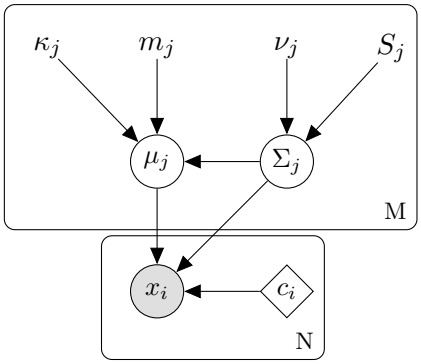

Figure 1: NIW model in boiler plate notation

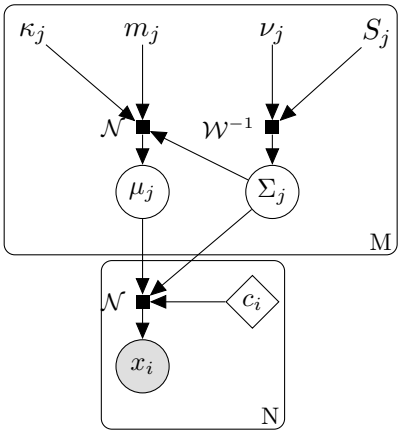

Figure 2: NIW model in factor graph notation

This visualizations are derived from a technical report "Directed Factor Graph Notation for Generative Models" and the accompanying TikZ macros by Laura Dietz 2010 (`http://people.cs.umass.edu/~dietz/`). The technical report is available in this repository as dietz-techreport.pdf. The library is found at `https://github.com/jluttine/tikz-bayesnet`.

