

## Sequence Length and Encoding Analysis – Study 1

The below tables displays the results of multinomial logit models identical to those shown in Table 3 in the submission, but where we added number of views (Figure 1) or encoding (Figure 2) as an indicator. While the main results reported below are summarized in the submission, the coefficients, standard errors, and model summaries reported here are not available in the submission.

Comparing the results reported in Figure 1 to those in Table 3 in the submission indicates that the preferences for certain types of groupings that are significant in Table 3 all still hold, with one exception. When we account for the sequence length, we observe that the coefficient for grouping by time as compared to measure is positive and significant. However, people are more likely to group by measure when 8 views are presented.

Reference	Aggre./Filter	Measure	Space	Aggre./Filter map	Measure map	Space map	Time map
<b>Aggre./Filter</b>	Reference	-0.35 (0.15)*	0.52 (0.16)***	Reference	-0.32 (0.20)	0.39 (0.22)	-0.06 (0.20)
<b>Measure</b>	0.35 (0.15)*	Reference	0.87 (0.15)***	0.32 (0.20)	Reference	0.71 (0.22)**	0.26 (0.20)
<b>Space</b>	-0.52 (0.16)***	-0.87 (0.15)***	Reference	-0.39 (0.22)	-0.71 (0.22)**	Reference	-0.45 (0.21)*
<b>Time</b>	0.39 (0.14)**	0.04 (0.14)	0.91 (0.15)***	0.06 (0.20)	-0.26 (0.20)	0.45 (0.21)*	Reference
<b>L.R. Test</b>				chi <sup>2</sup> = 1883.8***			
<b>McFadden R<sup>2</sup></b>				0.54			

Figure 1: Multinomial Logits Regressing "Between Factor Choice" on factor types and number of views indicator (0=4 views, 1=8 views). Coefficients and standard errors (in parentheses) are reported. \* denotes significance at alpha=0.05, \*\* at alpha=0.01, \*\*\* at alpha=0.001.

When encoding is included in the model, we see that a map encoding results in an increased tendency to group by space over measure, and an increased tendency to group by space over time.

Reference	Aggre./Filter	Measure	Space	Aggre./Filter 8 views	Measure 8 views	Space 8 views	Time 8 views
<b>Aggre./Filter</b>	Reference	-0.63 (0.13)***	0.64 (0.14)***	Reference	0.30 (0.21)	0.20 (0.22)	-0.13 (0.20)
<b>Measure</b>	0.63 (0.13)***	Reference	1.23 (0.15)***	-0.30 (0.21)	Reference	-0.10 (0.22)	-0.43 (0.20)*
<b>Space</b>	0.65 (0.14)***	-1.28 (0.15)***	Reference	-0.20 (0.22)	0.10 (0.22)	Reference	-0.33 (0.22)
<b>Time</b>	0.34 (0.14)*	-0.29 (0.14)*	0.99 (0.14)***	0.13 (0.20)	0.43 (0.20)*	0.33 (0.21)	Reference
<b>L.R. Test</b>				chi <sup>2</sup> = 178.5***			
<b>McFadden R<sup>2</sup></b>				0.54			

Figure 2: Multinomial Logits Regressing "Between Factor Choice" on factor types and encoding indicator (0=bar, 1=map). Coefficients and standard errors (in parentheses) are reported. \* denotes significance at alpha=0.05, \*\* at alpha=0.01, \*\*\* at alpha=0.001.