

Did it happen or not?

Memory narratives may hold the answer

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Appendix

Table 1: statistical parameters of the mixed linear model of the type of memory, the subtypes of NBM and interaction. The main effects of the variable "Type of memory" and of the interaction between the type of memory and the subtypes of NBM are shown in bold. As the variable "Subtypes of NBM" is not relevant to BM, the main effects of "Subtypes of NBM" are not considered.

	Type of memory			Subtypes of NBM			Type of memory*Subtypes of NBM		
	Chisq	DF	P	Chisq	DF	P	Chisq	DF	P
Word count	7.527	1	0.006	12.355	2	0.002	0.0497	2	0.975
1 st pronoun	12.56	1	< 0.001	0.166	2	0.920	1.8583	2	0.395
Past tense	5.304	1	0.021	2.669	2	0.263	4.1113	2	0.128
Present tense	2.414	1	0.120	2.771	2	0.250	6.9395	2	0.031
Cognition	16.104	1	< 0.001	4.055	2	0.132	0.005	2	0.997
Insight	20.466	1	< 0.001	7.668	2	0.022	2.387	2	0.303
Causality	0.957	1	0.328	0.040	2	0.980	5.994	2	0.049
Discrepancy	0.145	1	0.004	5.188	2	0.075	0.902	2	0.637
Doubt	3.529	1	0.060	2.606	2	0.272	1.477	2	0.478
Certitude	0.863	1	0.353	1.889	2	0.389	0.991	2	0.609
Perception	0.050	1	0.823	0.143	2	0.931	5.864	2	0.053
Visual	1.266	1	0.260	0.378	2	0.828	3.526	2	0.172
Sound	1.473	1	0.225	0.093	2	0.955	3.025	2	0.220
Sensitive	3.340	1	0.067	0.857	2	0.651	3.815	2	0.148
Contextual	0.060	1	0.806	1.225	2	0.542	0.703	2	0.704
Location	0.425	1	0.514	3.102	2	0.212	0.705	2	0.703
Time	3.189	1	0.074	0.754	2	0.686	1.304	2	0.521

Table 2: statistical parameters of the mixed linear model of type of memory, type of belief change and interaction. The main effects of the variable "Type of memory" and of the interaction between type of memory and type of belief change are shown in bold. As the variable "Type of belief change" is not relevant to BM, the main effects of "Type of belief change" are not considered.

	Type of memory			Type of belief change			Type of memory*Type of belief change		
	Chisq	DF	P	Chisq	DF	P	Chisq	DF	P
Word count	7.247	1	0.007	0.923	1	0.337	< 0.001	1	0.9997
1 st pronoun	12.541	1	< 0.001	0.225	1	0.635	1.287	1	0.257
Past tense	5.189	1	0.023	0.183	1	0.669	0.027	1	0.869
Present tense	2.381	1	0.123	2.414	1	0.12	3.217	1	0.073
Cognition	15.967	1	< 0.001	0.861	1	0.353	0.129	1	0.719
Insight	19.851	1	< 0.001	0.861	1	0.353	0.004	1	0.95
Causality	0.958	1	0.328	0.725	1	0.394	5.468	1	0.019
Discrepancy	7.981	1	0.005	0.009	1	0.924	0.001	1	0.975
Doubt	3.587	1	0.058	3.599	1	0.058	5.428	1	0.02
Certitude	0.857	1	0.354	0.179	1	0.672	0.877	1	0.349
Perception	0.049	1	0.825	0.001	1	0.973	0.694	1	0.405
Visual	1.276	1	0.259	5.506	1	0.019	0.765	1	0.382
Sound	1.495	1	0.221	1.007	1	0.316	6.569	1	0.01
Sensitive	3.324	1	0.068	2.848	1	0.091	0.323	1	0.57
Contextual	0.06	1	0.806	0.896	1	0.344	0.082	1	0.775
Location	0.425	1	0.514	2.583	1	0.108	1.174	1	0.279
Time	3.181	1	0.074	1.314	1	0.252	0.024	1	0.876

Table 3: estimated Marginal Means (EMMs) of each linguistic marker for each type of memory.

