

Supplementary Table 1: Selected statistics for the reported sessions; column two also indicates the figure(s) this session is shown in. Same identity trial aggregates are indicated by the S string, different identity trial aggregates by the D string. Microstimulation during Cue2 is indicated by the MSC02 string, d: d', c: criterion c, effect size: percent correct difference between trials with and without microstimulation, P denotes the significance of the effect size (Fisher's exact test), a value of 0 denotes < 0.000000005. This table contains all sessions for experiments 1, 2, 6, and 7.

Session	Figure	Current μ A	Notes	Subject	Target	#Trials noMS	#Trials MS	d(S,D)	d(\$ MSC02 D MSC02)	c(S,D)	c(\$ MSC02 D MSC02)	effect-size %(\$ MSC02 S)	effect-size %(\$ MSC02-D)	P(\$ MSC02-S)	P(D MSC02-D)
1301301432		300		1	ML	1086	532	1.686538965	0.858956888	-0.322729316	0.863789605	-54.61612844		0	0
1302011544	F2c, S7a	300		1	ML	1840	528	2.070566448	1.321942213	-0.174125069	1.739065271	-74.62511202		0	0
1302131221	F2a, F3ab, F4d, S7b	300	200ms MS dur	1	AM	1513	512	1.801223111	0.513693857	-0.471112831	1.340584859	-77.56848668		0	0
1302131221	S7d	300	50ms MS dur	1	AM	633	205	1.722945485	1.480569841	-0.361200103	0.788507994	-40.85041256		0	0.00000284
1302141229	S1d	300		1	AM	917	298	1.998003529	0.803505246	-0.194793308	1.795925832	-80.20882772		0	0
1302141229	S1c	100		1	AM	320	110	1.892470749	1.436327189	-0.188681244	0.077496705	-13.2664437		0.038950037	1
1302151316	F2g	300		1	AF	1366	543	2.15596015	1.933895824	-0.022354344	1.172632834	-44.58882611		0	0
1302161303	F2e	300		1	AL	575	184	1.539885097	0.361516264	-0.302243749	1.125427723	-68.57680251		0	0.00001072
1303271654	F3ab, F6bd, S1b	300		1	AM	127	66	1.637281533	0.264544679	-0.022980467	1.307259132	-68		0.000000005	0.093591932
1303271654	S1a	100		1	AM	301	98	2.224427902	1.570660717	0.194892765	1.233755842	-49.35897436		0	0.195888465
1303301907		300		1	AM	156	71	1.761764574	Inf	-0.375561198	Inf	-37.05223881		0	0.001566806
1303311208	F2b, F3ab, S7c	300		2	AM	864	480	1.277114884	0.480854723	-0.209986223	1.282192326	-65.31720366		0	0
1304011724	F3ab	300		1	AM	480	307	1.440293741	1.336884534	-0.218667446	0.493740359	-25.67438908		0.00000133	0.000012209
1304021204	F3ab, F4f	300		2	AM	246	122	1.301361205	0.534792829	-0.641113173	0.871981761	-62.90584416		0	0.00001194
1304031338	F8bd	300		1	AM	173	80	1.861416357	Inf	-0.20420844	Inf	-68.997669		0	0.001446435
1304031338	F3ab	300		1	AM	176	94	1.270430179	Inf	-0.180550624	Inf	-67.36353078		0	0.000002921
1304051608	F3ab	300		1	AM	177	209	1.98976802	1.021189969	-0.696133228	0.966930807	-63.047113805		0	0.00001402
1304071529	F3ab	300		1	AM	647	146	1.802542039	1.025407537	-0.274400841	0.385211415	-32.94123486		0.000000005	0.208795278
