

Bayesian Philosophy of Language, “Natural Logic”, and the Stability Bridge

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In recent years, Bayesian theories have become highly influential in science (e.g. Bayesian psychology) and in philosophy (e.g. Bayesian epistemology and philosophy of language). Sometimes these theories are presented as replacing the more traditional logic-based approaches. Is the “natural logic” perhaps probabilistic in nature? I will start my lecture with some brief methodological considerations: as far as philosophy is concerned, I will suggest that both logic and subjective probability theory are in the normative business of rational reconstruction which does not recognize anything like a “natural logic“ at all. (The situation might be different for linguistics as an empirical discipline.) Then I will turn to the question how logical and probabilistic reconstructions of rationality and language might be related by general normative bridge principles. One such bridge principle will turn out to be particularly attractive: belief, assertability, truth, and other all-or-nothing notions might not just correspond to high probability but to stably or resiliently high probability. (This is worked out in detail in my recent: *The Stability of Belief. How Rational Belief Coheres with Probability*. Oxford: Oxford University Press, 2017.) I will study three instantiations of that stability bridge: in the first one, a counterfactual is true if and only if its corresponding conditional chance is stably high. In the second one, indicative conditionals are not truth-apt, but an indicative conditional is assertable if and only if its corresponding subjective conditional probability is stably high. (The resulting assertability conditions can also be represented distributedly in artificial neural networks.) In the third one, the pragmatics of language is probabilistic while its semantics is not, and the stability bridge principle contributes to the bridge between pragmatics and semantics.