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**Supplementary information**

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**Evolving schema representations in  
orbitofrontal ensembles during learning**

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In the format provided by the  
authors and unedited

**Supplementary Table 1 | Number of neurons recorded for each problem across 15 days**

Day	Problem #1	Problem #2	Problem #3	Problem #4	Problem #5
1	282	285	215	202	155
2	259	288	225	191	185
3	267	237	242	223	186
4	264	236	237	172	175
5	281	235	258	143	188
6	270	241	260	192	204
7	275	232	248	215	157
8	264	224	256	208	187
9	280	185	238	238	197
10	281	213	206	205	182
11	292	223	259	231	160
12	290	224	242	232	183
13	279	150	231	230	187
14	283	206	218	237	173
15	188	208	235	180	213

**Supplementary Table 2 | Number of neurons recorded from each rat across 15 days**

Day	J016	J086	J067	J081	J083	J088	J089	J091	J092
1	85	216	153	99	71	120	150	73	172
2	111	204	143	99	63	121	149	88	170
3	99	207	140	133	35	116	163	85	177
4	96	149	141	131	38	108	157	94	170
5	95	160	156	144	40	118	152	97	143
6	89	202	161	158	35	117	148	111	146
7	84	205	164	157	36	111	147	71	152
8	65	205	160	155	29	114	151	72	188
9	86	197	153	150	34	115	151	98	154
10	71	201	155	150	28	119	121	55	187
11	82	188	155	154	32	117	148	97	192
12	84	213	145	150	35	116	149	89	190
13	107	204	148	130	32	88	145	68	155
14	79	212	138	146	38	102	155	67	180
15	69	213	131	156	37	115	124	87	92

