

**A CRITIQUE OF THE REPORT SUBMITTED BY THE COMMITTEE  
ESTABLISHED TO EXAMINE GANS' EXPERIMENT<sup>1</sup>**

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*Summary*

- a. An experiment performed by Harold Gans [G]<sup>2</sup> to examine ELS rabbi/community matches in Genesis, concluded with statistical results that were highly significant. Data collection for the experiment was accomplished through a mechanical procedure by means of a precise algorithm.
- b. Following criticism of the algorithm and its implementation, a committee headed by Professor Yisrael Aumann was established. (The committee included a representative of the experiment's proponents, Professor Eliyahu Rips and a representative of its opponents, Professor Dror Bar-Natan). The objective of the committee was "to look into the results reported by Gans in [G]." The committee began examining the algorithm and how it was implemented, but after several meetings the original goal was abandoned and the committee moved onto something different: To plan and perform a new experiment that would examine the ELS matches of rabbi/community names in Genesis using new data.
- c. Because of disagreement over this new experiment's protocol, it was decided to conduct two separate experiments: Experiment [F] that would be loosely connected to [G], and experiment [R] that would replicate [G]. Data collection for the new experiments was entrusted to experts appointed by committee member Professor Hillel Furstenberg. Each expert would work in accordance with written instructions prepared in advance by each experiment's proponents.
- d. When we finally received the lists of data collected by the experts for [F] and [R], it was immediately obvious to us that they included errors. (For example, on the first page of data for [R] the word Venice was misspelled ("וינוציא" instead of "ויניציא") and on the first page of data for [F] the name of the one Spanish town "טולידו" was confused with the name of another Spanish town "טודילא"! ) We immediately drew the attention of the committee to the fact that there were trivial errors in the data, and made it clear that we would not take part in any experiment or calculation until the collected data was first verified as being appropriate for a scientific experiment. As we will explain below, an exhaustive examination made at that time found not only trivial errors, but discovered that the experiments were fatally flawed because of deviations from the protocol and because of errors and carelessness in preparation of the data.
- e. When we informed the committee chairman of our decision, he insisted on

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<sup>1</sup> Appendices for this article can be found at <http://ratio.huji.ac.il/dp/dp365A.pdf>

<sup>2</sup> Concerning the experiment see:

Gans, H, J. (1995). Coincidence of Equidistant Letter Sequence Pairs in the Book of Genesis. Preprint.

In 1997, due to critical feedback Gans decided to thoroughly examine his data and he announced the results of the subsequent two year investigation in a detailed paper:

Gans, H, J. (2000). A Primer on the Torah Codes Controversy for Laymen. Preprint. Pp.16-18.

Also see details in the book "Tzofen Bereshit" ("The Genesis Code") by D. Witztum (5764) in chapter 17 and in appendix 13.

- "קהל" ("Kehal" = "the community of..." For example, Kehal Vilna).
- "קהלת" ("kehilat" = another form of "the community of..." For example, Kehillat Vilna).

The usage of these two adjectival phrases dominates in Jewish historical documents. (For further details see appendix E of the document "Comments on the flaws of experiment F", included in the appendix of this paper.) This, in fact, is why the adjectival phrases "Kehal" and "Kehillat" were chosen for replication experiment [R].

Adding the above data to the expert list for [F], it seems that we could perform the "communities experiment", e.g., options II(1) and/or II(2) mentioned in section E above. We now deal with the problem of spelling.

## 2. Spelling.

Let us first stress that it is not we who initiated and designed experiment [F], and we had no part in composing its instructions to the expert, which did not include spelling rules at all. In our opinion, the resulting list F contains many names with unsuitable spelling for searching ELSs encoded in the Torah. (For example, list F spells Vienna with two Vavs: "ווינא".) The issue of the appropriate spelling was already discussed above (in Section C), and our position has been publicized many times in the past. Therefore we consider all results based on the present spelling of list F invalid.

But in this instance too, it is possible to mend the existing list, in the following way. The committee adopted in advance a set of spelling rules, whose original purpose was to use it for list R. But these spelling rules can be also applied to the names of list F. Applying these spelling rules to list F results in a list with a greater number of correct spellings.

We mended list F according to 1 and 2 above. Then we ran the "communities experiment" on the resulting list F'. The results were as follows:

	r4	r2
(1) Calculation with adjectival phrases	0.000895	0.000602
(2) Calculation with and without adjectival phrases	0.0046	0.0061

Where:

r2 is the ranking of statistic P2 out of 1,000,000 permutations, divided by 1,000,000.

r4 is the ranking of statistic P4 out of 1,000,000 permutations, divided by 1,000,000.

This calculation included all 66 Famous Rabbis. [More details can be found in appendix F of the document mentioned above. (See here note no. 3)].