

## Generics as reflecting conceptual knowledge

### Abstract

Generics are proposed to reflect the nature of the conceptual system, whose prototype structure and vague boundaries make an unreliable basis for traditional treatments of truth and logic. Examples from the psychological literature are used to illustrate the relation between generics, similarity-based reasoning and concepts.

### Main paper

Most of the comments or statements that we make about the world share the characteristics of generic statements. Although we may state them with confidence, and we may be taken to be telling the truth by our listeners, yet in a strict sense they may be false. Our knowledge of the world depends on a conceptual repertoire that is constructed from individual concept representations. These representations themselves contain or point to information that is considered germane and relevant to an understanding and familiarity with that concept. Such information includes fundamental or ontological features, such as that water is H<sub>2</sub>O, but also information about the common or typical form that exemplars of the concept may take, and any other information that it is important for someone to know.

A generic statement, it is argued, is a read-out from this conceptual/knowledge database, without concern for the degree to which it is universally or even most commonly true. The consequence of this process can be seen in a series of psychological studies that demonstrate the loose connection between what people consider to be true and the rules of logic. These studies include demonstrations of intransitivity in categorization (Hampton, 1982), and failures to respect the logic of class inclusion, disjunction, negation and conjunction (Hampton, 2011; Jönsson & Hampton, 2006; Sloman, 1993, 1998), and the acceptance of contradiction in vague statements (Alxatib & Pelletier, 2011; Ripley, 2011). These phenomena are representative of similarity-based and associative forms of reasoning proposed in the Dual Process account of reasoning (Evans, 2003; Sloman, 2002).

To understand the logic of generics, we should therefore look to the processes by which information becomes attached to, and a part of, the representation of a concept.

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