



Figure 1: Schematic prior distributions for prevalence x (blue dashed), the pragmatic listener L_1 model's posterior distribution over prevalence upon hearing a generic utterance (red), and speaker S_2 model's endorsement of a generic utterance for different levels of prevalence (black). The names given to these priors are meant to be suggestive of what kinds of properties these distributions might correspond to. The left column uses prevalence priors modeled as Beta(15,15), Beta(4,1), and Beta(4,16) distributions. The right column uses a prior distribution that is a mixture of the distribution above it with a second component, modeled as Beta(0.5, 4.5), reflecting categories with 0% property prevalence. Horizontal dashed line at 0.5 is for convenience of comparing the point at which an utterance becomes judged as more true than false for S_2 . Note that the prior distribution over prevalence will be the same as L_1 's posterior distribution upon hearing the "null" utterance.