge that events could happen far away rather than locally. The analysis also revealed a marginal interaction between location and event type, $p = .09$. All other effects were nonsignificant, $ps \geq .28$.

These findings suggest that thinking about distant locations makes extraordinary events seem more possible. However, we must consider an alternative interpretation of the findings: Perhaps

Table 1
Mean Ages and Age Ranges of Participants in Each Condition From All Experiments and Mean Proportion Scores for Each Item Type With Standard Deviations in Parentheses

Experiment/age group	Location	n	M_{age}	Age range	Improbable	Impossible	Ordinary
1A							
Younger	Local	31	5;9	5.1–6.5	.26 (.28)	.02 (.08)	
	Distant	31	5;9	5.0–6.5	.38 (.33)	.08 (.21)	
Older	Local	29	7;3	6.6–7.11	.26 (.29)	.00 (.00)	
	Distant	29	7;1	6.6–7.10	.49 (.33)	.10 (.20)	
1B							
Younger	Unspecified	31	5;10	5.2–6.5	.20 (.29)	.09 (.17)	
Older	Unspecified	29	7;2	6.6–7.11	.43 (.33)	.01 (.06)	
2							
Younger	Local	33	5;10	5.0–6.5	.22 (.30)	.08 (.22)	.99 (.06)
	Distant	28	5;8	5.0–6.5	.31 (.31)	.11 (.26)	.88 (.21)
Older	Local	27	7;2	6.7–7.11	.26 (.31)	.02 (.09)	1.00 (.00)
	Distant	32	7;1	6.6–7.11	.46 (.39)	.07 (.18)	.96 (.11)

asking children about what can happen locally makes events seem *less* possible. For example, asking about children's own country may have led them to adopt more conservative criteria in comparing the target event to whichever events they called to mind. To address this possibility, we conducted a follow-up condition in which we did not specify location.

Experiment 1B

Method

Participants. We tested 60 children aged 5–7 years (M_{age} = 6;6; range = 5;2–7;11; 24 females); 31 fell into the younger group, and 29 fell into the older group.

Procedure. This was identical to the procedure from Experiment 1A, except we removed all content pertaining to locations. Children were not asked what country they lived in; the experimenter did not mention that there are many other countries far away or tell children they would be asked about events in a particular location. Furthermore, the test questions asked about whether the events were possible without specifying a location (e.g., "Could a person have a pet zebra in their bedroom?").

Results and Discussion

We first compared children's responses in Experiment 1B with the responses of children from the distant condition of Experiment 1A. This analysis was conducted to test whether children are more likely to judge that events can happen in distant countries than if their location is unspecified. We then compared children's responses in Experiment 1B with the responses of children from the local condition from Experiment 1A to test whether asking children about what can happen locally makes events seem less possible, compared with when location is not specified. In each analysis, we entered children's responses into an ANOVA with the within-subjects factors event type (improbable, impossible) and the between-subjects factors location and age group (younger, older).

Unspecified versus distant. The analysis revealed a main effect of event type, $F(1, 116) = 121.13$, $p < .001$, $\eta_p^2 = .51$, as children were more likely to affirm that improbable events could happen compared with impossible events. However, this effect was qualified by an interaction between event type and age group, $F(1, 116) = 12.93$, $p < .001$, $\eta_p^2 = .10$. This interaction resulted because the age groups differed in their responses for improbable events, $t(118) = 2.88$, $p = .005$, but not for impossible events, $t(118) = 0.92$, $p = .360$; older children were more likely than younger children to judge that improbable events could happen. There was also a main effect of location, $F(1, 116) = 4.45$, $p = .037$, $\eta_p^2 = .04$, which resulted because judgments that events were possible were more frequent overall for events in a distant country than when location was unspecified. The analysis also revealed a marginal effect of age, $p = .062$, and a marginal three-way interaction between event type, location, and age, $p = .056$. All other effects were nonsignificant, $ps \geq .161$.

Unspecified versus local. The analysis revealed a main effect of event type, $F(1, 116) = 93.16$, $p < .001$, $\eta_p^2 = .45$, qualified by an interaction between event type and age, $F(1, 116) = 9.76$, $p = .002$, $\eta_p^2 = .08$, and by a three-way interaction between event type, location, and age, $F(1, 116) = 6.78$, $p = .010$, $\eta_p^2 = .06$. All other effects were nonsignificant, $ps \geq .133$.

To follow up on these interactions, we conducted separate location-by-age ANOVAs for each event type. The analysis of children's responses for improbable events revealed a main effect of age, $F(1, 116) = 4.85$, $p = .030$, $\eta_p^2 = .04$, qualified by an interaction between age and location, $F(1, 116) = 4.35$, $p = .039$, $\eta_p^2 = .04$. Younger children's judgments did not differ depending on whether the location of the improbable events was local or unspecified, $t(60) = 0.82$, $p = .413$, while older children were more likely to say improbable events could happen when location was unspecified, $t(56) = 2.05$, $p = .046$.

