

1 *Supplementary materials for:* The psychological arrow of
2 time drives temporal asymmetries in inferring
3 unobserved past and future events

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Table S1: **Stimuli description.**

Storyline	Segment	Episode	Duration (s)	Main characters	Number of events ^a	
					Onscreen	Offscreen ^b
1	1	1	105	Beth, Sheila, Rob, Leo	4	7
1	2	1	172	Beth, Sheila, Rob, Leo	7 [1]	3
1	3	1	70	Beth, Sheila, One neighbor	6	2
1	4	1	135	Beth, Sheila	8 [1]	1
1	5	1	90	Beth, Rob, April	8	4
1	6	1	188	Beth, Rob	6 [2]	1
1	7	1	91	Beth, Sheila	5 [1]	2
1	8	1	142	Beth, April	4 (1) [2]	3 (1)
1	9	2	134	Beth, April	4 [2]	1
1	10	2	58	Beth	3 [1]	6 [1]
1	11	2	159	Beth, Rob	9	
2	1	1	70	Simone, Karl	3 [1]	6
2	2	1	119	Simone, Karl, Naomi, Tommy	4 [1]	2
2	3	1	58	Simone, Karl, Tommy	4	2
2	4	1	102	Simone, Karl	4	6
2	5	1	134	Simone, Karl, Tommy	6 (3) [1]	3
2	6	1	81	Simone, Karl, Neighbors, Wanda	4 (1)	6
2	7	1	194	Simone, Tommy	8	3
2	8	2	101	Simone, Karl	3 (1)	1
2	9	2	86	Simone, Tommy	4 [1]	3
2	10	2	232	Simone, Karl	6 [1]	3
2	11	2	189	Simone, Naomi, Tommy	7 (1) [1]	

^a Number of partial events (see methods) shown in parentheses; number of summary events shown in square brackets.

^b Offscreen events happened between the current segment and the next segment.