	NBM					BM				
	EMM	SE	DF	lower	upper	EMM	SE	DF	lower	upper
Word count	149.840	7.499	302.12	135.082	164.598	123.872	7.499	302.12	109.114	138.629
1 st pronoun	11.871	0.374	302.12	11.135	12.608	10.197	0.374	302.12	9.4612	10.933
Past tense	9.669	0.326	302.12	9.027	10.311	10.594	0.326	302.12	9.9525	11.237
Present tense	7.796	0.291	302.12	7.224	8.368	7.333	0.290	302.12	6.761	7.905
Cognition	21.683	0.367	302.12	20.960	22.406	19.752	0.367	302.12	19.029	20.475
Insight	2.680	0.141	302.12	2.401	2.958	1.766	0.141	302.12	1.488	2.045
Causality	3.265	0.174	302.12	2.922	3.608	3.562	0.174	302.12	3.219	3.906
Discrepancy	1.5	0.112	302.12	1.280	1.720	3.265	0.174	302.12	2.922	3.608
Doubt	1.623	0.121	302.12	1.384	1.861	1.292	0.121	302.12	1.053	1.531
Certitude	2.618	0.173	302.12	2.278	2.957	2.480	0.172	302.12	2.140	2.820
Perception	2.888	0.188	302.12	2.517	3.260	3.059	0.189	302.12	2.688	3.431
Visual	1.196	0.129	302.12	0.942	1.450	1.127	0.129	302.12	0.872	1.381
Sound	0.936	0.102	302.12	0.734	1.138	0.865	0.102	302.12	0.663	1.067
Sensitive	0.6105	0.102	302.12	0.409	0.812	0.888	0.102	302.12	0.687	1.090
Contextual	17.043	0.404	302.12	16.248	17.838	17.306	0.404	302.12	16.512	18.101
Location	6.213	0.244	302.12	5.733	6.692	6.096	0.244	302.12	5.616	6.575
Time	6.0781	0.2446	302.12	5.597	6.560	5.574	0.245	302.12	5.0927	6.0555

Table 4: Estimated Marginal Means (EMMs) of each linguistic marker for each subtypes of NBM.

	Classic NBM					Weak NBM					Grain of Doubt NBM				
	EMM	SE	DF	Lower	upper	EMM	SE	DF	Lower	upper	EMM	SE	DF	Lower	upper
Word count	155.508	7.505	302.124	140.739	170.28	108.15	11.555	302.124	85.410	130.89	146.92	7.952	302.124	131.263	162.561
1 st pronoun	10.904	0.374	302.124	10.167	11.641	11.088	0.57639	302.124	9.953	12.222	11.111	0.397	302.124	10.332	11.892
Past tense	10.552	0.326	302.124	9.909	11.194	10.051	0.5027	302.124	9.06244	11.041	9.792	0.346	302.124	9.112	10.473
Present tense	7.198	0.291	302.124	6.625	7.770	7.602	0.448	302.124	6.721	8.484	7.893	0.308	302.124	7.286	8.499
Cognition	20.597	0.368	302.124	19.874	21.321	20.154	0.566	302.124	19.041	21.268	21.401	0.389	302.124	20.634	22.168
Insight	2.399	0.142	302.124	2.1208	2.678	1.785	0.218	302.124	1.356	2.2146	2.483	0.150	302.124	2.188	2.779
Causality	3.411	0.175	302.124	3.0673	3.754	3.447	0.269	302.124	2.918	3.975	3.383	0.1850	302.124	3.019	3.747
Discrepancy	1.354	0.112	302.124	1.134	1.575	0.986	0.172	302.124	0.647	1.325	1.453	0.119	302.124	1.219	1.687
Doubt	1.335	0.121	302.124	1.096	1.574	1.420	0.187	302.124	1.0524	1.789	1.615	0.129	302.124	1.362	1.869
Certitude	2.517	0.172	302.124	2.177	2.857	2.362	0.266	302.124	1.839	2.885	2.768	0.183	302.124	2.407	3.127
Perception	2.991	0.189	302.124	2.619	3.363	2.899	0.291	302.124	2.326	3.472	3.031	0.2	302.124	2.637	3.425
Visual	1.220	0.129	302.124	0.966	1.475	1.157	0.199	302.124	0.765	1.549	1.106	0.1370	302.124	0.836	1.375
Sound	0.88	0.1026	302.124	0.686	1.09	0.885	0.158	302.124	0.574	1.196	0.929	0.109	302.124	0.715	1.143
Sensitive	0.704	0.1026	302.124	0.502	0.906	0.711	0.158	302.124	0.4	1.0218	0.833	0.109	302.124	0.619	1.04711
Contextual	17.305	0.404	302.124	16.51	18.1	17.457	0.622	302.124	16.232	18.681	16.762	0.428	302.124	15.919	17.605
Location	6.1493	0.243	302.124	5.67	6.629	6.543	0.375	302.124	5.804	7.282	5.770	0.258	302.124	5.262	6.278
Time	5.701	0.245	302.124	5.219	6.183	5.775	0.377	302.124	5.033	6.5167	6.0029	0.259	302.124	5.492	6.512

