

has all the other characteristic features of a robin is difficult. The first study will verify this claim.

Diagnosticity is also used to refer to the inferential potency of a feature. Some authors (e.g., Franks, 1995) call features diagnostic of a category to the extent that they allow us to infer other features of the category. Inferential potency increases with the degree to which the feature is predictive of other features. For example, an animal's shape usually has high inferential potency because it allows us to make inferences about other of its attributes like speed and ferocity. An example of a feature that has little inferential potency is color, especially of an artifact category like house. The knowledge that a house is blue tells us little about the house that we did not already know. The importance of predictability in categorization has been emphasized by others, including Anderson (1991) and Billman and Heit (1988). In Billman's focused sampling theory, the salience of a feature (the probability that the feature will be sampled or attended to during learning) is increased if it successfully predicts values on other dimensions. Billman and Knutson (1996) showed that people learn categories with intercorrelated features better than those with isolated features because the former allows one to predict values of other features.

Conceptually, inferential potency is distinct from informational value. Some features have low inferential potency but high informational value. Features that are unique to a category have high informational value for the category, but might provide few clues to the category's other properties and so have little inferential potency. The names of unfamiliar people or objects have this character.

The inferential potency of a feature is also distinguishable from its mutability. A feature gains inferential potency by virtue of its statistical relations to other features; in contrast, a feature is mutable by virtue of its dependencies. Statistical relations can correspond to dependency relations, but they need not. Some features, like the invariant properties of an animal's shape, are inferentially potent and immutable. But others are inferentially potent yet mutable. For instance, *has buttons* is statistically correlated with *is colored*, *has material*, *has a zipper*, and *has sleeves* (Malt & Smith, 1984) and therefore inferentially potent, but nevertheless highly mutable because little about clothing depends on having buttons.

Salience

Salience refers to the intensity of a feature, the extent to which it presents a high amplitude signal in relation to background noise, in a way that is fairly independent of context. For example, the brightness of a bright light or the redness of a fire engine are salient features. Again, a highly salient feature is not necessarily immutable as in the stripes of a zebra.

SUMMARY AND PLAN OF THE PAPER

In summary, the mutability of a feature in a concept is a measure of conceptual centrality, people's willingness to transform the feature in a representation of an object while retaining the belief that the object is represented by the concept. This dimension of conceptual structure can be distinguished from category centrality, diagnosticity, and salience. Study