**Supplementary Table 3 | Statistical results for Fig. 1**

Figure	Description	Number of Samples	Test	Statistic	P value
Fig. 1d	Effect of 24 trial types and training days (Day 1 vs. Day 15) on %Correct	Day 1: 37 sessions Day 15: 36 sessions	Two-way ANOVA Factor 1: Trial Type (n = 24) Factor 2: Day (n = 2)	Trial Type: $F(23,1704) = 86.12$ Day: $F(1,1704) = 1073.62$ Interaction: $F(23,1704) = 40.49$	Trial Type: $p = 3.4 \times 10^{-265}$ Day: $p = 5.0 \times 10^{-183}$ Interaction: $p = 4.6 \times 10^{-143}$
Fig. 1d	%Correct of each trial type between Day 1 and Day 15	Day 1: 37 sessions Day 15: 36 sessions	Post-hoc test Tukey's honest significant difference (HSD)	Mean differences (Day 15 – Day 1): P1 (S1a, S1b, S2a, S2b): 11.5, 0.27, 2.2, 3.1 P2 (S1a, S1b, S2a, S2b): 44.3, 46.6, 49.5, 41.5 P3 (S1a, S1b, S2a, S2b): 41.3, 46.3, 38.5, 41.8 P4 (S1a, S1b, S2a, S2b): 3.1, 3.6, -1.5, 67.0 P5 (S1a, S1b, S2a, S2b): 33.0, 35.9, 66.1, 3.3 P6 (S1a, S1b, S2a, S2b): 4.3, 4.6, 0.5, 0.5	P1: 0.49, 1, 1, 1 P2: $5.9 \times 10^{-6}$ , $5.9 \times 10^{-6}$ , $5.9 \times 10^{-6}$ , $5.9 \times 10^{-6}$ P3: $5.9 \times 10^{-6}$ , $5.9 \times 10^{-6}$ , $5.9 \times 10^{-6}$ , $5.9 \times 10^{-6}$ P4: 1, 1, 1, $5.9 \times 10^{-6}$ P5: $5.9 \times 10^{-6}$ , $5.9 \times 10^{-6}$ , $5.9 \times 10^{-6}$ , 1 P6: 1, 1, 1, 1
Fig. 1e	%Correct changes with trial types (reward vs. non-reward) and training days	Session numbers from Day 1 to Day 15: 37, 40, 40, 38, 38, 39, 38, 39, 39, 38, 39, 40, 36, 38, 36	Two-way ANOVA Factor 1: Reward (n = 2) Factor 2: Day (n = 15)	Trial Type: $F(1,1120) = 1308.32$ Day: $F(14,1120) = 44.91$ Interaction: $F(14,1120) = 33.47$	Trial Type: $p = 2.0 \times 10^{-190}$ Day: $p = 4.3 \times 10^{-98}$ Interaction: $p = 3.0 \times 10^{-75}$
Fig. 1f	%Correct changes with trial types (S2a4 vs. S2b5) and training days	Session numbers from Day 1 to Day 15: 37, 40, 40, 38, 38, 39, 38, 39, 39, 38, 39, 40, 36, 38, 36	Two-way ANOVA Factor 1: Trial Type (n = 2) Factor 2: Day (n = 15)	Trial Type: $F(1,1120) = 20.33$ Day: $F(14,1120) = 0.73$ Interaction: $F(14,1120) = 0.17$	Trial Type: $p = 0$ Day: $p = 0.74$ Interaction: $p = 1$
Fig. 1g	%Correct changes with trial types (S2b4 vs. S2a5) and training days	Session numbers from Day 1 to Day 15: 37, 40, 40, 38, 38, 39, 38, 39, 39, 38, 39, 40, 36, 38, 36	Two-way ANOVA Factor 1: Trial Type (n = 2) Factor 2: Day (n = 15)	Trial Type: $F(1,1120) = 385.24$ Day: $F(14,1120) = 32.96$ Interaction: $F(14,1120) = 3.43$	Trial Type: $p = 6.0 \times 10^{-74}$ Day: $p = 3.4 \times 10^{-74}$ Interaction: $p = 1.8 \times 10^{-5}$
Fig. 1h	Effect of past and future rewards on poke latency on Day 1	37 sessions	Linear regression with four predictors: reward on prior, current, next, and next + 1 trials	Prior: $\beta = -0.04$ Current: $\beta = -0.55$ Next: $\beta = -0.18$ Next + 1: $\beta = -0.12$	Prior: $p = 0.16$ Current: $p = 1.3 \times 10^{-65}$ Next: $p = 2.3 \times 10^{-9}$ Next + 1: $p = 2.9 \times 10^{-5}$
Fig. 1i	Effect of past and future rewards on poke latency on Day 15	36 sessions	Linear regression with four predictors: reward on prior, current, next, and next + 1 trials	Prior: $\beta = -0.04$ Current: $\beta = -0.71$ Next: $\beta = -0.23$ Next + 1: $\beta = -0.067$	Prior: $p = 0.12$ Current: $p = 6.7 \times 10^{-107}$ Next: $p = 6.4 \times 10^{-16}$ Next + 1: $p = 0.014$

**Supplementary Table 4 | Statistical results for Fig. 2**

Figure	Description	Number of Samples	Test	Statistic	P value
Fig. 2d	% of variance explained by the first 5 LCs between Day 1 and Day 15	500 repeats	Two-way ANOVA Factor 1: LC (n = 5) Factor 2: Day (n = 15)	LC: $F(4,4990) = 274897.13$ Day: $F(1,4990) = 26020.86$ Interaction: $F(4,4990) = 80786.91$	LC: $p = 0$ Day: $p = 0$ Interaction: $p = 0$
Fig. 2e	Change of % of variance with training days	500 repeats	One-way ANOVA	$F(14,7485) = 24160.84$	$P = 0$
Fig. 2f	Change of # of LCs with training days	500 repeats	One-way ANOVA	$F(14,7485) = 7975.03$	$P = 0$
Fig. 2g	Change of # of LCs with sequences (S1 vs. S2) and training days	500 repeats	Two-way ANOVA Factor 1: Sequence (n = 2) Factor 2: Day (n = 15)	Sequence Type: $F(1,14970) = 30470.9$ Day: $F(14,4990) = 4884.4$ Interaction: $F(14,4990) = 90.07$	Sequence Type: $p = 0$ Day: $p = 0$ Interaction: $p = 0$