1304101638	F3ab	300		1	AM	54	20	2.443936389	Inf	-0.42285432	Inf	-75		0.000063605	0.11747686
1304111326	F3ab, S1h	200		2	AM	301	133	1.840544701	0.321287007	-0.37325991	1.753862322	-84.65423465		0	0.000000841
1304111326	S1g	100		2	AM	21	13	2.188061915	1.533703888	0.126609391	-0.200736372	0		1	0.55
1304141610		200		1	OUTFP	172	83	1.934655682	0.869489931	0.077080954	0.062455605	-16.81722043		0.079943678	0.056937392
1304161430	S1k	300		2	ML	381	182	2.285720434	1.28797043	-0.2040459	1.153307535	-60.57316065		0	0.001435869
1304161430	F2d, S1j	200		2	ML	376	199	2.459825744	1.0931616	-0.262491306	1.189926205	-67.22033898		0	0.002294058
1304161430	S1i	200		2	ML	170	65	2.49195975	1.655707927	-0.237560072	0.706266581	-38.2647386		0.000007134	0.228765611
1304171554	S1f, S5bd	200		2	AM	231	120	2.11828775	Inf	-0.66064907	Inf	-81.8049271		0	0.000000001
1304171554	S1e	100		2	AM	201	111	1.999388284	0.833755544	-0.383299985	0.814499434	-57.12121212		0	0.022418098
1304172302	F4a, S2c	200		1	OUTFP	147	51	2.15079295	1.909191757	-0.233775242	-0.112974645	0		0.6843922	1
1305141946		300		1	AM	53	99	1.976028392	1.388292366	0.079563268	0.358108043	-18.66028708		0.176379152	1
1305171419		300		1	AM	140	57	2.150252837	0.577931135	0.316838661	0.385524183	-13.43236074		0.005995795	0.066951616
1305261621		300		1	AM	259	176	1.910512981	1.23482753	-0.090081361	0.6512936	-36.69617894		0.000000085	0.083771469
1305271525		300		1	AM	442	332	1.888896931	0.561654617	0.004086575	0.382622908	-8.209255533		0	0.094666114
1305301548		300		1	AM	353	257	1.55186714	0.833711566	-0.10144382	0.168128093	-21.16448692		0.000253277	0.668963621
1306011734		300		2	AM	303	194	1.832179976	1.159005192	-0.51674692	0.236647291	-28.99042915		0.000000006	0.017695631
1306061659		200		2	AM	356	243	1.940681658	1.541998093	-0.340403567	-0.076540929	-10.33750404		0.015675491	0.785365392
1307111430		300		1	AM	797	522	1.954949401	0.856918057	-0.155148184	0.166715805	-7.041652441		0	0.039021503
1307121543		300		1	AM	217	146	1.242770144	0.929423068	-0.417054733	0.07188072	-19.76895119		0.003377239	0.112495225
1307181509	F3ab, F5bd, S2b	100		1	AM	415	274	1.605289883	0.887536951	-0.381253665	0.802227269	-52.1773399		0	0.000006446
1307190955	S2a	50		1	AM	126	81	1.379884696	1.102445202	-0.277479218	0.485210789	-30.70175439		0.001294164	0.052377865
1307211710	F3ab	300		1	AM	515	310	2.146538772	1.30231645	-0.418159013	0.121034989	-23.00887167		0.000000001	0.467498474
1307251707	F3ab	200		2	AM	400	287	1.76275855	1.090637891	-0.752303003	0.160983617	-29.92021728		0	0.00088359
1307261725		50		2	AM	237	145	1.748759193	1.742225737	-0.315142619	-0.047670381	-6.198736049		0.271094102	0.247145322
1307271417		50		2	AM	229	150	2.356376789	2.454605527	-0.410416897	0.510805263	-18.07673389		0.000594665	0.00040171
