Overall comments regarding modeling section:

The current modeling analysis aims to show that the exemplar model can provide a viable account of the qualitative patterns observed in the overall subject performance during the transfer phase.

\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*

I think it would be more appropriate to say that our purpose was to TEST whether alternative models could account for the qualitative patterns observed during the transfer phase. We really did not know in advance which models would be successful.

Following Hintzman’s (1986) influential style of modeling, we decided to simulate the psychological structure of dot-pattern stimuli and categories in an analogous manner to Posner-Keele statistical-distortion procedure.

Hintzman (1986) has already shown that his exemplar-based MINERVA2 model predicts that people will generalize more successfully if trained using low distortions rather than high distortions. So what is the purpose of our modeling analysis?

Nosofsky & Zaki [1992] reported that six-dimensional solutions can adequately account for the similarity relations among dot patterns).

I think you mean Shin and Nosofsky (1992)?

Without loss of generality, we set the between-category scaling parameter *between* to be fixed at 2, while allowing the parameters *within* and *c* to be freely estimated.

At this point you have not yet explained that similarity is an exponentially decreasing function of distance in space and c has not yet been defined. so this is very poorly organized

In sum, there are two free parameters (*within*, *c*) in the prototype model.

to make things comparable, I guess that we should also fit a 4-parameter prototype model: c, low, medium, high

\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*

We used the Hook and Jeeves (1961) algorithm for parameter search.

10 different random starting configurations for each parameter search, although almost all configurations led to the same best-fitting parameters

Consistent with the observed data (Fig. 3, left panel), the model predicts that the novel high distortions are classified with the lowest accuracy in the high training condition compared to the other conditions, and that the novel medium distortions are classified with lower accuracy in the medium training condition than in the low training condition.

Ultimately, the above trends are the ones we want to focus upon. However, there is way more going on in the data than just those two comparisons. You should describe the successful predictions more broadly before turning to the above aspects of the data. In addition to the broad patterns, one thing we have not yet discussed are the predictions and observed performance for the old training patterns compared to new distortions of the same distortion level. This should also be part of the discussion.

The right panel of Figure 5 illustrates the predictions yielded by the best-fitting baseline prototype model. Apparently, the model predicts virtually no difference in the classification performance for the novel test patterns across all four training conditions. In other words, according the prototype model, the level of distortions of the training patterns has no effect on the generalization performance. The best-fitting parameters and the sum-of-squared deviations for the baseline exemplar model are reported in table 1.

Some explanation of these predictions should be provided and this needs to be discussed way more. How might a prototype theorist react to these results? What caveats should we state? Your last sentence refers to the exemplar model, not the prototype model. You need to be more careful.