

¹ Supplementary Materials: Cross-cultural differences in children's object handling at home

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7 **Developmental context**



Figure 1. Four images illustrating aspects of the Tseltal and Rossel environments. Left: Tseltal target infant in the mother's lap at a family morning meal in the kitchen hut. Left-center: Tseltal mother walking with a man up a main path (target child is in sling). Right-center: Rossel children using stones to crack open foraged nuts under the stairs entering a household structure. Right: Rossel child playing in the net hammock under their house with a caregiver laying nearby on the veranda.

(#fig:context.imgs)

8

Reliability

9 Confusion matrices

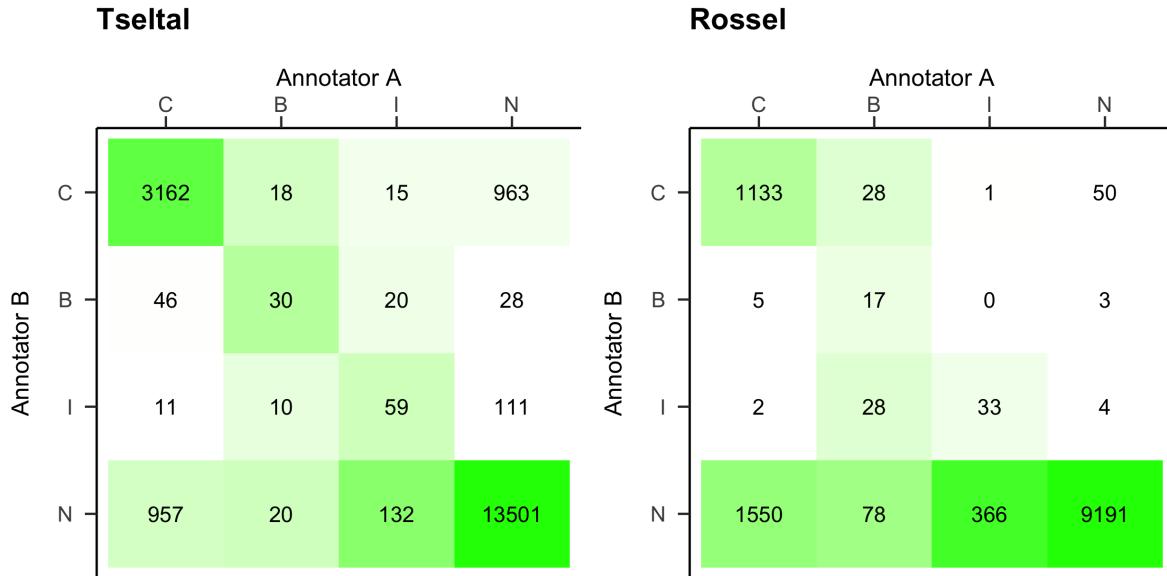


Figure 2. Confusion matrices of possible photo annotation values by site: Tseltal (left) and Rossel (right). The value in each cell indicates the number of photos with the given combination of annotations from person A and person B. The shading indicates proportion of the label category for Annotator A distributed over Annotator B's possible responses.

(#fig:confmat.fig)

Table 1

Linear regression output for the analysis of annotation agreement by child age, population, and their interaction.

	B	SE	t	p
(Intercept)	0.90	0.04	22.55	0.00
Age	0.00	0.00	-1.84	0.08
SiteMayan	0.02	0.05	0.44	0.66
Age:SiteMayan	0.00	0.00	0.20	0.84

Effects of age and cultural context

To test whether annotation was more reliable at different ages or in different sites, we conducted a linear regression of mean agreement value by child age (in months; numeric), site (Tseltal vs. Papuan; factorial), and their interaction ($\text{Mean_agmt} \sim \text{Age} * \text{Site}$; $N = 29$; $\text{AIC} = -70.13$). We found no evidence for significant impacts of age or cultural context on annotation agreement scores.

Full regression output of object handling analyses

Below are the full model outputs for each regression reported in the main text as well as equivalent models with a log-transformed dependent variable (which often yielded more normally distributed residual estimates, but showed no qualitative differences from the results reported in the main text).

Table 2

Linear regression output for the analysis of proportion photos showing child object handling by child age, population, and their interaction.

	B	SE	t	p
(Intercept)	0.08	0.03	2.69	0.01
Age	0.00	0.00	2.80	0.01
SiteMayan	-0.06	0.04	-1.49	0.14
Age:SiteMayan	0.00	0.00	2.32	0.02

Table 3

Linear regression output for the analysis of log-transformed proportion photos showing child object handling by child age, population, and their interaction.

	B	SE	t	p
(Intercept)	-3.01	0.24	-12.52	0.00
Age	0.04	0.01	3.81	0.00
SiteMayan	-0.53	0.35	-1.53	0.13
Age:SiteMayan	0.03	0.01	2.02	0.05

Table 4

Linear regression output for the analysis of child object handling burstiness by child age, population, and their interaction.

	B	SE	t	p
(Intercept)	0.48	0.05	9.53	0.00
Age	0.00	0.00	0.00	1.00
SiteMayan	-0.08	0.08	-0.97	0.34
Age:SiteMayan	0.00	0.00	0.03	0.97

Table 5

Linear regression output for the analysis of log-transformed child object handling burstiness by child age, population, and their interaction.

	B	SE	t	p
(Intercept)	-0.92	0.17	-5.28	0.00
Age	0.01	0.01	1.27	0.21
SiteMayan	0.13	0.27	0.51	0.61
Age:SiteMayan	-0.01	0.01	-1.09	0.28

Table 6

Linear regression output for the analysis of proportion photos showing child-relevant interactant object handling by child age, population, and their interaction.

	B	SE	t	p
(Intercept)	0.03	0.01	4.83	0.00
Age	0.00	0.00	-1.76	0.08
SiteMayan	0.00	0.01	0.54	0.59
Age:SiteMayan	0.00	0.00	-0.96	0.34

Table 7

Linear regression output for the analysis of log-transformed proportion photos showing child-relevant interactant object handling by child age, population, and their interaction.

	B	SE	t	p
(Intercept)	-3.52	0.16	-21.40	0.00
Age	-0.01	0.01	-1.67	0.10
SiteMayan	0.26	0.24	1.12	0.27
Age:SiteMayan	-0.02	0.01	-1.63	0.11

Table 8

Linear regression output for the analysis of child-relevant interactant object handling burstiness by child age, population, and their interaction.

	B	SE	t	p
(Intercept)	0.35	0.06	5.77	0.00
Age	0.00	0.00	-1.91	0.06
SiteMayan	0.04	0.10	0.40	0.69
Age:SiteMayan	-0.01	0.00	-2.11	0.04

Table 9

Linear regression output for the analysis of log-transformed child-relevant interactant object handling burstiness by child age, population, and their interaction.

	B	SE	t	p
(Intercept)	0.25	0.16	1.58	0.12
Age	0.00	0.01	-0.59	0.56
SiteMayan	0.33	0.25	1.31	0.20
Age:SiteMayan	-0.03	0.01	-2.65	0.01