

Summary

This manuscript on L&P-updating and Jeffrey updating makes interesting points. I recommend that the author/s (AU) *revise and resubmit* an improved version which makes the argument clearer, contains a conclusions section and makes the originality of the contribution much clearer. See below for details.

Major Comments

The argument structure needs to be clearer. Why exactly is one updating approach preferable to the other? Sections and their headlines should better guide the reader. A proper assessment of the badness of failing to fulfill the desiderata is lacking.

Adding a conclusions section is a must.

It's not quite clear (at least to me), which arguments AU claim to be novel. If(!) none is, then this manuscript does not deserve to be published.

Minor Comments

Adding a table with the different desiderata according to whether the two approaches satisfy them might be nice.

Section 1 and Section 2 have a single subsection (1.1 and 2.1). That's strange.

Page 3: “(P' for the posterior, not necessarily a probability)” – delete or expand. I have no idea why P' is not a probability function.

$(0.5P + 0.5Q)$ – this does not require a Euclidean metric.

Page 6: The isomorphism is used to pull back the metric on \mathbb{S}^{n-1} , which, I presume, is the restriction of the Euclidean metric on \mathbb{R}^n to \mathbb{S}^{n-1} , to the set of probability functions \mathbb{P} .

State that \mathbb{S}^{n-1} is the simplex such that ...

Page 7: L&P-updating should be introduced before it is applied.

I don't like the word "expectation". It makes people think about expected values. How about "desiderata", "properties" or something else?

Are these lists meant to consist of intuitive statements or are the items natural language formulations of formal properties?

CONTINUITY and INVARIANCE: these properties need clarification.

JC is an amujus, really?

"Evidence appears in the form of a constraint on acceptable probability distributions" – Please, reformulate.

Page 11: Delete the sentence following (3).

Page 12: Where can I find the "brief sketch"?

Page 14: "minimally inaccurate" – if one measures in their sense.

Page 17: "meant to be" – by whom?

Page 25: "Asymmetry is the central feature" – No.

"It is called standard conditioning." – Delete this sentence.

Pages 28 – 30: A clearer structure of the argument would be nice here. The use of the "proof"-environment or other such structures is advisable.

COLLINEAR HORIZON: This has *strong* Euclidean appeal. I wonder whether a "logarithmic" equivalent of co-linearity can be found.

Page 33: "the information required is infinite." – outright impossible.

Page 34: "escapes any epistemic intuition" – If so, is this so bad?

Page 35: Make indexing consistent. Either always or never. I prefer to always

display the index.