Table 5: Estimated Marginal Means (EMMs) of each linguistic marker for each type of belief change.

	Reduced belief					Suppressed belief				
	EMM	SE	DF	lower	upper	EMM	SE	DF	lower	upper
Word count	146.974	6.16	300.055	134.852	159.097	136.86	8.624	300.055	119.889	153.831
1 st pronoun	10.935	0.302	300.055	10.341	11.529	11.18	0.422	300.055	10.348	12.011
Past tense	10.103	0.266	300.055	9.579	10.626	10.297	0.372	300.055	9.564	11.029
Present tense	7.751	0.236	300.055	7.287	8.215	7.125	0.33	300.055	6.475	7.774
Cognition	21.028	0.297	300.055	20.443	21.613	20.431	0.416	300.055	19.612	21.25
Insight	2.382	0.116	300.055	2.154	2.61	2.198	0.162	300.055	1.879	2.517
Causality	3.338	0.141	300.055	3.061	3.614	3.542	0.197	300.055	3.155	3.93
Discrepancy	1.32	0.091	300.055	1.141	1.5	1.335	0.128	300.055	1.084	1.586
Doubt	1.565	0.097	300.055	1.374	1.756	1.25	0.136	300.055	0.983	1.518
Certitude	2.619	0.14	300.055	2.345	2.894	2.519	0.195	300.055	2.134	2.903
Perception	2.987	0.154	300.055	2.685	3.289	2.996	0.215	300.055	2.573	3.419
Visual	2.996	0.215	300.055	2.573	3.419	2.996	0.215	300.055	2.573	3.419
Sound	0.951	0.082	300.055	0.789	1.112	0.81	0.115	300.055	0.584	1.036
Sensitive	0.836	0.083	300.055	0.673	0.999	0.597	0.116	300.055	0.369	0.825
Contextual	16.946	0.326	300.055	16.304	17.587	17.473	0.456	300.055	16.575	18.371
Location	5.893	0.196	300.055	5.507	6.28	6.432	0.275	300.055	5.891	6.973
Time	5.961	0.197	300.055	5.573	6.35	5.575	0.276	300.055	5.031	6.118

Table 6: statistical parameters of the robust mixed linear model of "Subtypes of NBM", "Temporal distance from the event" and interaction.