1307291233	F3ab, F6h	300		2	AM	471	283	1.90948344	1.275258778	-0.583592397	0.310067899	-30.96381506		0	0.000180501
1307291233	F3ab	300		2	AM	250	172	2.184634337	1.144492757	-0.382168487	-0.234603312	-13.97011046		0.004882798	0.048406398
1307301727	F3ab	300		2	AM	763	510	2.38120399	1.354773952	-0.396312687	0.094545468	-22.37340154		0	0.844639036
1308051316	F3ab	300		2	AM	68	38	1.375761283	1.020076233	-0.193007478	-0.510038116	-18.96511724		1	0.259031251
1308071929	F3ab	300		1	AM	152	107	1.451160743	0.655443358	-0.229330757	0.384721353	-35.2915952		0.000423821	0.518218162
1308131314		300		2	AM	235	161	1.877212291	1.071689749	-0.291954064	0.148897517	-24.01538929		0.000075157	0.866929025
1308131732		300		1	AM	371	262	1.701378561	1.209591991	-0.33110299	0.306159467	-26.39646279		0.000000249	0.018102793
1309012053		300		2	MF	75	51	1.90257267	0.464061356	-0.252760625	0.442459072	-46.90476191		0.00017951	1
1309051601	F2f	300		2	MF	222	145	1.955009282	1.257863679	-0.453104128	0.537986762	-38.74969295		0.000000002	0.005761279
1309061507		300		2	MF	422	275	2.575029573	2.003081902	-0.55485854	-0.170614248	-17.02972384		0.000000306	0.011291782
1309071812		300		2	MF	119	67	1.864198193	0.653828851	-0.69626231	0.593908551	-55.353902		0.000000002	0.050734755
1309091051		300		2	MF	20	14	Inf	Inf	#NAME?	Inf	-37.5		0.2	0.496503497
1309091145		300		2	MF	42	24	1.720498203	0.047466993	-0.474928635	-0.34237286	-26.62337662		0.084155598	0.230917874
1309101346		300		2	MF	184	129	2.500065163	1.303646546	-0.072691111	-0.257136145	6.5625		0.000008988	0.376767668
1309171637		300		2	MF	104	74	2.403206433	1.722022725	-0.558257811	0.206559162	-21.71945701		0.003865381	0.281446625
1309211649		300		2	MF	19	18	0.914704517	0.927860225	-0.108596563	0.603640411	-26.98412698		0.357517483	0.595588235

Session	Figure	Current μ A	Notes	Subject	Target	#Trials_noMS	#Trials_MS	d(S.D)	d(S_MSC02.D_MSC02)	c(S.D)	c(S_MSC02.D_MSC02)	effect-size_1%(S_MSC02-S)	effect-size_1%(D_MSC02-D)	P(S_MSC02-S)	P(D_MSC02-D)
1309221807		300		2	MF	193	120	2.155107069	1.82383731	-0.268709131	0.032750936	-10.05462615	3.688853248	0.082891797	0.670392988
1309241404		300		2	MF	71	51	2.630459159	1.875879435	-0.453595459	-0.029481849	-12.82051282	1.262626263	0.181502388	1
1309241541		300		2	MF	27	20	Inf	1.227097233	Inf	-0.294909252	10.38961039	-37.5	0.62254902	0.024347826
1208031412	S9b	0	muscimol, v13	1	AF	456	1230	1.334405959	1.299552727	-0.095739618	0.13784015	-8.159901092	6.838226844	0.026174243	0.043820568
1209111549	S9a	0	muscimol, v20	1	AM	357	1490	0.491839513	0.713217724	-0.428569994	-0.309698957	-0.260718424	9.117125111	1	0.058693545
1210081418	S8b	100	500ms dualMS	1	AM	468	442	0.775377968	0.587022768	-0.162229218	-0.460915581	6.589129678	-15.56631776	0.10685076	0.004222122