**Supplementary Table 5 | Statistical results for Fig. 3**

Figure	Description	Number of Samples	Test	Statistic	P value
Fig. 3c	Change of the correlation between CCs and task features over training days	500 repeats	One-way ANOVA	CC #1: $F(14,7485) = 210.5$ CC #2: $F(14,7485) = 416.9$ CC #3: $F(14,7485) = 270.3$	CC #1: $p = 0$ CC #2: $p = 0$ CC #3: $p = 0$
Fig. 3e	Effect of manifold alignment and training days on decoding accuracy for cross-problem decoding	500 repeats	Two-way ANOVA Factor 1: Alignment ( $n = 2$ ) Factor 2: Day ( $n = 15$ )	Alignment: $F(1,14970) = 27332.18$ Day: $F(14,14970) = 101.59$ Interaction: $F(14,4990) = 38.06$	Alignment: $p = 0$ Day: $p = 1 \times 10^{-281}$ Interaction: $p = 8.6 \times 10^{-103}$
Fig. 3e	Differences between aligned and misaligned on each day for cross-problem decoding	500 repeats	Post-hoc test Tukey's HSD	Mean differences (Aligned – Misaligned; from Day 1 to 15) 7.9, 11.4, 10.6, 12.2, 10.6, 11.9, 11.9, 11.2, 14.0, 13.7, 14.3, 14.3, 12.7, 12.9, 14.1	$p < 2.3 \times 10^{-6}$ on all days

**Supplementary Table 6 | Statistical results for Fig. 4**

Figure	Description	Number of Samples	Test	Statistic	P value
Fig. 4c	Change of the correlation between CCs and task features over training days	500 repeats	One-way ANOVA	CC #1: $F(14,7485) = 321.7$ CC #2: $F(14,7485) = 295.6$ CC #3: $F(14,7485) = 288.9$	CC #1: $p = 0$ CC #2: $p = 0$ CC #3: $p = 0$
Fig. 4e	Effect of manifold alignment and training days on decoding accuracy for cross-rat decoding	500 repeats	Two-way ANOVA Factor 1: Alignment ( $n = 2$ ) Factor 2: Day ( $n = 15$ )	Alignment: $F(1,14970) = 25295.79$ Day: $F(14,14970) = 62.02$ Interaction: $F(14,4990) = 22.19$	Alignment: $p = 0$ Day: $p = 3.6 \times 10^{-171}$ Interaction: $p = 3.0 \times 10^{-57}$
Fig. 4e	Effect of manifold alignment and training days on decoding accuracy for cross-rat decoding	500 repeats	Two-way ANOVA Factor 1: Alignment ( $n = 2$ ) Factor 2: Day ( $n = 15$ )	Alignment: $F(1,14970) = 25295.79$ Day: $F(14,14970) = 62.02$ Interaction: $F(14,4990) = 22.19$	Alignment: $p = 0$ Day: $p = 3.6 \times 10^{-171}$ Interaction: $p = 3.0 \times 10^{-57}$
Fig. 4f	Differences between aligned and misaligned on each day for cross-rat decoding	500 repeats	Post-hoc tests Tukey's HSD	Mean differences (Aligned – misaligned; from Day 1 to Day 15): 8.2, 9.8, 11.0, 12.4, 11.0, 11.1, 11.6, 11.6, 12.9, 11.3, 12.6, 12.9, 13.0, 12.1, 13.0	$p < 2.3 \times 10^{-6}$ on all days