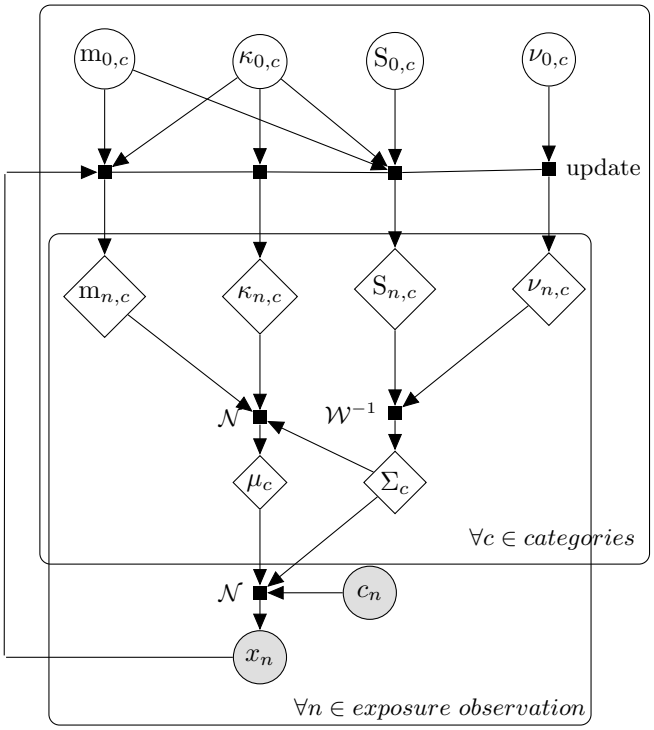

Figure 3: NIW updating model in factor graph notation

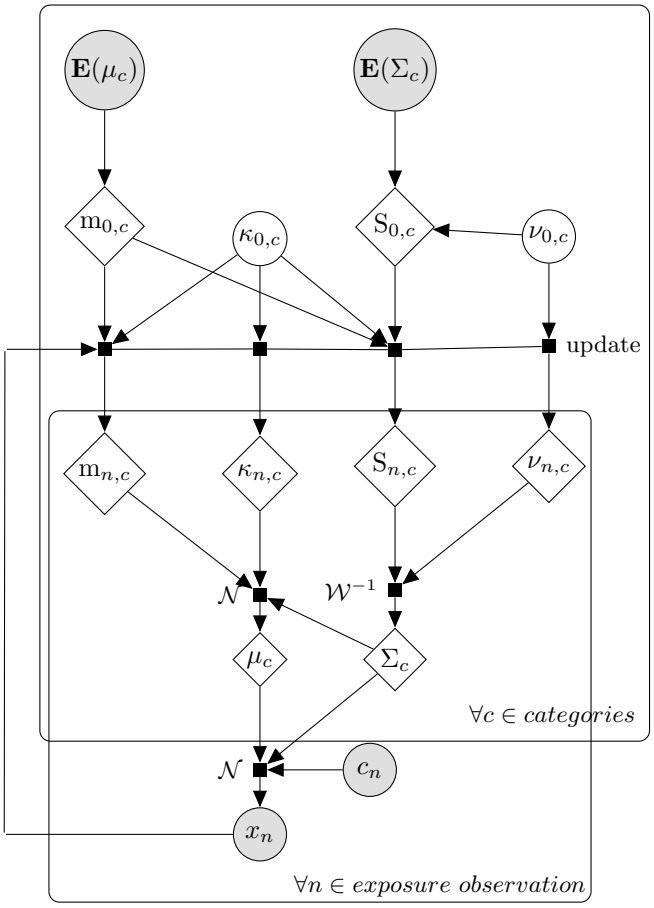

Figure 4: $\mathcal{N}\mathcal{W}^{-1}$ belief-updating model in factor graph notation, when $\mathrm{m}_{0,c} = \mathbf{E}(\mu_c)$ and $\mathrm{S}_{0,c} = \mathbf{E}(\Sigma_c)$ are fixed by phonetic databases

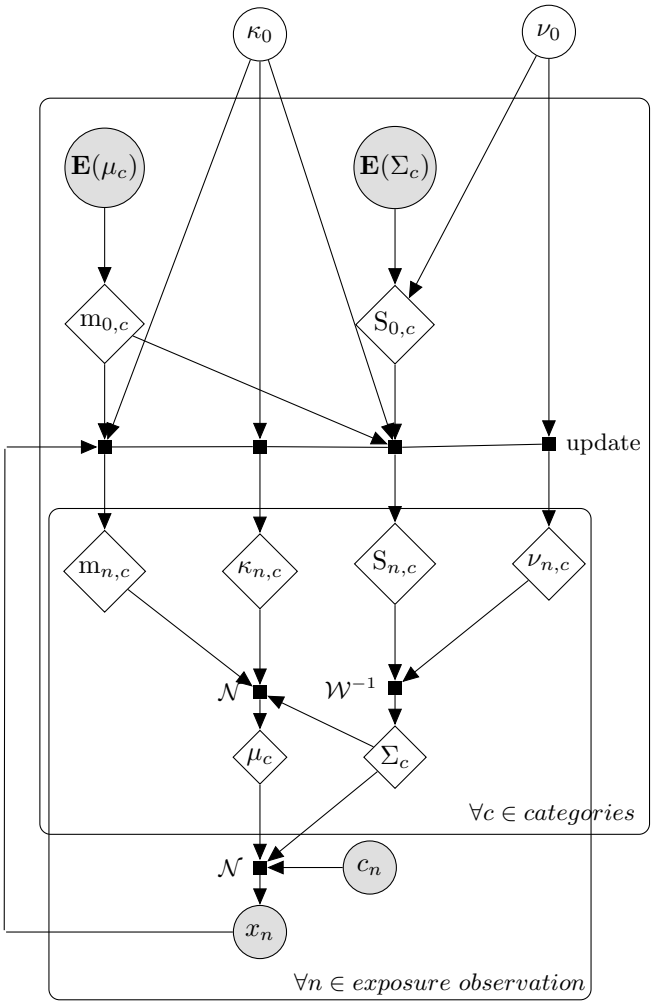

Figure 5: $\mathcal{N}\mathcal{W}^{-1}$ belief-updating model in factor graph notation, when $\mathrm{m}_{0,c} = \mathbf{E}(\mu_c)$ and $\mathrm{S}_{0,c} = \mathbf{E}(\Sigma_c)$ are fixed by phonetic databases and it is assumed that all categories share a common $\kappa_{0,c}$ and $\nu_{0,c}$.

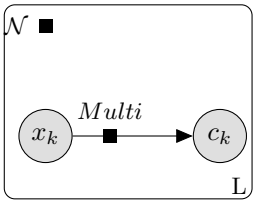

Figure 6: NIW updating model applied to test token in factor graph notation
NOT YET READY

Bibliography

[1] Laura Dietz, *Directed Factor Graph Notation for Generative Models.* Technical Report. 2010

[2] Laura Dietz, Steffen Bickel, Tobias Scheffer, *Unsupervised Prediction of Citation Influences.* In: Proceedings of International Conference on Machine Learning. 2007