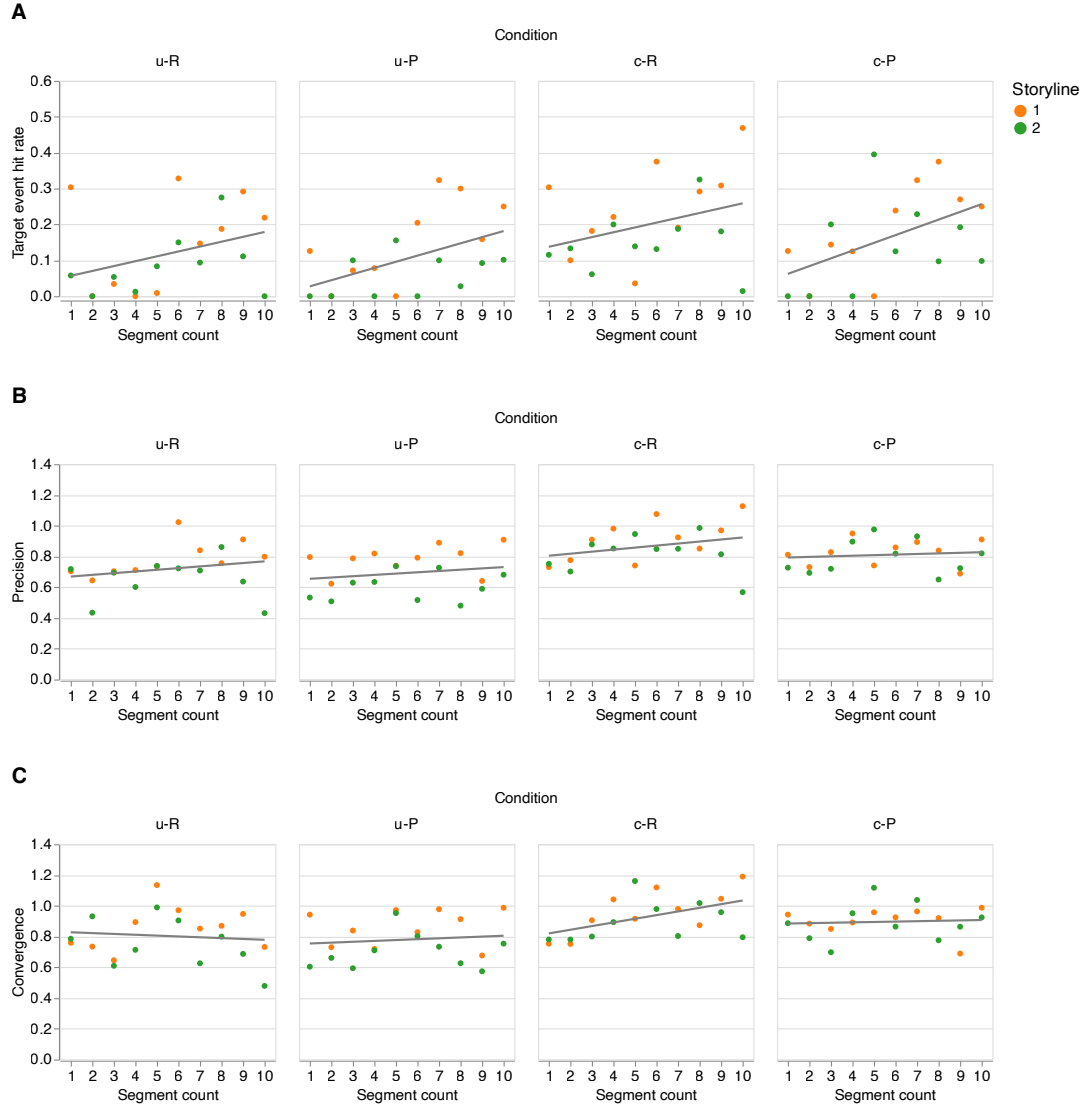


Figure S1: Mean proportion of target events hit (A), precision (B), and convergence (C) as a function of number of segments watched in each storyline, in participants' uncued and character-cued retrodictions and predictions. Grey lines represent the least squares fits.

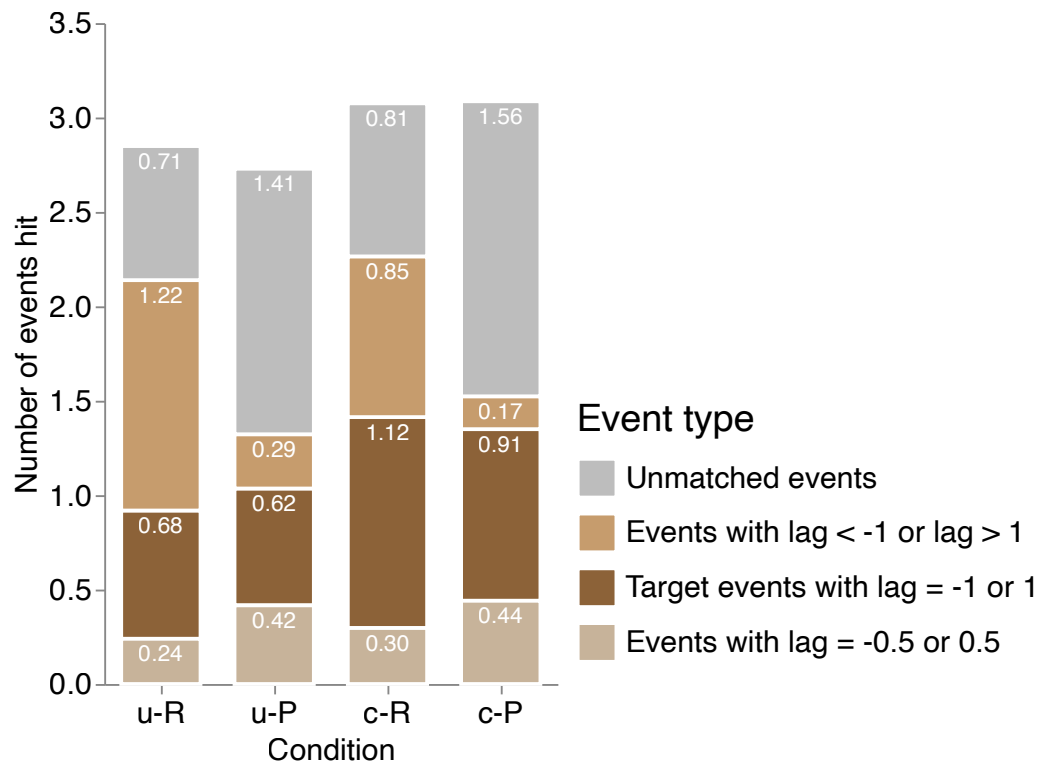


Figure S2: Mean number of events hit for each event type, in participants' uncued and character-cued retrodictions and predictions, averaged across just-watched segments.