The analysis for impossible events revealed main effects but no interactions. Older children were less likely than younger children to judge that impossible events could happen, $F(1, 116) = 6.70$, $p = .011$, $\eta_p^2 = .06$, and children were more likely to judge impossible events could happen when location was unspecified than when it was local, $F(1, 116) = 4.20$, $p = .043$, $\eta_p^2 = .04$.

These findings again suggest that children view events to be more possible if they are described as taking place in some distant country. For younger children, leaving the events' location unspecified led to similar judgments as when the events' location was specified as the child's own country. However, older children were swayed by distance information in both directions for the most critical events: improbable events. It appears that older children use more conservative criteria in evaluating whether events are possible locally than when location is unspecified and more liberal criteria in evaluating whether they could take place in distant locations. Even so, as Table 1 shows, in judgments about improbable events in distant locations, older children were about as likely to judge the events were possible as to judge they were impossible.

In our final experiment, we sought to replicate the effect of distance with new stimuli. We also investigated whether the effect of distance might be more nuanced if we included ordinary events in our items. In Experiments 1A and 1B, we did not find evidence that thinking about distant locations affects judgments for improbable events significantly more than judgments for impossible events. However, all the events in these experiments were extraordinary, and this could have led some children to overlook the differences between them. If so, including ordinary events might help children think more carefully about the different kinds of items and perhaps differentiate improbable events from impossible events to a greater degree in the "distant country" condition. In this experiment, we continued to contrast a distant country with children's own country, as this manipulation appears to have the strongest effect on children's judgments, at least for older children.

Experiment 2

Method

Participants. We tested 120 children aged 5–7 years (M_{age} = 6;5; range = 5;0–7;11; 66 girls); 61 fell into the younger group, and 59 fell into the older group.

Materials and procedure. Children were first asked what country they live in and informed that there are many other countries in the world (see Experiment 1A). Children were then either told they would be asked about events "here in Canada" (local condition) or about events "in a country very far away"

(distant condition); equal numbers of children in each age group were randomly assigned to each of these between-subjects conditions. Then, across nine trials, children were shown pictures of events and asked whether each could happen in Canada (local condition) or a distant country (distant condition).

The first three trials asked whether a person could ride a horse (ordinary), zebra (improbable), or mouse (impossible); the next three trials asked whether a person could wear a yellow hat (ordinary), have a beard growing to the ground (improbable), or have wings (impossible); the final three trials asked whether a person could have a pet dog (ordinary), peacock (improbable), or unicorn (impossible). These trials were administered in either of two orders: ABCACBACB or ACBABCABC, in which A is ordinary, B is improbable, and C is impossible. If children responded to any test questions with silence or by saying "I don't know" or "maybe," the experimenter asked, "What do you think?" Only one child failed to give a "yes" or "no" answer following this prompt.

Results and Discussion

We again examined how often children judged that events of each type could happen (see Table 1). An ANOVA with the within-subjects factor event type (ordinary, improbable, impossible) and the between-subjects factors location (local, distant) and age group (younger, older) revealed a main effect of event type, $F(1.69, 196.30, \text{Greenhouse Geisser corrected}) = 520.80$, $p < .001$, $\eta_p^2 = .82$, and an interaction between event type and location, $F(1.69, 196.30) = 7.39$, $p = .002$, $\eta_p^2 = .06$. There was a marginally significant interaction between event type and age, $F(1.69, 196.30) = 3.16$, $p = .053$, $\eta_p^2 = .03$. All other effects were nonsignificant, $ps \geq .211$.

To follow up on the interaction between event type and location, we separately examined the effect of location for each event type. Location had opposite effects for ordinary events, $t(66.84) = 3.25$, $p = .002$, and improbable ones, $t(118) = 2.48$, $p = .015$, but no effect for impossible events, $t(118) = 0.85$, $p = .399$. Children were *less* likely to judge ordinary events could happen if asked about distant locations than if the location was local. However, they were more likely to judge that improbable events could happen when asked about distant locations.

These findings again show that children's possibility judgments depend on location. The effects of location vary, though, across different types of events. Asking about a distant location increases judgments that improbable events can happen and has no effect for impossible events. However, it may reduce judgments that ordinary events can happen. This latter finding could reflect a belief that many events are different in distant lands, including seemingly ordinary events (see, e.g., Wakslak, 2012), but it could also be due to a ceiling effect in the local condition. More research is needed to determine whether this small (8%) dip in possibility judgments for ordinary events is psychologically meaningful.

General Discussion

We found that children who contemplated the possibility of improbable events in a distant country were more likely to judge those events as possible than children who contemplated the same events in their own country. Moreover, in our second experiment, asking children to consider the possibility of events in a distant country increased their acceptance of improbable events more than their acceptance of impossible events. Together, these findings show that children's inclination to deny the possibility of improbable events is assuaged when they consider those events in the context of a distant country. The findings also provide preliminary evidence that asking about a distant country may make children more likely to draw on their causal knowledge when judging whether an event is possible.