1211021506	S8b	300	300ms dualMS	1	AM	1193	1190	1.452512756	0.799370481	0.259157781	-0.304132036	7.944138258	-29.97273776	0.003496238	0
1302131221	F4c	300	objects	1	AM	1253	421	2.939580468	2.547262118	-0.076845037	0.424133334	-13.68265881	3.704206242	0.00000292	0.109259648
1304021204	F4e	300	objects	2	AM	475	213	2.80151862	2.745377517	0.131238348	-0.010305369	1.879432624	-2.377695526	0.695079514	0.490378957
1302131221	S4ac	300	nonround objects	1	AM	363	118	2.948528967	2.62623652	-0.181459254	0.1704216	-7.769338959	2.907369844	0.035210958	1
1304021204	S4bd	300	nonround objects	2	AM	131	59	3.144937552	1.993971266	0.06007919	-0.455590548	-0.79533404	-24.28355958	1	0.021936345

Supplementary Table 2: Selected statistics for the performance bars shown in figures 2, 4, 5, 6, 8, 9, as well as supplementary figures 1, 2, 4, 5, 7, 8, 9; column four indicates which figure panel a row corresponds to. Same identity trial aggregates are indicated by the S string, different identity trial aggregates by the D string. Microstimulation during Cue2 is indicated by the MSC string, effect size: percentage points difference for correct trials between trials with and without microstimulation, P denotes the significance of the effect size (Fisher's exact test), a value of 0 denotes < 0.000000005. Column starting with N- give the number of trials in each of the different trial types. Experiments with more than 1 stimulus category are stacked vertically to keep the table size constant.

Session	Subject	Target	Figure	Category	Effect Size [%] (S_MSC-S)	Effect Size [%] (D_MSC-D)	P (S_MSC-S)	P (D_MSC-D)	N-Same Hit	N-Same Miss	N-Diff Hit	N-Diff Miss	N-Same_MSC Hit	N-Same_MSC Miss	N-Diff_MSC Hit	N-Diff_MSC Miss
1302131221	1	AM	F2a	32faces	-77.56848668	27.86954151	0	0	613	57	497	249	33	204	223	13
1303311208	2	AM	F2b	32faces	-65.31720366	27.01907064	0	0	332	82	283	142	36	206	205	14
1302011544	1	ML	F2c	32faces	-74.62511202	18.63787504	0	0	736	94	683	165	34	208	242	2
1304161430	2	ML	F2d	32faces	-67.22033898	12.54295533	0	0.002294058	165	12	165	33	26	74	93	4
1302161303	1	AL	F2e	32faces	-68.57680251	22.42553192	0	0.000010172	236	39	187	88	15	72	85	9
1309051601	2	MF	F2f	32faces	-38.74969295	17.83783784	0.000000002	0.005761279	109	9	70	30	37	32	65	9
1302151316	1	AF	F2g	32faces	-44.58882611	12.93752883	0	0	561	88	540	92	113	157	243	4
1304172302	1	OUTFP	F4a	32faces	-4.761904762	0	0.6843922	1	57	6	52	13	18	3	20	5
1302131221	1	AM	F4c	28objects	-13.68265881	3.704206242	0.000000292	0.109259648	539	35	505	45	146	36	192	9
1302131221	1	AM	F4d	32faces	-77.56848668	27.86954151	0	0	613	57	497	249	33	204	223	13
1304021204	2	AM	F4e	28objects	1.879432624	-2.377695526	0.695079514	0.490378957	211	24	224	15	99	9	95	9
