

target probes were either tested immediately before or after the corresponding related probe. In Experiment 6, target probes were presented before or after the corresponding related probe in a more unpredictable fashion, such that between zero and two probes taken from other lists were presented in between the target probe and the corresponding related probe. Data from the target probes used to implement the priming manipulation were discarded.

Results

Table 4 gives parameter estimates and significance tests. Across both experiments, as predicted, priming affected the recollection rejection process: V_r was improved in the target-first condition of Experiment 5, as compared with the target-last and the control conditions, $\Delta G^2_{(df = 1)} = 20.27$ and 11.70 , respectively, both $p < .001$. No difference was observed between the latter two condi-

tions, $\Delta G^2_{(df = 1)} = 0.38$, $p = .54$. This effect was replicated in Experiment 6: V_r was greater in the target-first than in the target-last condition, $\Delta G^2_{(df = 1)} = 11.49$, and greater than in the target-first and control conditions, $\Delta G^2_{(df = 1)} = 15.65$, both $p < .001$. However, there was no difference between the target-last and control conditions, $\Delta G^2_{(df = 1)} = 1.79$, $p = .18$.

No other effects on the memory parameters emerged. Neither verbatim memory for targets (V_t) nor gist memory parameters (G_t and G_r) were affected by the priming manipulation (smallest $p = .08$).

Guessing parameters. No effects were obtained on parameter b in Experiment 5. In contrast, this parameter was affected in Experiment 6. In the target-first condition, parameter b was depressed below the level observed in the target-last and control conditions, $\Delta G^2_{(df = 1)} = 7.15$ and 4.06 , respectively, both $p < .05$. This reflects the fact that in the target-first condition, participants were less likely to accept an item as old for which they had no memory.

Planned comparisons were computed for parameter a . Remember that lower estimates of a were predicted in the control condition as compared with the target-first condition. These predictions were confirmed for Experiment 6, $\Delta G^2_{(df = 1)} = 10.41$, $p < .001$, and tended to be confirmed for Experiment 5, $\Delta G^2_{(df = 1)} = 3.40$, $p = .06$. In the target-last conditions, estimates of a had intermediate values ranging between those of the target-first and control conditions, and they did not differ significantly from the other two conditions. This pattern is consistent with the predicted rank order derived a priori, on the basis of the definition of the Bayes factor BF_a , as well as with the rank order of actual values of BF_a computed post hoc from parameter estimates. For Experiment 5, these values were .64, .28, and .10 for the target-first, target-last, and control conditions, respectively. For Experiment 6, values of BF_a were .94, .54, and .15 for the target-first, target-last, and control conditions, respectively.

Discussion

In Experiments 5 and 6, we successfully validated the model's V_r parameters as measures of the process of recollection rejection. We presented a target probe just before the corresponding related distracter was probed. As predicted, and as observed by Brainerd et al. (1999) using the original CR paradigm, the recollection rejection parameter was affected by the priming manipulation. It is concluded that the simplified CR paradigm adequately captured the effects of the priming manipulation and that the V_r parameter can be considered a valid indicator of the recollection-rejection or nonidentity process.

For the memory parameters, no other effects were significant. Brainerd et al. (1999, Experiment 3) have found that the priming manipulation reduced gist memory for related probes (G_r); in the present studies, a tendency toward such a reduction was also observed in both experiments, but this effect was not significant.

The guessing parameter a followed the pattern predicted by a Bayesian metacognitive account (Batchelder & Batchelder, 2008) as applied to the simplified CR paradigm. This framework can explain the pattern of guessing whether an item is a target or a related distracter (parameter a) on the basis of two factors: First, participants bias their responses toward the class of items that they are least likely to discriminate, that is, for which verbatim memory is weakest, on the

Table 4
Estimates (and 95% Confidence Intervals) for the Parameters of the Simplified Conjoint Recognition Model for Experiments 5 and 6

