

An open letter to Harold Gans

The following letter was sent by email to Harold Gans on June 4, 1998.

Dear Mr. Gans,

I am writing to you about a variant of your famous cities experiment. From the limited details that you have released to me, it would seem that its new elements suffer from the same problems as the original WRR experiment in that the list of cities is based on subjective and arbitrary rules of spelling and variant names. I am proposing an experiment in which the names of the cities and their spelling is taken from the same Margalioth Encyclopedia that was used in the initial WRR experiment to decide which Rabbis warranted inclusion on the lists of famous Rabbis. The details and proposed time table appear later in this letter.

Of course, this experiment, which follows the general method in the original WRR experiment, is hardly definitive. There are many problems with the WRR experiment beyond the choice of list, among them the following: Prof. HaSofer has analyzed the statistical model behind the experiment and found it lacking, Prof. Haralick and others have questioned the method used to compute the distances. Prof. Diaconis' exact proposal to computing the statistics was not used. The lists of appellations which this new test also uses are subjective and therefore invalid as part of a truly scientific analysis.

There have been proposals by several individuals (e.g. Profs. Haralick and Kahzdan) that a fresh, comprehensive experiment should be done designed from the start to address all the many problems in the original WRR experiment and done by a group that involves both the proponents and critics of the existing experiments. Such a project involves a massive expenditure of time and some considerable costs including travel for the participants to be able to meet face to face. None of the results found so far have established enough of a case to warrant this massive effort.

It is here that my proposed experiment is relevant even though it shares many of the flaws in the original WRR experiment. I would regard a highly significant result (defined normally by statisticians as a level of better than 1 in 1000) in this proposed experiment as an indication that the codes phenomenon warrants a serious comprehensive study and would then be willing to invest the time in such a project and attempt to help raise the funds needed for such a project.

Should the results not be significant at the 1 in 1000 level, they would confirm my opinion that a serious scientific study is not warranted, would raise serious questions about your version of the cities experiment and would call into question the whole notion of whether there are statistically significant codes in the Torah.

I welcome your comments on this proposal.

Barry Simon
IBM Professor of Mathematics and Theoretical Physics
Caltech

Appendix: Timetable and procedure for the experiments

1. I would expect a response from you about whether you are willing to take part in this experiment within one week of my sending this letter to you (i.e. a response by June 11). Either way I intend to pursue the experiment.
2. I would endeavor to get three Yeshiva students who have not previously taken a serious public stance on the codes to draw up the names and spellings of the cities to be used for each of the 66 Rabbis on the two WRR lists. Two of the students would independently go through the Margalioth entry for each Rabbi and determine the names of all the cities in which the Rabbis lived as mentioned in this encyclopedia. Spellings would be as used in the encyclopedia entry in question and the lists would be limited to cities and towns (and not, for example, countries). Only city names that are between 5 and 8 letters would be used. Only the names of cities themselves and NOT with added generic prefixes (like "the community of") will be acceptable. These two students would then give their lists to the third student who would check that they were consistent. In any places where they were inconsistent, the third student would consult the encyclopedia and the two students to determine what was correct. The final list of cities to be used for each Rabbi as determined by the third student would be supplied to you and me and other interested parties by the third student.
3. The input data will consist of those of the Rabbis with some city name, their complete list of appellations exactly as used in WRR and the list of cities as found in step 2.
4. You would then do the experiment following the precise method of WRR including the calculation of 4 p-values and a single significance level as computed in WRR using Bonferroni's inequality. If you decided not to take part in the experiment or do not reply within the initial week, I would ask another individual to do the experiment. I would expect the results from you within two weeks of your getting the list from step 2. If the results are not available by then, I would ask someone else to provide them.
5. We would widely disseminate the results of this experiment.