# Of Science and Parody: A Complete Refutation of MBBK's Central Claim

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#### Introduction

# A. Background:

Discussion concerning the phenomenon of hidden codes in the Torah text tends to be highly charged and loaded with preconceptions. Some of the criticism of codes research seems to be motivated not by the objective evidence but by an *a priori* hostility to the hypothesis deriving from the critics' general worldview. This flaw seems to be most apparent in the work of professors Brendan McKay, Maya Bar-Hillel, Dror Bar-Natan and Gil Kalai (MBBK).

In their joint paper, published in *Statistical Science* [1], they criticize the work of Witztum, Rips and Rosenberg (WRR) demonstrating the existence of coded information in the Torah [2]. WRR's research had been published in the same journal five years earlier. Because MBBK believe that WRR's thesis, if shown to be correct, would affirm the divine authorship of the Torah, MBBK are forced by their opposing philosophy of life to attribute the success of the experiment to deceit. Their starting point, then, is not the question of *whether* there was deceit, but only *how* the assumed deceit could have been perpetrated.

Given these circumstances, their pseudo-scientific approach can hardly qualify as a yardstick for establishing truth. We are fiercely attacked and even vilified by these opponents, who feel justified by their philosophy to mislead and distort. Any means seems to justify their goal – to deny the existence of the Torah Codes. Hence the reader should not be surprised to find in our article many examples of MBBK's falsehoods and deceptions.

The statistical aspects of the controversy are thoroughly dealt with in our paper [3] entitled "MBBK's Study of Varitions." This paper thoroughly refutes MBBK's "statistical proof" that we cheated and establishes the exact opposite — that MBBK's "statistical proof" is itself a gross deception. We suggest reading the brief article, "A Review of the Attempts to Invalidate the Torah Codes" which links to other articles refuting MBBK's various allegations.

The present article concentrates on MBBK's central claim and needs no specialized knowledge of statistics. It is only because of the broader character of the battle (as described above) that they allow themselves to "prove" their **central claim** with such an unscientific methodology – the use of **parody!** 

#### B. MBBK's central claim:

MBBK's central claim, publicized by every means available, was that they did "the same thing" that WRR did in *Genesis*, in *War and Peace*.

But what do they mean by "the same thing"?

In order to understand the meaning of doing "the same thing", we should first know what was done in WRR's research.

The original research of WRR was a daring attempt to investigate whether the names of famous rabbinical personalities were encoded in *Genesis* in proximity to their dates of birth and death.

- A list of personalities was prepared according to certain objective criteria. Then, a list of names and appellations for these personalities was prepared by Prof. Shlomo Zalman Havlin, then head of the Dept. of Information Studies & Bibliography at Bar Ilan University, following professional guidelines. We denote this list "L1." All the functions and parameters needed for the measurements, as well as the list itself and the rules governing the data (names, appellations and dates) were established before the experiment began.
- The subsequent experiment performed on L1 succeeded exceptionally well and indicated that these data are indeed encoded in *Genesis*. Prof. Diaconis, a prominent statistician, proposed that a new list of famous personalities be prepared constrained by the same rules, to be investigated using the exact same functions and parameters.
- A second list, which we denote by L2, was prepared by Havlin using the same rules as before. Then a second experiment was done, using the exact same program.
- This experiment, for L2, also succeeded exceptionally.

**MBBK claim:** L2's success was achieved solely by exploiting the flexibility within the rules and by breaking them.

<u>We claim:</u> L2's success is due to the existence of a genuine code phenomenon. The rules, by virtue of being correct, serve to select appropriately the names and appellations of the famous rabbinical personalities.

There is a simple test to decide between the two claims: Let an independent expert prepare a new list of names and appellations for the personalities of the second list, according to the same rules. If this list succeeds it would prove that the original success was due neither to flexibility nor to the breaking of rules.

Surprisingly, instead of doing this simple scientific test, MBBK chose to invent a new kind of "experiment". They assembled a list of names and appellations of their own, which succeeded in *War and Peace*. They claim that they did the "same thing" as WRR, i.e., that they "cooked" their list by exploiting the flexibility of the rules and by breaking them "to the same extent" as WRR did. This is their central claim.

In fact, their work in *War and Peace* is nothing more than a worthless parody. It is based on linguistic and bibliographic errors, and on futile assertions and deceptions. To say that they did "the same thing" as we did is simply nonsense (see our article: "A Refuted Refutation, or: How the List of Famous Rabbis *Failed* in *War and Peace*," <u>Part A</u>, <u>Part B</u>.). This assessment has received the endorsement of a number of experts in rabbinical bibliography (see Chap. III).

The problem is that what is clear to the professional is often not so obvious to the layman. Most of readers (including the editors of the journals where MBBK's work was published) are unfamiliar with the relevant fields. We even suspect that MBBK counted on this while preparing their parody.

The present article is intended to bridge this gap. It refutes MBBK's central claim without overwhelming the reader with linguistic or bibliographic details.

We assert that MBBK's central claim is built on a double deception:

- 1. Their data is incorrect and misleading.
- 2. Their method is unscientific and is in fact designed to facilitate deceit.