**Supplementary Table 7 | Statistical results for Fig. 5**

Figure	Description	Number of Samples	Test	Statistic	P value
Fig. 5b	Differences between learning curves on Problem #1 and other problems (#2 – #5)	Number of rats Problem #1: n = 9, Day 1, n = 6 Day 15; Problem #2: n = 9, Day 1, n = 8, Day 15; Problem #3: n = 7, Day 1, n = 8, Day 15; Problem #4: n = 6, Day 1, n = 7, Day 15; Problem #5: n = 6, Day 1, n = 7, Day 15.	Two-way ANOVA Factor 1: Problem (n = 2) Factor 2: Seq. block (n = 20)	Problem #1 vs. #2: F(1,320) = 0.06 Seq. block: F(19,320) = 13.0 Interaction: F(19,320) = 0.66 Problem #1 vs. #3: F(1,280) = 13.7 Seq. block: F(19,280) = 12.9 Interaction: F(19,280) = 1.07 Problem #1 vs. #4: F(1,260) = 9.5 Seq. block: F(19,260) = 7.2 Interaction: F(19,260) = 2.5 Problem #1 vs. #5: F(1,260) = 32.5 Seq. block: F(19,260) = 11.6 Interaction: F(19,260) = 1.7	Problem #1 vs. #2: p = 0.8 Seq. block: p = $1.1 \times 10^{-29}$ Interaction: P = 0.86  Problem #1 vs. #3: p = $2.5 \times 10^{-4}$ Seq. block: p = $1.7 \times 10^{-28}$ Interaction: p = 0.4  Problem #1 vs. #4: p = 0.0023 Seq. block: p = $1.5 \times 10^{-15}$ Interaction: p = $6.2 \times 10^{-4}$  Problem #1 vs. #5: p = $3.3 \times 10^{-8}$ Seq. block: p = $2.7 \times 10^{-25}$ Interaction: p = 0.04
Fig. 5c	Differences between dimensionality reduction on Problem #1 and other problems (#2 – #5)	500 repeats	Two-way ANOVA Factor 1: Problem (n = 2) Factor 2: Day (n = 15)	Problem #1 vs. #2: F(1,14970) = 24027.4 Day: F(14,14970) = 4701.7 Interaction: F(14,14970) = 839.3 Problem #1 vs. #3: F(1,14970) = 8777.0 Day: F(14,14970) = 8172.4 Interaction: F(14,14970) = 584.7 Problem #1 vs. #4: F(1,14970) = 36191.2 Day: F(14,14970) = 3476.1 Interaction: F(14,14970) = 1507.1 Problem #1 vs. #5: F(1,14970) = 13113.6 Day: F(14,14970) = 4945.4 Interaction: F(14,14970) = 598.2	Problem #1 vs. #2: p = 0 Day: p = 0 Interaction: P = 0  Problem #1 vs. #3: p = 0 Day: p = 0 Interaction: p = 0  Problem #1 vs. #4: p = 0 Day: p = 0 Interaction: p = 0  Problem #1 vs. #5: p = 0 Day: p = 0 Interaction: p = 0
Fig. 5d	Differences between schema evolution on Problem #1 and other problems (#2 – #5)	500 repeats	Two-way ANOVA Factor 1: Problem (n = 2) Factor 2: Day (n = 15)	Problem #1 vs. #2: F(1,14970) = 5525.8 Day: F(14,14970) = 7939.9 Interaction: F(14,14970) = 423.5 Problem #1 vs. #3: F(1,14970) = 6822.1 Day: F(14,14970) = 9877.7 Interaction: F(14,14970) = 336.3 Problem #1 vs. #4: F(1,14970) = 6240.8 Day: F(14,14970) = 6718.9 Interaction: F(14,14970) = 157.2 Problem # vs. #5: F(1,14970) = 5077.6 Day: F(14,14970) = 8920 Interaction: F(14,14970) = 473.6	Problem #1 vs. #2: p = 0 Day: p = 0 Interaction: P = 0  Problem #1 vs. #3: p = 0 Day: p = 0 Interaction: p = 0  Problem #1 vs. #4: p = 0 Day: p = 0 Interaction: p = 0  Problem #1 vs. #5: p = 0 Day: p = 0 Interaction: p = 0