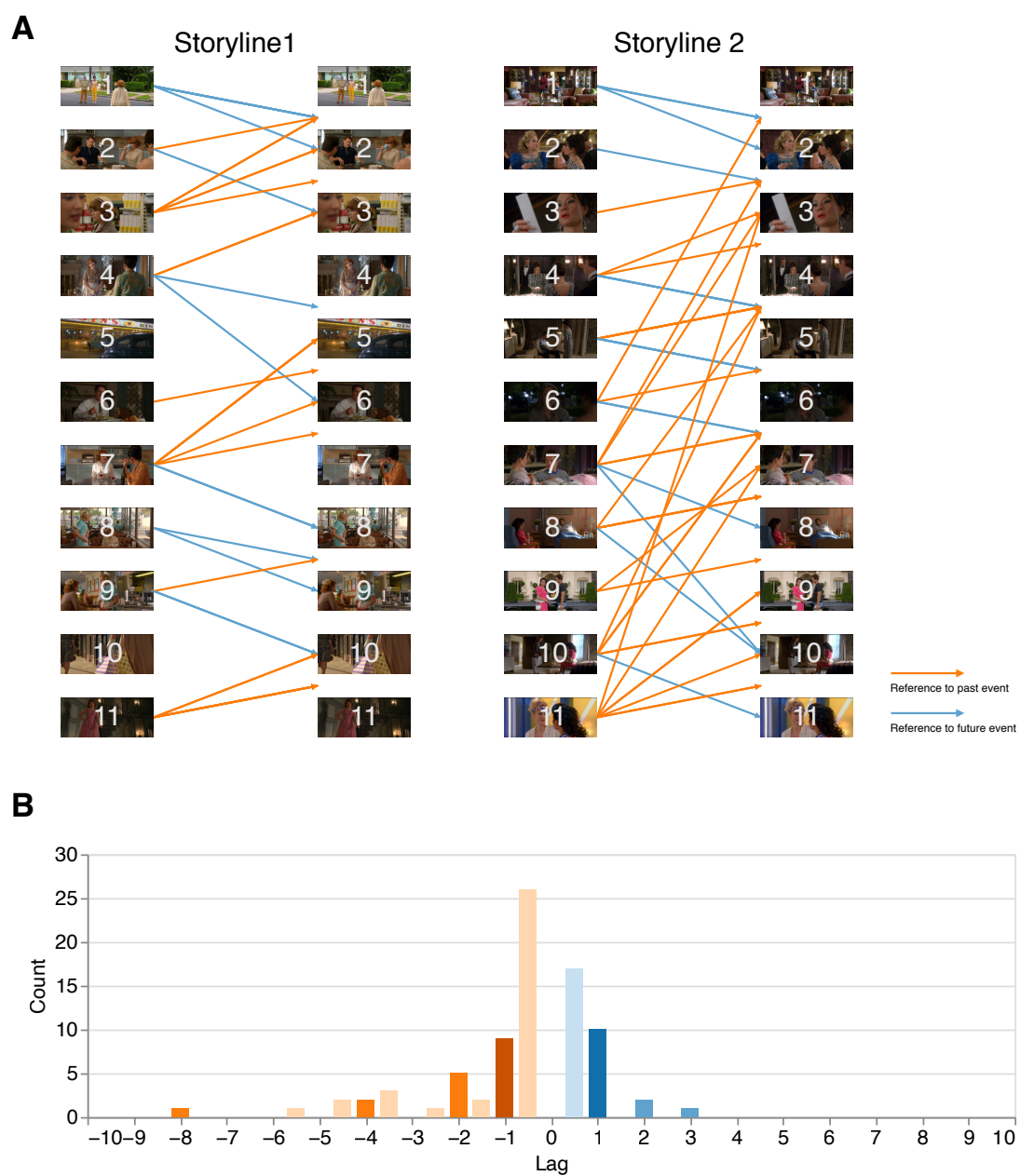


Figure S3: **(A)** References in each storyline. **(B)** Distribution of reference lags.