	Subtypes of NBM			Temporal distance from event			Subtypes*Temporal distance from event		
	F	DF	P	F	DF	P	F	DF	P
Word count	0.67	2	0.513	1.63	1	0.204	0.284	2	0.753
1 st pronoun	1.278	2	0.282	0.517	1	0.473	1.509	2	0.225
Past tense	1.675	2	0.191	0.021	1	0.886	0.22	2	0.803
Present tense	2.219	2	0.113	0.207	1	0.65	0.424	2	0.655
Cognition	1.96	2	0.145	0.56	1	0.456	0.617	2	0.541
Insight	0.805	2	0.449	0.285	1	0.594	1.287	2	0.279
Causality	1.612	2	0.203	0.236	1	0.628	0.164	2	0.849
Discrepancy	0.981	2	0.378	0.069	1	0.794	0.418	2	0.659
Doubt	0.858	2	0.426	1.504	1	0.222	1.226	2	0.297
Certitude	2.027	2	0.136	0.105	1	0.747	0.81	2	0.447
Perception	0.217	2	0.805	0.463	1	0.497	0.512	2	0.6
Visual	1.163	2	0.315	1.048	1	0.308	0.772	2	0.464
Sound	1.171	2	0.313	0.285	1	0.595	0.233	2	0.792
Sensitive	2.359	2	0.098	2.029	1	0.157	0.876	2	0.419
Contextual	0.025	2	0.975	2.015	1	0.158	0.178	2	0.837
Location	0.185	2	0.831	2.15	1	0.145	1.356	2	0.261
Time	0.123	2	0.884	1.011	1	0.316	0.314	2	0.731

Table 7: statistical parameters of the mixed linear model of "Subtypes of NBM", "Distance from belief change", "belief duration" and interactions. Significant effects are shown in bold.

	Subtypes of NBM			Distance from belief change			Belief duration			Subtypes*Distance from belief change			Subtypes*Belief duration		
	F	DF	P	F	DF	P	F	DF	P	F	DF	P	F	DF	P
Word count	0.427	2	0.653	1.136	1	0.288	0.758	1	0.385	1.878	2	0.157	0.296	2	0.744
1 st pronoun	1.186	2	0.309	1.343	1	0.248	0.006	1	0.939	1.095	2	0.337	2.253	2	0.109
Past tense	1.38	2	0.255	0.161	1	0.689	0.116	1	0.734	0.134	2	0.875	0.225	2	0.798
Present tense	2.062	2	0.131	0.254	1	0.615	0.009	1	0.923	0.147	2	0.863	0.313	2	0.732
Cognition	1.97	2	0.143	0.672	1	0.414	0.056	1	0.813	0.208	2	0.812	0.625	2	0.537
Insight	0.714	2	0.491	0.251	1	0.617	0.04	1	0.841	0.304	2	0.738	1.366	2	0.259
Causality	1.788	2	0.171	0.039	1	0.844	0.348	1	0.556	0.02	2	0.98	0.195	2	0.823
Discrepancy	0.722	2	0.487	0.021	1	0.884	0.089	1	0.766	0.391	2	0.677	0.187	2	0.83
Doubt	0.806	2	0.449	1.265	1	0.263	0.412	1	0.522	0.101	2	0.904	1.127	2	0.327
Certitude	2.275	2	0.107	0.018	1	0.894	0.601	1	0.439	0.325	2	0.723	0.761	2	0.469
Perception	0.178	2	0.837	0.298	1	0.586	0.253	1	0.616	1.161	2	0.316	3.141	2	0.046
Visual	0.681	2	0.508	0.301	1	0.584	0.316	1	0.575	1.296	2	0.277	0.591	2	0.555
Sound	0.908	2	0.406	0.241	1	0.624	0.114	1	0.737	2.734	2	0.068	0.791	2	0.455
Sensitive	1.671	2	0.192	2.446	1	0.12	0.186	1	0.667	0.722	2	0.488	1.109	2	0.333
Contextual	0.032	2	0.968	1.667	1	0.199	0.458	1	0.5	0.071	2	0.932	0.082	2	0.921
Location	0.163	2	0.849	1.819	1	0.18	0.503	1	0.479	0.98	2	0.378	0.475	2	0.623
Time	0.011	2	0.989	0.199	1	0.656	1.553	1	0.215	2.348	2	0.099	2.63	2	0.076

Table 8: statistical parameters of the robust mixed linear model of "Type of belief change", "Temporal distance from the event" and interaction. Significant effects are shown in bold.