**Supplementary Table 8 | Statistical results for Extended Data Fig. 1**

Problem #1	n = 9, 9, 9, 9, 9, 9, 9, 9, 9, 9, 9, 9, 9, 9, 8, 9, 9, 7, 2, NA rats from Day 1 to Day 23. (NA: Not Available) $F_R(1,330) = 201.2$ , $p = 5.5 \times 10^{-36}$ ; $F_D(21, 330) = 13.5$ ; $p = 3.4 \times 10^{-33}$ ; interaction: $F(21, 330) = 10$ , $p = 8.0 \times 10^{-25}$
Problem #2	n = 9, 9, 8, 8, 8, 8, 8, 8, 7, 8, 8, 8, 5, 8, 8, 7, 8, 5, 3, 3, 1, NA, NA rats from Day 1 to Day 23. $F_R(1,248) = 143.2$ , $p = 2.4 \times 10^{-26}$ ; $F_D(20,248) = 8$ ; $p = 1.0 \times 10^{-17}$ ; interaction: $F(20,248) = 6.4$ , $p = 8.3 \times 10^{-14}$
Problem #3	n = 7, 8, 8, 8, 8, 8, 8, 8, 7, 8, 8, 8, 7, 8, 8, 6, 7, 7, 6, NA, NA, NA rats from Day 1 to Day 23. $F_R(1,262) = 358.9$ , $p = 5.3 \times 10^{-51}$ ; $F_D(19,262) = 8.1$ ; $p = 1.6 \times 10^{-17}$ ; interaction: $F(19,262) = 6.1$ , $p = 8.1 \times 10^{-13}$
Problem #4	n = 6, 7, 8, 6, 6, 7, 7, 7, 8, 7, 8, 8, 8, 8, 8, 5, 7, NA, NA, NA, NA, NA, NA rats from Day to Day 23. $F_R(1,208) = 254.7$ , $p = 5.7 \times 10^{-38}$ ; $F_D(16,208) = 5.5$ ; $p = 7.7 \times 10^{-10}$ ; interaction: $F(16,208) = 3.0$ , $p = 1.3 \times 10^{-4}$
Problem #5	n = 6, 7, 7, 7, 7, 6, 7, 7, 7, 6, 7, 6, 6, 7, 7, 7, NA, NA, NA, NA, NA, NA rats from Day 1 to Day 23. $F_R(1,194) = 349.3$ , $p = 3.0 \times 10^{-45}$ ; $F_D(16,194) = 7.9$ ; $p = 2.2 \times 10^{-14}$ ; interaction: $F(16,194) = 7.2$ , $p = 6.0 \times 10^{-13}$
Rat #J016	n = 4, 4, 4, 4, 4, 4, 4, 4, 4, 4, 4, 4, 4, 3, 2, 1, 1, 1, 1, 1, 1 problems from Day 1 to Day 23. $F_R(1,96) = 31.4$ , $p = 2.0 \times 10^{-7}$ ; $F_D(22,96) = 7.2$ ; $p = 2.3 \times 10^{-12}$ ; interaction: $F(22,96) = 6.0$ , $p = 1.9 \times 10^{-10}$
Rat #J067	n = 5, 5, 5, 4, 4, 5, 5, 5, 5, 5, 4, 5, 5, 5, 5, 5, 3, 3, 3, 2, 1, 1 problems from Day 1 to Day 23. $F_R(1,144) = 1108$ , $p = 1.7 \times 10^{-69}$ ; $F_D(22,144) = 13.0$ ; $p = 2.2 \times 10^{-24}$ ; interaction: $F(22,144) = 12.9$ , $p = 3.7 \times 10^{-24}$
