

## Getting a Handle on Meaning

We confirm that when thinking about how to grab an object's handle, constituents of motor actions associated with handled objects play a role in identifying such objects. Subjects held in working memory action plans for reaching actions; these action plans specified both the hand to be used (left or right) and a wrist orientation (vertical or horizontal). Speeded object identification was impaired when a pictured object matched the action on only one of these two categorical dimensions (e.g., a frying pan with its handle facing left, an action plan involving the right hand and horizontal wrist orientation), relative to when the object matched the action on both dimensions or neither dimension. This phenomenon only occurred for semantic tasks (i.e., naming) and persisted when objects without handles were presented too. These results imply that, when actively thinking about how to grab a handled object, identification of the object leads to retrieval of matching features of a planned action along with nonmatching features to which they are bound. When bound to a matching feature, the discrepant features cannot be easily disregarded. It conflicts with the features of the target object which results in delayed identification.