

Predicate Exchangeability and Language Invariance in Pure Inductive Logic

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6th May 2015

In Pure Inductive Logic, the rational principle of Predicate Exchangeability states that permuting the predicates in a given language L and replacing each occurrence of a predicate in an L -sentence φ according to this permutation should not change our belief in the truth of φ . In this paper we study when a prior probability function w on a purely unary language L satisfying Predicate Exchangeability also satisfies the principle of Unary Language Invariance.

Key words: Predicate Exchangeability, Language Invariance, Inductive Logic, Probability Logic, Uncertain Reasoning.