Rat #J081	n = 5, 5, 5, 5, 5, 5, 5, 5, 5, 5, 5, 5, 5, 5, 5, 5, 4, 3, 3, 3, 2, 1, 1 problems from Day 1 to Day 23. $F_R(1,148) = 166.6$ , $p = 5.3 \times 10^{-26}$ ; $F_D(22,148) = 7.8$ ; $p = 1.1 \times 10^{-15}$ ; interaction: $F(22,148) = 6.0$ , $p = 7.2 \times 10^{-12}$
Rat #J083	n = 4, 4, 5, 5, 5, 5, 5, 5, 5, 5, 5, 5, 4, 5, 5, 4, 4, 4, 2, 1, 1 problems from Day 1 to Day 23. $F_R(1,148) = 18.6$ , $p = 2.9 \times 10^{-5}$ ; $F_D(22,148) = 3.5$ ; $p = 3.4 \times 10^{-6}$ ; interaction: $F(22,148) = 1.8$ , $p = 0.02$
Rat #J086	n = 2, 2, 1, 1, 1, 1, 1, 1, 1, 1, 1, 1, 1, 1, 1, 1, 4, 1, 1, 1, 1, 1 problems from Day 1 to Day 23. $F_R(1,10) = 61.6$ , $p = 1.4 \times 10^{-5}$ ; $F_D(22,10) = 4.0$ ; $p = 0.01$ ; interaction: $F(22,10) = 3.6$ , $p = 0.02$
Rat #J088	n = 4, 5, 5, 4, 5, 5, 5, 5, 5, 5, 5, 5, 4, 4, 5, 4, 5, 4, 4, 2, 1, NA problems from Day 1 to Day 23. $F_R(1,146) = 407.4$ , $p = 4.4 \times 10^{-44}$ ; $F_D(21,146) = 14.6$ ; $p = 3.0 \times 10^{-26}$ ; interaction: $F(21,146) = 10.7$ , $p = 2.3 \times 10^{-20}$
Rat #J089	n = 5, 5, 5, 5, 5, 5, 5, 5, 5, 4, 5, 5, 5, 5, 5, 5, 4, 4, 3, 2, 1, NA problems from Day 1 to Day 23. $F_R(1,152) = 134.1$ , $p = 1.3 \times 10^{-22}$ ; $F_D(21,152) = 7.8$ ; $p = 2.3 \times 10^{-15}$ ; interaction: $F(21,152) = 4.4$ , $p = 2.6 \times 10^{-8}$
Rat #J091	n = 3, 5, 5, 5, 5, 5, 4, 4, 5, 4, 5, 5, 4, 4, 5, 5, 5, 4, 3, 3, 1, NA, NA problems from Day 1 to Day 23. $F_R(1,136) = 256.1$ , $p = 4.5 \times 10^{-33}$ ; $F_D(20,136) = 16.6$ ; $p = 2.6 \times 10^{-27}$ ; interaction: $F(20,136) = 14.7$ , $p = 5.7 \times 10^{-25}$
Rat #J092	n = 5, 5, 5, 5, 4, 4, 4, 5, 4, 5, 5, 5, 4, 5, 5, 3, 5, NA, 23, NA, NA, NA problems from Day 1 to Day 23. $F_R(1,128) = 1557$ , $p = 1.7 \times 10^{-73}$ ; $F_D(18,128) = 16.8$ ; $p = 1.5 \times 10^{-25}$ ; interaction: $F(18,128) = 14.3$ , $p = 1.1 \times 10^{-22}$

