AI/ML models have rapidly gained prominence as innovations for solving previously unsolved problems and their unintended consequences from amplifying human biases. Advocates for responsible AI/ML have sought ways to draw on the richer causal models of system dynamics to better inform the development of responsible AI/ML. However, a major barrier to advancing this work is the difficulty of bringing together methods rooted in different underlying assumptions (i.e., Dana Meadow's 'the unavoidable a priori'). This paper brings system dynamics and structural equation modeling together into a common mathematical framework that can be used to generate systems from distributions, develop methods, and compare results to inform the underlying epistemology of system dynamics for data science and AI/ML applications.