Parameter	List condition			$\Delta G^2_{(df = 2)}$	p
	Target-first	Target-last	Control		
Experiment 5					
a	.43 (.30, .57)	.28 (.16, .40)	.24 (.10, .38)	4.26	.12
b	.26 (.19, .32)	.27 (.21, .33)	.19 (.13, .24)	4.68	.10
G_t	.29 (.00, .63)	.38 (.14, .63)	.28 (.03, .53)	0.39	.82
G_r	.43 (.19, .67)	.70 (.55, .84)	.72 (.56, .88)	4.86	.09
V_t	.89 (.83, .94)	.81 (.75, .87)	.86 (.80, .91)	3.20	.20
V_r	.72 _a (.61, .82)	.05 _b (.00, .42)	.23 _b (.00, .62)	20.89	<.01
Experiment 6					
a	.39 _a (.24, .55)	.25 _{ab} (.14, .35)	.12 _b (.03, .20)	10.50	<.01
b	.19 _a (.14, .24)	.31 _b (.24, .37)	.28 _b (.21, .34)	7.67	.02
G_t	.19 (.00, .43)	.31 (.03, .58)	.50 (.27, .73)	3.12	.21
G_r	.40 (.15, .66)	.26 (.00, .52)	.66 (.42, .89)	5.16	.08
V_t	.81 (.75, .87)	.83 (.78, .89)	.82 (.76, .88)	0.32	.85
V_r	.73 _a (.63, .84)	.33 _b (.12, .54)	.00 _b (.00, .64)	16.40	<.01

Note. Parameter estimates in each row that share subscripts do not differ significantly. a = probability of guessing "target"; b = probability of guessing that an item is either a target or a related probe; G_t = probability of retrieving a target's gist trace given a target probe; G_r = probability of retrieving a target's gist trace given a related probe; V_t = probability of retrieving a target's verbatim trace given a target probe; V_r = probability of retrieving a target's verbatim trace given a related probe.

■ **Table 5.7.** Sample Table of Results of Fitting Mathematical Models

Table X

Estimates [and 95% Confidence Intervals] for the Parameters of the Simplified Conjoint Recognition Model for Experiment 5

Parameter	List condition			$\Delta G^2_{(df=2)}$	<i>p</i>
	Target-first	Target-last	Control		
<i>a</i>	.43 [.30, .57]	.28 [.16, .40]	.24 [.10, .38]	4.26	.12
<i>b</i>	.26 [.19, .32]	.27 [.21, .33]	.19 [.13, .24]	4.68	.10
G_t	.29 [.00, .63]	.38 [.14, .63]	.28 [.03, .53]	0.39	.82
G_r	.43 [.19, .67]	.70 [.55, .84]	.72 [.56, .88]	4.86	.09
V_t	.89 [.83, .94]	.81 [.75, .87]	.86 [.80, .91]	3.20	.20
V_r	.72 _a [.61, .82]	.05 _b [.00, .42]	.23 _b [.00, .62]	20.89	<.01

Note. Parameter estimates in each row that share subscripts do not differ significantly. *a* = probability of guessing "target"; *b* = probability of guessing that an item is either a target or a related probe; G_t = probability of retrieving a target's gist trace given a target probe; G_r = probability of retrieving a target's gist trace given a related probe; V_t = probability of retrieving a target's verbatim trace given a target probe; V_r = probability of retrieving a target's verbatim trace given a related probe. Adapted from "A Simplified Conjoint Recognition Paradigm for the Measurement of Gist and Verbatim Memory," by C. Stahl and K. C. Klauer, 2008, *Journal of Experimental Psychology: Learning, Memory, and Cognition*, 34, p. 579. Copyright 2008 by the American Psychological Association.

heads, and table spanners) and word entries. Also, capitalize the first letter of each word of all proper nouns and the first word following a colon or em dash.

5.14 Table Body

Decimal values. The table body contains the data. Express numerical values to the number of decimal places that the precision of measurement justifies (see section 4.35), and if possible, carry all comparable values to the same number of decimal places.

Empty cells. If the point of intersection between a row and a column (called a *cell*) cannot be filled because data are not applicable, leave the cell blank. If a cell cannot be filled because data were not obtained or are not reported, insert a dash in that cell and explain the use of the dash in the general note to the table. By convention, a dash in