

TABLE 5
Rank correlations between modeled dependency (Equation 1) and 10 judgment tasks for each category and across categories

Feature-rating Tasks	Dimension	Chair	Guitar	Apple	Robin	Across Categories
surprise	Mutability	0.95	0.11	0.55	0.30	0.61
ease of imagining	Mutability	-0.92	-0.62	-0.60	-0.59	-0.72
goodness of example	Mutability	-0.95	-0.63	-0.38	-0.15	-0.65
similarity to ideal	Mutability	-0.98	-0.40	-0.57	-0.65	-0.77
counterfact. naming	Category centrality	-0.93	-0.57	-0.62	0.042	-0.63
variability	Category centrality	-0.95	-0.56	-0.82	-0.38	-0.76
cue validity	Diagnostic.	0.37	0.017	0.75	-0.67	0.14
inferential potency	Diagnostic.	0.55	0.23	0.73	-0.47	0.31
prominence	Salience	0.64	0.57	-0.49	-0.011	0.22
availability	Salience	0.76	0.0089	-0.18	0.021	0.21

Note. The average correlation across categories is the mean Fisher's Z transformation of each category's correlation, converted back into units of correlation.

Centrality predictions were derived by iterating Equation (1) until it converged using mean dependency judgments as estimates of the d_{ij} . Table 5 presents Spearman rank correlations across features between each of the 10 feature rating tasks, averaged over participants, and the dependency model of Equation (1). Rank correlations are shown for each category individually and for the mean across categories. Mean correlations were obtained using Fisher's Z-transformation to reduce the effects of the skewness of correlations' sampling distributions. Correlations with the surprise task are positive because surprise varies with centrality; correlations with the other three measures of mutability are negative because they vary inversely with centrality.

The correlations between the mutability measures and the model are in the expected direction in every case. The magnitude of these correlations varies considerably across categories. *Chair* shows correlations whose absolute value is above .9 on every measure; correlations for the other categories are appreciably lower and less consistent. We believe that the mean correlations (absolute values of .61, .72, .65, and .77 for the four measures, respectively) indicate a reasonably close fit for the model given that they were obtained without any free parameters: the model's predictions are calculated without reference to the mutability data, they consider only the dependency data. This suggests the plausibility of Equation (1) and our hypothesis that a feature's immutability varies with the extent to which other immutable features depend upon it.⁵

The category centrality measures, counterfactual naming and variability, also tended to correlate with centrality (negatively, as would be expected). Like Study 1, this study does not indicate a dissociation between conceptual and category centrality. The only exception is *robin* on the counterfactual naming measure whose correlation is near 0. Note that of our 4 categories, *robin* is the only clearly subordinate one. Study 4 tests the hypothesis that conceptual and category centrality are more likely to dissociate when categories are more specific.