# Typos from the ' Og 

Christian P. Robert

May 5, 2021

## The Bayesian Choice

1. (Thanks to Bastien Boussau, Berkeley) In Example 1.1.3 (or Example 1.3), on page 3 , I consider an hypergeometric $\mathcal{H}(30, N, 20 / N)$ distribution, while in Appendix A, I denote hypergeometric distributions as $\mathcal{H}(N ; n ; p)$, inverting the role of the population size and of the sample size.
2. (Thanks to Thong Pham, Ritsumeikan University, Japan) In Example 1.3.2 (or Example 1.11), the term $\sigma^{n}$ in the expression at the top of page 15 should be $\sigma^{n-1}$.
3. (Thanks to Cristiano Passerini, Pontecchio Marconi, Italy). In Example 4.3.3 (or Example 4.19), page 184, further involves a typo related with the hypergeometric distribution $\mathcal{H}(N ; n ; p)$. The ratio should be

$$
\frac{\binom{n_{1}}{n_{11}}\binom{n-n_{1}}{n_{2}-n_{11}} /\binom{n}{n_{2}} \pi(N=n)}{\sum_{k=36}^{50}\binom{n_{1}}{n_{11}}\binom{k-n_{1}}{n_{2}-n_{11}} /\binom{k}{n_{2}} \pi(N=k)} .
$$

4. (Thanks to Stack Exchange) In Definition 5.5 (p.231) of the Bayes factor, the final formula

$$
B_{01}^{\pi}(x)=\frac{\int_{\Theta_{0}} f\left(x \mid \theta_{0}\right) \pi_{0}(\theta) \mathrm{d} \theta}{\int_{\Theta_{1}} f\left(x \mid \theta_{1}\right) \pi_{1}(\theta) \mathrm{d} \theta}=\frac{m_{0}(x)}{m_{1}(x)}
$$

should be

$$
B_{01}^{\pi}(x)=\frac{\int_{\Theta_{0}} f\left(x \mid \theta_{0}\right) \pi_{0}\left(\theta_{0}\right) \mathrm{d} \theta_{0}}{\int_{\Theta_{1}} f\left(x \mid \theta_{1}\right) \pi_{1}\left(\theta_{1}\right) \mathrm{d} \theta_{1}}=\frac{m_{0}(x)}{m_{1}(x)}
$$

5. (Thanks to Luiz Max Fagundes de Carvalho, Getúlio Vargas Foundation (FGV), Brazil) In Exmple 5.2.7, the numerical illustration should be

$$
\left(1+\frac{2}{120} 2^{5}\right)^{-1}=\frac{15}{23}
$$

(This typo was created in later revisions as it does not appear in the 2001 printing.)
6. (Thanks to John Haman) On page 280, at the end of Section 5.7.1, $\gamma^{\pi}(x)$ is equal to one when the probability is larger than $a_{1} /\left(a_{0}+a_{1}\right)$.
7. (Thanks to Peng Yu) On pages 344-345, (7.1.1) should designate the general setting of a collection of models, i.e. the last formula of page 344, rather than the mixture example.
8. (Thanks to Benjamin Remy Holcblat) In formula (10.4.3), on page 480, (formula (10.15), page 493 in the paperback), the denominator should be $p_{x_{n+1}}\left(x_{1}, \ldots, x_{n}\right)$ instead of $p_{x_{n+1}}\left(x_{1}, \ldots, x_{n}\right)+1$.
9. (Thanks to Anthony Lee) In Definition 10.2.1, formula (10.2.1), the last integrand should be $\theta_{n}$, not $\theta_{n+1}$. (I somehow thought this had been corrected already!)
10. (Thanks to Stefan Webb) The density

$$
f(x \mid p)=\frac{\binom{p n}{x}\binom{(1-p) N}{n-x}}{\binom{N}{n}} \mathbb{I}_{\{n-(1-p) N, \ldots, p N\}}(x) \mathbb{I}_{\{0,1, \ldots, n\}}(x) .
$$

should be
11. (Thanks to Peng Yu) On page 578, the reference West (1992) is a phantom reference in that it is not quoted in the book.