1304021204	2	AM	F4f	32faces	-62.90584416	36.89104788	0	0.000001194	101	11	66	65	18	48	48	7
1307181509	1	AM	F5ac	3faces	-52.55717256	20.2467344	0.000000075	0.09515333	57	8	28	25	13	24	19	7
1307181509	1	AM	F5ac	3apples	-29.03225807	16.86567164	0.003116073	0.140835948	54	8	49	18	18	13	18	2
1307181509	1	AM	F5ac	3citrus fruits	-16.24242424	21.47335423	0.056075057	0.038729844	46	4	45	21	25	8	26	3
1307181509	1	AM	F5ac	3pots	-11.28117914	13.63636364	0.190729057	0.053592911	45	4	57	9	29	7	28	0
1307181509	1	AM	F5ac	3clocks	-9.97983871	3.86996904	0.196738528	0.727205124	58	6	45	6	25	6	35	3
1307181509	1	AM	F5bd	32faces	-52.1773399	23.03517152	0	0.000000646	179	24	130	66	45	80	126	15
1303271654	1	AM	F6ac	4face_cartoons	-70.9445347	30.3030303	0	0.000454005	130	9	77	44	7	24	31	2
1303271654	1	AM	F6ac	4face_linedrawings	-32.57452575	20.13184584	0.000006189	0.027343378	123	12	79	37	24	17	30	4
1303271654	1	AM	F6ac	4face_moonneys	-40.40977147	13.8962963	0.000000324	0.079107836	112	23	103	22	20	27	26	1
1303271654	1	AM	F6ac	4face_silhouettes	-51.59646739	13.65079365	0.00000173	0.101263743	105	23	79	26	7	16	32	4
1303271654	1	AM	F6bd	32faces	-68	13.81147541	0.000000005	0.093591932	48	12	48	13	3	22	37	3
1307291233	2	AM	F6eg	4face_cartoons	-12.5	26.93602694	0.109975768	0.018442576	53	3	36	30	23	5	22	5
1307291233	2	AM	F6eg	4face_linedrawings	-10.3021978	-1.786600496	0.275434372	1	51	5	41	24	21	5	19	12
1307291233	2	AM	F6eg	4face_moonneys	-34.96462264	12.06896552	0.000112069	0.09021437	50	3	51	7	19	13	30	0
1307291233	2	AM	F6eg	4face_silhouettes	-26.84729064	34.572697	0.000407034	0.000628709	57	1	30	23	20	8	31	3
1307291233	2	AM	F6fh	32faces	-30.96381506	18.36213669	0	0.000180501	227	15	147	81	93	55	111	23
1304031338	1	AM	F8ac	4house_linedrawings	-49.07888522	27.37967914	0.000002958	0.002981192	61	12	54	31	10	19	30	3
1304031338	1	AM	F8ac	4house_cartoons	-47.98534799	37.37824675	0.00000007	0.000151311	69	9	41	36	17	25	29	3
1304031338	1	AM	F8ac	4house_silhouettes	-41.86909582	22.88477035	0.000011629	0.010073837	63	13	52	21	16	23	32	2
1304031338	1	AM	F8ac	4face_moonneys	-65.71428571	20.25089606	0	0.012855399	64	6	69	24	9	26	34	2
1304031338	1	AM	F8ac	4face_moonneys_inverted	-26.55172414	24.83552632	0.000054788	0.008489147	84	3	50	26	28	12	29	3
1304031338	1	AM	F8bd	32faces	-68.997669	23.37662338	0	0.001446435	68	10	59	18	8	36	31	0
1302141229	1	AM	F9	32faces	-80.20882772	19.66522839	0	0	380	50	371	99	12	135	141	2
1303271654	1	AM	F9	4face_cartoons	-70.9445347	30.3030303	0	0.000454005	130	9	77	44	7	24	31	2
1304031338	1	AM	F9	4face_moonneys	-65.71428571	20.25089606	0	0.012855399	64	6	69	24	9	26	34	2
1303271654	1	AM	F9	4face_silhouettes	-51.59646739	13.65079365	0.00000173	0.101263743	105	23	79	26	7	16	32	4
1304031338	1	AM	F9	4house_linedrawings	-49.07888522	27.37967914	0.000002958	0.002981192	61	12	54	31	10	19	30	3