	Belief change			Distance from event			Belief change* Distance from event		
	F	DF	P	F	DF	P	F	DF	P
Word count	0.095	1	0.758	1.048	1	0.308	0.008	1	0.928
1 st pronoun	0.035	1	0.852	0.007	1	0.934	0.181	1	0.671
Past tense	0.018	1	0.893	0.090	1	0.764	0.065	1	0.800
Present tense	0.492	1	0.484	0.687	1	0.409	0.644	1	0.424
Cognition	3.915	1	0.050	0.279	1	0.598	1.564	1	0.213
Insight	0.574	1	0.450	2.080	1	0.151	1.054	1	0.306
Causality	0.696	1	0.405	0.498	1	0.481	3.420	1	0.066
Discrepancy	0.343	1	0.559	0.540	1	0.463	0.541	1	0.463
Doubt	4.761	1	0.031	0.263	1	0.609	1.086	1	0.299
Certitude	1.305	1	0.255	2.418	1	0.122	0.034	1	0.853
Perception	3.466	1	0.065	0.348	1	0.556	3.282	1	0.072
Visual	0.567	1	0.453	0.128	1	0.721	5.536	1	0.020
Sound	4.550	1	0.035	1.430	1	0.234	0.608	1	0.437
Sensitive	1.381	1	0.242	0.712	1	0.400	0.003	1	0.954
Contextual	0.209	1	0.649	1.970	1	0.163	0.543	1	0.462
Location	0.274	1	0.601	0.000	1	0.996	0.758	1	0.385
Time	0.021	1	0.886	1.837	1	0.177	0.216	1	0.643

Table 9: statistical parameters of the mixed linear model of "Type of belief change", "Distance from belief change", "Belief duration" and interactions. Significant effects are shown in bold.

	Belief change			Distance from belief change			Belief duration			Belief change: Distance from belief change			Subtypes*Belief duration		
	F	DF	P	F	DF	P	F	DF	P	F	DF	P	F	DF	P
Word count	0.068	1	0.794	0.410	1	0.523	4.534	1	0.035	0.765	1	0.383	0.384	1	0.537
1 st pronoun	0.005	1	0.946	0.000	1	0.999	0.016	1	0.900	0.003	1	0.959	0.594	1	0.509
Past tense	0.000	1	0.995	1.245	1	0.266	0.948	1	0.332	0.053	1	0.818	0.509	1	0.477
Present tense	0.410	1	0.523	1.081	1	0.300	0.005	1	0.944	0.197	1	0.658	0.604	1	0.438
Cognition	3.726	1	0.056	0.002	1	0.963	0.731	1	0.394	1.398	1	0.239	0.312	1	0.577
Insight	0.652	1	0.421	0.003	1	0.958	4.647	1	0.033	0.049	1	0.826	1.469	1	0.227
Causality	0.515	1	0.474	0.955	1	0.330	0.010	1	0.920	3.259	1	0.073	0.648	1	0.422
Discrepancy	0.148	1	0.701	1.601	1	0.208	0.210	1	0.648	1.400	1	0.239	0.096	1	0.757
Doubt	6.327	1	0.013	1.550	1	0.215	1.434	1	0.233	0.087	1	0.768	2.812	1	0.096
Certitude	1.729	1	0.191	0.115	1	0.735	4.668	1	0.032	0.303	1	0.583	1.027	1	0.313
Perception	3.203	1	0.076	0.019	1	0.891	0.528	1	0.469	1.957	1	0.164	1.345	1	0.248
Visual	0.592	1	0.443	0.098	1	0.755	0.738	1	0.392	3.778	1	0.054	2.428	1	0.121
Sound	3.905	1	0.050	1.375	1	0.243	0.227	1	0.635	1.097	1	0.297	0.000	1	0.995
Sensitive	1.082	1	0.300	0.134	1	0.715	1.046	1	0.308	0.152	1	0.698	0.200	1	0.655
Contextual	0.211	1	0.647	2.444	1	0.120	0.257	1	0.613	0.213	1	0.646	0.301	1	0.584
Location	0.436	1	0.510	0.031	1	0.859	0.043	1	0.836	0.992	1	0.321	0.009	1	0.924
Time	0.113	1	0.737	0.467	1	0.496	1.724	1	0.191	0.558	1	0.456	0.133	1	0.716