Subjectivity and objectivity in Bayesian statistics: rejoinder to the discussion

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It has been very interesting to engage in this discussion on subjective and objective issues in Bayesian statistics. I hope that we have generated more light than heat. Thanks to all the discussants and *Bayesian Analysis* for providing the forum. Here are some reactions to the discussion.

1   Comments on Jim Berger's paper

Jim has provided an excellent overview of the considerations that lead to the "objective" Bayes position, emphasising the pragmatic advantages in simplifying the formulation and resulting analysis for the Bayesian statistician, who, after all, has a hard enough job just carrying out any version of a Bayesian analysis for substantial problems. I am happy to accept such simplifications in many situations, as I discuss in my consideration of pragmatic subjectivism. So, why does this issue generate so much controversy?

When discussing subjectivity and objectivity in Bayesian statistics, there are various issues that can easily become confused. There are deep philosophical questions as to what we mean by these terms and common sense considerations as to how these terms are generally used and understood in practice. These distinctions are mirrored by the corresponding methodological considerations as to what constitutes a good analysis in principle, and what is achievable in practice.

Let's consider the meaning of these terms. Here is how the The Internet Encyclopedia of Philosophy explains the distinction:

"Objective judgment or belief" refers to a judgment or belief based on objectively strong supporting evidence, the sort of evidence that would be compelling for any rational being. A subjective judgment would then seem to be a judgment or belief supported by evidence that is compelling for some rational beings (subjects) but not compelling for others.

[Objectivity, D.H. Mulder, The Internet Encyclopedia of Philosophy, http://www.iep.utm.edu/]

This seems reasonable to me. I think that it corresponds more or less to how the term is commonly used and understood and explains why it is valued as a gold standard in science and elsewhere. This is the view that I expressed in my article. A common aim for a scientific Bayesian analysis is to ascertain whether the data is sufficiently convincing that any reasonable assignment of prior judgments would lead to roughly the same conclusions. If we called such an outcome an "objective Bayesian analysis"

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