1304031338	1	AM	F9	4house_cartoons	-47.98534799	37.37824675	0.00000007	0.000151311	69	9	41	36	17	25	29	3
1304031338	1	AM	F9	4house_silhouettes	-41.86909582	22.88477035	0.000011629	0.010073837	63	13	52	21	16	23	32	2
1303271654	1	AM	F9	4face_linedrawings	-32.57452575	20.13184584	0.000006189	0.027343378	123	12	79	37	24	17	30	4

Session	Subject	Target	Figure	Category	Effect Size [%] (S_MSC-S)	Effect Size [%] (D_MSC-D)	P (S_MSC-S)	P (D_MSC-D)	N-Same Hit	N-Same Miss	N-Diff Hit	N-Diff Miss	N-Same_MSC Hit	N-Same_MSC Miss	N-Diff_MSC Hit	N-Diff_MSC Miss
1307181509	1	AM	F9	3apples	-29.03225807	16.86567164	0.003116073	0.140835948	54	8	49	18	18	13	18	2
1307181509	1	AM	F9	3citrus fruits	-16.24242424	21.47335423	0.056075057	0.038729844	46	4	45	21	25	8	26	3
1307181509	1	AM	F9	3spots	-11.28117914	13.63636364	0.190729057	0.053592911	45	4	57	9	29	7	28	0
1307181509	1	AM	F9	3clocks	-9.97983871	3.86996904	0.196738528	0.727205124	58	6	45	6	25	6	35	3
1302131221	1	AM	F9	14nonround_objects	-7.769338959	2.907369844	0.035210958	1	214	11	92	10	69	10	27	2
1303271654	1	AM	S1a	32faces	-49.35897436	7.384910486	0	0.195888465	128	28	123	13	17	35	45	1
1303271654	1	AM	S1b	32faces	-68	13.81147541	0.000000005	0.093591932	48	12	48	13	3	22	37	3
1302141229	1	AM	S1c	32faces	-13.2664437	1.124422026	0.038950037	1	136	20	121	35	34	12	48	13
1302141229	1	AM	S1d	32faces	-80.20882772	19.66522839	0	0	380	50	371	99	12	135	141	2
1304171554	2	AM	S1e	32faces	-57.12121212	15.97262952	0	0.022418098	99	9	68	25	19	36	49	6
1304171554	2	AM	S1f	32faces	-91.8049271	34.51327434	0	0.000000001	112	5	74	39	2	49	67	0
1304111326	2	AM	S1g	32faces	0	-17.46031746	1	0.55	10	2	8	1	5	1	5	2
1304111326	2	AM	S1h	32faces	-84.65423465	26.44300144	0	0.000000841	129	14	109	45	3	51	70	2
1304161430	2	ML	S1i	32faces	-38.2647386	9.412650602	0.000007134	0.228765611	81	6	70	13	17	14	30	2
1304161430	2	ML	S1j	32faces	-67.22033898	12.54295533	0	0.002294058	165	12	165	33	0	74	93	4
1304161430	2	ML	S1k	32faces	-60.57316065	13.77684652	0	0.001435869	174	17	152	32	29	66	80	3
1307190955	1	AM	S2a	3faces	-23.64230298	14.00076717	0.018489572	0.207010019	62	17	44	35	17	14	23	10
1307190955	1	AM	S2a	3apples	-18.52564103	10.07326007	0.013462203	0.422625356	71	7	59	19	29	11	24	4
1307190955	1	AM	S2a	3citrus fruits	-0.421200421	19.63294921	1	0.075545628	69	8	42	29	33	4	26	7
1307190955	1	AM	S2a	3spots	-3.147128245	-4.812030075	0.733437275	0.448120968	74	8	66	4	27	4	34	4
1307190955	1	AM	S2a	3clocks	-8.760683761	12.17320261	0.138205726	0.136035838	74	4	59	13	31	5	32	2
1307190955	1	AM	S2a	32faces	-30.70175439	19	0.001294164	0.052377865	55	11	33	17	20	18	34	6
1307181509	1	AM	S2b	3faces	-52.55717256	20.2467344	0.000000075	0.09515333	57	8	28	25	13	24	19	7
