Results

The order in which the participants received the two types of questions did not affect the responses. Therefore, all data were collapsed across the two orders. The name centrality and the mutability scales used are in the opposite direction in that 1 in the name centrality scale (i.e., very inappropriate to call it X without feature Y) means the feature is very central whereas 1 in the mutability scale (i.e., very easy to transform feature Y in X) means the feature is peripheral. To ease presentation, the name centrality scale was reversed so that the two scales had the same directionality.

As shown in Table 9, the name centrality ratings were close for the two category levels, indicating that the features selected in this experiment did not vary much in name centrality. However, the mutability ratings show that the features unique to the specific level were easier to mentally transform than those associated with the intermediate level. A two-way repeated-measures analysis of variance was conducted on type of task and category level. As predicted, there was a reliable interaction between the two factors, $F(1,15) = 4.68$, $MSe = 0.83$, $p < .05$. In addition, regardless of the type of task, the features selected for the intermediate-level categories were judged to be reliably more central (mean of 5.10) than those selected for the specific categories (mean of 4.11), $F(1,15) = 35.96$, $MSe = .42$, $p < .01$. This main effect of category level is due to the low mutability ratings at the specific level. Type of task also had a significant effect. The ratings on the name centrality task were reliably higher (mean of 5.66) than those on the mutability task (mean of 3.54), $F(1,15) = 42.86$, $MSe = 1.68$, $p < .01$.

The pattern of results was consistent across items. For 8 of 9 categories, the mutability judgment for the feature at the specific level was lower than at the intermediate level (the exception was "car"). In contrast, the name centrality judgment was lower at the specific than at the intermediate level for only 4 categories.

Discussion

In contrast to Studies 1 and 2, Study 4 shows a dissociation between mutability and name centrality. Changing the specificity of the object category increased the mutability of features without affecting their name centrality. Because we carefully selected the features at both levels of abstraction in this experiment, we cannot draw any general conclusions about the difference between specific and intermediate-level categories. Nevertheless, we have shown that centrality is not a homogeneous phenomenon; it has at least two aspects,

TABLE 9
Mean Mutability and Name Centrality Ratings from Study 4 for Specific and Intermediate-Level Categories and Features

	Mutability Judgment	Name Centrality Judgment
Specific	2.81	5.42
Intermediate-level	4.28	5.90

Note. On both scales, 1 means less central and 9 means more central.