Comments on Madsen and Lipo from KA

This paper is beautifully-written, extremely interesting, and fits in well with the overall theme of the RNMH series. I have only a few comments, which I hope you will take into consideration in preparing your final version.

1. Eq. (2) on page 12 appears to be a distance measure. Shouldn’t the probability of interaction be ?
2. Fig. 5 reports important results, but is confusing because there are horizontal and vertical axes for each embedded figure as well as for the whole figure. Perhaps one of the embedded figures could be presented separately and explained in detail.
3. Two lines below Fig. 5, it is stated “left hand peak corresponds to simulation runs which had no global innovation….” Does this mean that the left hand peak represents runs in which innovation did not occur by chance?
4. In the paragraph below Fig. 7, you make the interesting statement “mean radius declines … due to the slower velocity at which an innovation diffuses.” Are there any studies on the original Axelrod model that explore the effect of changing the interaction distance?
5. Design space is assumed to be finite, which entails that hominid imagination is also limited. Could you discuss further what would be the effect of evolutionary advances in imagination?