The findings also suggest developmental differences in how children determine whether events are possible when their location is unspecified. We observed no significant effects of age when comparing children asked about local events with children asked about distant locations (Experiment 1A and Experiment 2). But there were significant effects of age when we compared judgments about improbable events from children asked about local events with those for whom location unspecified. Younger children responded similarly regardless of whether these events were described as local or with location unspecified, while older children were more likely to judge these events were possible when location was unspecified. This suggests that when location is unspecified, younger children (but not older children) may have a default tendency to think about events as if they are happening locally, and this default could contribute to their skepticism about the possibility of improbable events. Although further work is needed to corroborate this suggestion, it might help explain developmental differences observed in previous studies, as earlier studies did not specify the locations of events (e.g., Lane et al., 2016; Shtulman, 2009; Shtulman & Carey, 2007).

Overall, our findings are consistent with the proposal that children normally evaluate an event's possibility by calling to mind actual events they have experienced or learned about and then judging whether these events are sufficiently similar to the event under evaluation. Considering a distant country could lead children to recognize that the events they normally call to mind are unlikely to be informative and to change their approach for assessing possibility. As outlined earlier, thinking about distant countries could prompt children to put more emphasis on their *causal* knowledge and to ask themselves whether there are principled reasons why a hypothetical event cannot happen. Many adults appear to take this "I-don't-see-why-not" approach and justify their judgments of possibility by discounting reasons why an event might not occur (Shtulman & Tong, 2013). Our findings provide mixed evidence about whether thinking about distant locations fostered this approach. If asking about distant locations increases causal reasoning, we should expect it to increase their acknowledgment that improbable events are possible, as these events should not violate children's causal knowledge. But asking about distance should not lead to a corresponding increase for impossible events, as they do conflict with children's causal knowledge. We observed such differential effects of thinking about distant locations in our second experiment but did not observe this in the first experiment, where thinking about distant locations led to increases in possibility judgments for improbable and impossible events alike. Also, contrary to the causal view, asking about distant locations made children in the second experiment slightly less likely to judge that ordinary events are possible, even though these events do fit with children's causal knowledge.

The findings are consistent, though, with other accounts of how thinking about distant lands might affect children's possibility judgments. For example, in thinking about distant lands, children could stick with the approach of calling events to mind, but they might call to mind a wider range of events than normal or be more lenient in granting that the events called to mind resemble the target event. Although both of these possibilities *could* involve causal reasoning, neither necessarily requires it. Our findings do not provide specific support for these accounts, though. Further research is needed to determine whether the mind-set fostered by thinking about distant lands is continuous with mature modal cognition or with an extension of the "calling to mind" strategy that many adults seem to abandon.

Our findings also underscore the tension in previous research on children's possibility judgments, between research demonstrating how robustly children conflate improbable events and impossible events (e.g., Nancekivell & Friedman, 2017; Shtulman & Phillips, 2018) and research demonstrating that children can make this differentiation when given the right kinds of support (e.g., Nolan-Reyes et al., 2016; Weisberg & Sobel, 2012). The distance manipulation in our experiments was reliable but modest. Children in Experiment 1 were 17% more likely to judge improbable events possible in a distant country relative to one's own country and 15% more likely to do so in Experiment 2. The effect was more pronounced for the older children—a 23% increase in correct judgments for the improbable events in Experiment 1 and a 20% increase in Experiment 2—but even older children judged improbable events in a distant country impossible about as often as they judged them possible.

Thus, thinking about distant lands is not a panacea for improving children's reasoning about physical possibility. Nonetheless, the efficacy of this manipulation relative to other manipulations (e.g., Lane et al., 2016) suggests that broadening the context in which children construe events may be a promising method for helping overcome their skepticism about the possibility of extraordinary events. Effects of geographic context might also affect children's judgments about the possibility of violating social conventions. Previous findings show that young children often treat social conventions as if they are unchangeable (e.g., Browne & Woolley, 2004; Chernyak et al., 2013; Kalish, 1998). Some of these studies included questions about whether the conventions apply everywhere or might instead differ in other places (Komatsu & Galotti, 1986; Levy et al., 1995; Lockhart et al., 1977; Miller et al., 2000). However, to our knowledge, no studies directly examined whether children judged that violations of conventions would be more possible or acceptable, if they occurred far away, rather than locally.

Our findings also build on previous research in other ways. They corroborate claims that children usually think about extraordinary events and entities by drawing on their knowledge of the ordinary world (e.g., Cook & Sobel, 2011; Lane & Harris, 2014). They also provide further evidence for the inferential benefits of reasoning about distant locations (Dias & Harris, 1988; Richards & Sanderson, 1999). Earlier work showed that children are more successful at deciding whether an unbelievable conclusion follows from a logically valid argument when they are prompted to imagine that the premises of that argument are true of another planet. Our findings show that a more subtle manipulation of distance—asking about another country rather than about another planet—also benefits children's judgments, at least when children evaluate what is possible.

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