1307181509	1	AM	S2b	3apples	-29.03225807	16.86567164	0.003116073	0.140835948	54	8	49	18	18	13	18	2
1307181509	1	AM	S2b	3citrus fruits	-16.24242424	21.47335423	0.056075057	0.038729844	46	4	45	21	25	8	26	3
1307181509	1	AM	S2b	3spots	-11.28117914	13.63636364	0.190729057	0.053592911	45	4	57	9	29	7	28	0
1307181509	1	AM	S2b	3clocks	-9.97983871	3.86996904	0.196738528	0.727205124	58	6	45	6	25	6	35	3
1307181509	1	AM	S2b	32faces	-52.1773399	23.03517152	0	0.000000646	179	24	130	66	45	80	126	15
1304172302	1	OUTFP	S2c	3faces	-8.378970427	-3.16017316	0.461256349	0.815604896	56	27	51	19	13	9	23	10
1304172302	1	OUTFP	S2c	3apples	-12.51457443	3.090623363	0.033330896	1	80	3	66	17	26	5	19	4
1304172302	1	OUTFP	S2c	3citrus fruits	-19.34883721	22.33766234	0.008331403	0.020074961	82	4	51	26	19	6	31	4
1304172302	1	OUTFP	S2c	3spots	1.162790698	-2.662037037	1	0.392243103	85	1	95	1	22	0	26	1
1304172302	1	OUTFP	S2c	3clocks	-3.603254552	-2.33384069	0.687115149	0.469090909	83	6	72	1	26	3	26	1
1304172302	1	OUTFP	S2c	32faces	-4.761904762	0	0.6843922	1	57	6	52	13	18	3	20	5
1302131221	1	AM	S4ac	14nonround_objects	-7.769338959	2.907369844	0.035210958	1	214	11	92	10	69	10	27	2
1304021204	2	AM	S4bd	14nonround_objects	-0.79533404	-24.28355958	1	0.021936345	86	6	37	2	38	3	12	5
1304171554	2	AM	S5ac	4house_line drawings	-0.679347826	2.727272727	1	0.769278856	63	6	14	56	29	3	5	17
1304171554	2	AM	S5ac	4house_cartoons	-25.71428571	24.70588235	0.008209015	0.027990954	54	9	24	44	18	12	18	12
1304171554	2	AM	S5ac	4house_silhouettes	-17.59142497	36.80555556	0.008401914	0.000553563	60	1	32	40	21	5	26	6
1304171554	2	AM	S5ac	4face_mooneys	-68.36065574	12.29379419	0	0.053963901	60	1	57	10	9	21	37	1
1304171554	2	AM	S5ac	4face_mooneys_inverted	-43.67201426	25.58775287	0.000016649	0.004425847	56	10	42	17	14	20	30	1
1304171554	2	AM	S5bd	32faces	-91.8049271	34.51327434	0	0.000000001	112	5	74	39	2	49	67	0
1302011544	1	ML	S7a	32faces MSC10	-20.19220852	-1.403379983	0	0.614406579	736	94	683	165	176	81	239	63
1302011544	1	ML	S7a	32faces MSC02	-74.62511202	18.63787504	0	0	736	94	683	165	34	208	242	2
1302011544	1	ML	S7a	32faces MSC12	-31.31620823	-6.936504875	0	0.016535928	736	94	683	165	152	113	198	71
1302131221	1	AM	S7b	32faces_200ms MSC10	-19.83261829	5.900538608	0	0.101886215	613	57	497	249	177	70	161	61
1302131221	1	AM	S7b	32faces_200ms MSC02	-77.56848668	27.86954151	0	0	613	57	497	249	33	204	223	13
1302131221	1	AM	S7b	32faces_200ms MSC12	-17.17960473	9.637698604	0.000080287	0.000000852	613	57	497	249	203	45	133	136
1303311208	2	AM	S7c	32faces MSC10	-20.36417689	7.578431373	0.000015046	0.121365772	332	82	283	142	70	47	89	31
1303311208	2	AM	S7c	32faces MSC02	-65.31720366	27.01907064	0	0	332	82	283	142	36	206	205	14

