

Correction

Correction: Neunuebel et al., Conflicts between Local and Global Spatial Frameworks Dissociate Neural Representations of the Lateral and Medial Entorhinal Cortex

In the article “Conflicts between Local and Global Spatial Frameworks Dissociate Neural Representations of the Lateral and Medial Entorhinal Cortex” by Joshua P. Neunuebel, D. Yoganarasimha, Geeta Rao, and James J. Knierim, which appeared on pages 9246–9258 of the May 29, 2013 issue, due to an error in a data spreadsheet, some of the calculations shown in Table 1 were incorrect. The correct table is reproduced below. Specifically, the “Mean angular deviation” columns for the four MEC rats were calculated incorrectly. The values for the LEC rats were correct. The point of this table was to show that the differences between LEC and MEC were general across the seven animals of the study and not due to outliers in each group. The correction does not change the authors’ conclusions from this table but alters the statistical argument. They originally conducted a χ^2 test based on the calculation that all three LEC animals had mean angular deviations closer to the local cues than the global cues, whereas all four MEC animals had the opposite pattern. The χ^2 test (with Yates correction for low n) showed a marginal effect ($p = 0.061$). The corrected table shows that one MEC rat (159) had almost equal angular deviation from both sets of cues, but the angular deviation was slightly less for the local cues, thus breaking the pattern and lowering the χ^2 value (with Yates correction) to 1.47 ($p = 0.225$). However, inspection of Figure 10 shows that this rat (Rat 4 in that figure) was strongly controlled by the global cues in the 45° and 90° mismatch sessions, but showed weak control by either set of cues in the 135° and 180° mismatch sessions, as indicated by small mean vectors and data points scattered around the circle. Thus, the overall conclusion of the table stands: the local-global differences are reproduced across the individual animals in the dataset and are not due to outliers in each group. The authors regret any confusion caused by their initial miscalculations. The correct Table 1 is shown below.

Table 1. Individual rat comparison

Rat	Mismatch	Angular deviation		Mean angular deviation	
		From local	From global	From local	From global
<i>LEC</i>					
151	45	6.68	51.68	24.77	91.07
	90	12.64	77.36		
	135	76.0	59.0		
	180	3.76	176.24		
156	45	67.5	22.5	36.79	86.96
	90	7.75	82.25		
	135	43.48	91.52		
	180	28.45	151.55		
184	45	18.55	26.45	26.35	103.61
	90	34.91	124.91		
	135	12.5	122.5		
	180	39.42	140.57		
<i>MEC</i>					
159	45	77.5	32.5	73.96	93.32
	90	122.07	32.07		
	135	66.28	158.72		
	180	30.00	150.00		
165	45	35.83	9.17	115.45	17.47
	90	97.26	7.26		
	135	168.58	33.58		
	180	160.11	19.89		
174	45	41.09	3.91	108.22	28.15
	90	120.61	30.61		
	135	152.12	17.12		
	180	119.06	60.94		
191	45	35.14	9.86	98.73	19.65
	90	82.51	7.49		
	135	146.76	11.76		
	180	130.53	49.47		