**Supplementary Table 9 | Statistical results for Extended Data Fig. 2**

Figure	Description	Number of Samples	Test	Statistic	P value
Extended Fig. 2a	Effect of trial types and training on reaction time	Day 1: n = 37 sessions Day 15: n = 36 sessions	Two-way ANOVA Factor 1: Trial Type Factor 2: Day	Trial Type: F(23,1516) = 15.0 Day: F(1,1516) = 138.8 Interaction: F(23,1516) = 6.9	Trial Type: $p = 1.2 \times 10^{-52}$ Day: $p = 1.0 \times 10^{-30}$ Interaction: $p = 4.6 \times 10^{-21}$
Extended Fig. 2b	Effect of trial types and training on reaction time	n = 37, 40, 40, 38, 38, 39, 38, 39, 39, 38, 39, 40, 36, 38, 36 sessions from Day 1 to 15	Two-way ANOVA Factor 1: Trial Type Factor 2: Day	Reward vs. Non-Reward: F(1,647) = 246.9 Day: F(14,647) = 2.5 Interaction: F(14,647) = 2.8	Reward vs. Non-Reward: $p = 2.3 \times 10^{-47}$ Day: $p = 0.002$ Interaction: $p = 5.0 \times 10^{-4}$
Extended Fig. 2c	Effect of trial types and training on reaction time		Two-way ANOVA Factor 1: Trial Type Factor 2: Day	S2a4+ vs. S2b5+: F(1,1088) = 0.5 Day: F(14,1088) = 0.53 Interaction: F(14,1088) = 0.1	S2a4+ vs. S2b5+: $p = 0.48$ Day: $p = 0.9$ Interaction: $p = 1$
Extended Fig. 2d	Effect of trial types and training on reaction time		Two-way ANOVA Factor 1: Trial Type Factor 2: Day	S2b4- vs. S2a5-: F(1,1055) = 7.0 Day: F(14,1055) = 1.44 Interaction: F(14,1055) = 0.35	S2b4- vs. S2a5-: $p = 0.008$ Day: $p = 0.13$ Interaction: $p = 0.99$
Extended Fig. 2e left panel	Effect of problems and training on %correct		Two-way ANOVA Factor 1: Problem Factor 2: Day	Problem: F(4,500) = 3.67 Day: F(14, 500) = 39.76 Interaction: F(56, 500) = 0.52	Problem: $p = 0.006$ Day: $p = 4.7 \times 10^{-72}$ Interaction: $p = 1$
Extended Fig. 2e middle panel	Effect of problems and training on %correct		Two-way ANOVA Factor 1: Problem Factor 2: Day	Problem: F(4,500) = 11.3 Day: F(14, 500) = 14.0 Interaction: F(56, 500) = 0.68	Problem: $p = 8.7 \times 10^{-9}$ Day: $p = 2.5 \times 10^{-28}$ Interaction: $p = 0.96$
Extended Fig. 2e right panel	Effect of problems and training on %correct		Two-way ANOVA Factor 1: Problem Factor 2: Day	Problem: F(4,500) = 2.62 Day: F(14, 500) = 22.3 Interaction: F(56, 500) = 0.83	Problem: $p = 0.035$ Day: $p = 2.6 \times 10^{-44}$ Interaction: $p = 0.8$
Extended Fig. 2f left panel	Effect of problems and training on reaction time		Two-way ANOVA Factor 1: Problem Factor 2: Day	Problem: F(4,500) = 4.76 Day: F(14, 500) = 1.75 Interaction: F(56, 500) = 0.51	Problem: $p = 9 \times 10^{-4}$ Day: $p = 0.04$ Interaction: $p = 1$ .
Extended Fig. 2f middle panel	Effect of problems and training on reaction time		Two-way ANOVA Factor 1: Problem Factor 2: Day	Problem: F(4,477) = 1.84 Day: F(14, 477) = 0.45 Interaction: F(56, 477) = 0.37	Problem: $p = 0.12$ Day: $p = 0.96$ Interaction: $p = 1$ .
Extended Fig. 2f right panel	Effect of problems and training on reaction time		Two-way ANOVA Factor 1: Problem Factor 2: Day	Problem: F(4,458) = 6.16 Day: F(14, 458) = 1.25 Interaction: F(56, 458) = 0.47	Problem: $p = 7.8 \times 10^{-5}$ Day: $p = 0.24$ Interaction: $p = 1$