Session	Subject	Target	Figure	Category	Effect Size [%] (S_MSC-S)	Effect Size [%] (D_MSC-D)	P (S_MSC-S)	P (D_MSC-D)	N-Same Hit	N-Same Miss	N-Diff Hit	N-Diff Miss	N-Same_MSC Hit	N-Same_MSC Miss	N-Diff_MSC Hit	N-Diff_MSC Miss
1303311208	2	AM	S7c	32faces MSC12	-9.438519734	1.636063771	0.047031133	0.818445011	332	82	283	142	75	31	73	34
1302131221	1	AM	S7d	32faces_50ms MSC10	-10.35590707	4.757199322	0.016296025	0.436316458	257	32	213	95	77	21	68	24
1302131221	1	AM	S7d	32faces_50ms MSC02	-40.85041256	24.52836637	0	0.000000284	257	32	213	95	50	54	89	6
1302131221	1	AM	S7d	32faces_50ms MSC12	-24.4828912	5.844155844	0.000000479	0.338535373	257	32	213	95	58	32	60	20
1210081418	1	AM	S8a	4faces_3views	6.589129678	-15.56631776	0.10685076	0.004222122	185	76	109	76	196	57	75	98
1211021506	1	AM	S8b	40faces	7.944138258	-29.97273776	0.003496238	0	380	179	470	91	432	137	311	267
1209111549	1	AM	S9a	4faces_3views	-0.260718424	9.117125111	1	0.058693545	162	54	59	79	645	218	305	283
1208031412	1	AF	S9b	16faces_3views	-8.159901092	6.838226844	0.026174243	0.043820568	164	47	164	65	416	182	477	131

Supplementary Table 3: Selected statistics for the signal-detection theory measures bars shown in figure 2h; column four indicates which figure panel a row corresponds to. Same identity trial aggregates are indicated by the S_string, different identity trial aggregates by the D_string. Microstimulation during Cue2 is indicated by the MSC string; the signal detection measures are given for the detectability of same identities (different identities are effectively treated as noise) without microstimulation (S.D) and with microstimulation (S_MSC.D_MSC); P denotes the significance of the effect size (Fisher's exact test) , a value of 0 denotes < 0.000000005. Column starting with N- give the number of trials for all different trial types.

Session	Subject	Target	Category	d' (S.D)	d' (S_MSC0D_MSC)	Criterion c (S.D)	Criterion c (S_MSC.D_MSC)	P (S_MSC-S)	P (D_MSC-D)	N-Same Hit	N-Same Miss	N-Diff Hit	N-Diff Miss	N-Same MSC Hit	N-Same MSC Miss	N-Diff MSC Hit	N-Diff MSC Miss
1302131221	1	AM	32faces	1.801223111	0.513693857	-0.471112831	1.340584859	0	0	613	57	497	249	33	204	223	13
1303311208	2	AM	32faces	1.277114884	0.480854723	-0.209986223	1.282192326	0	0	332	82	283	142	36	206	205	14
1302011544	1	ML	32faces	2.070566448	1.321942213	-0.174125069	1.739065271	0	0	736	94	683	165	34	208	242	2
1304161430	2	ML	32faces	2.459825744	1.0931616	-0.262491306	1.189926205	0	0.002294058	165	12	165	33	26	74	93	4
1302161303	1	AL	32faces	1.539885097	0.361516264	-0.302243749	1.125427723	0	0.000010172	236	39	187	88	15	72	85	9
1309051601	2	MF	32faces	1.955009282	1.257863679	-0.453104128	0.537986762	0.000000002	0.005761279	109	9	70	30	37	32	65	9
1302151316	1	AF	32faces	2.15596015	1.933895824	-0.022354344	1.172632834	0	0	561	88	540	92	113	157	243	4