We will demonstrate these assertions as follows:

- In Chapter I we will present a refutation of their central claim using logic alone.
- In Chapter II we will point out some of the false data they rely on. In particular we will show that contrary to their assertion, they have no scientific confirmation for their central claim.
- In Chapter III we will quote experts who affirm decisively and unequivocally that MBBK's claims are based on lies and ignorance.
- In Chapter IV we will explain that their working method is unscientific and is actually designed to facilitate deceit.

# Chapter One

# A Complete Refutation of MBBK's Central Claim

In this chapter we present a simple refutation of the central claim that:

MBBK exploited the flexibility of the rules or broke them to the same extent as WRR. Let us denote this claim by **Assertion 1**. We will refute Assertion 1 using logic alone. Understanding this argument will not require any knowledge of rabbinical bibliography or even of the Hebrew language.

# Stage I:

The constraints governing the preparation of L2 were of three kinds:

- 1. The rules mentioned in our *Statistical Science* paper [2]. We denote them by WRRR.
- 2. Havlin's rules, as published in his statement of opinion [4]. We denote them by HR.
- 3. The constraints that can be inferred from Havlin's first list, L1. We denote them by L1R.

Since it is our assertion that Prof. Havlin prepared lists L1 and L2 strictly according to HR, everything in L1R is included in HR.

#### Based on these facts, we have proposed "Challenge I":

An independent expert will prepare a new list of names and appellations, LE, for the thirty-two personalities of L2, according to the rules WRRR + HR.

An examination of list LE in both *Genesis* and *War and Peace* will help to determine the truth or falsehood of Assertion 1.

In fact, we know (and MBBK also admit) that LE would fail in *War and Peace*. Since this text contains no hidden codes only manipulated lists will succeed in it.

The real question is whether an alternative list, compiled by following the constraints that existed when L2 was prepared, will still be successful in *Genesis*. In other words, would LE succeed in *Genesis*?

There are two possibilities:

# (1) If LE succeeds in *Genesis*:

This would prove that L2's success was neither due to "an exploitation of the flexibility of the rules" nor to "breaking them." On the other hand, LE's failure in *War and Peace* would prove that MBBK's success in *War and Peace* was obtained solely through manipulation and the breaking of rules (as they concur). Therefore, we would be able to derive the following conclusions:

- Conclusion A: Assertion 1 is false.
- <u>Conclusion B</u>: The constraints that existed when L2 was prepared, WRRR+HR, really constrain a list of names and appellations for the personalities of L2 to succeed in *Genesis*.

Consequently we will have demonstrated that the phenomena of the Codes is genuine.

# (2) If LE failed in *Genesis*:

- <u>Conclusion C</u>: Assertion 1 might be correct. (For a final decision one would have to take other factors into consideration, like the opinions of the experts cited in Chap. III.)
- <u>Conclusion D</u>: The constraints that existed at the time L2 was prepared (WRRR+HR) would not constrain a list of names and appellations for the personalities of L2 to succeed in *Genesis*.

Consequently the reliability of the original results for L2 would depend on the integrity of WRR and Havlin.

This challenge was proposed at the beginning of the controversy and it was publicized in our article in *Galileo* [5] (which was posted on the Internet) and in *Jewish Action* [6]. We believe that had it been accepted it would have decided the issue once and for all. Unfortunately it was rejected (For example see [7]).

We repeated our challenge in Sept. 2000, accompanying it with a million dollar bet that LE would perform better in *Genesis* than in *War and Peace*. This suggestion was the headline of a full article in the holiday weekend (Sukkoth) supplement of the most popular paper in Israel (*Yedioth Acharonoth*). The same article quoted Prof. Bar-Hillel's response: "Why should anyone want to do that **foolish** experiment?" (Emphasis mine).

We still call upon MBBK to agree to the appointment of a mutually acceptable expert and the establishment of a protocol to carry out Challenge I.

# Stage II:

MBBK did not picked up the gauntlet and refused to participate in Challenge I, because the result of the experiment might prove conclusions **A** and **B**. Instead, they thought up a **new accusation**:

Because Havlin's rules were only publicized about nine years after L2 was prepared, perhaps they were made not *before* L2, but fabricated to fit L2 *a posteriori*.

Let us denote this claim by Assertion 2.

This claim was not raised in MBBK's earlier articles in *Galileo*, *Chance* and on the Internet. The first mention of it we found appears in an electronic letter McKay sent on 17 June '98 to a large group of addressees. This claim was raised again by MBB in response [8] to our criticism [9] in *Chance* at the end of '98. In the Appendix to Chapter I (C) we illustrate the absurdity of Assertion 2. Here we note the following fact: Assertion 2 may only help MBBK escape Conclusion **B**, but cannot change Conclusion **A**! (Explanation: By their persistent refusal to take up our challenge, they tacitly admit that LE would succeed in *Genesis* and not in *War and Peace*. They just claim [Assertion 2] that the **reason** for this success is that HR was prepared a posteriori.)

Hence, we are left with Conclusion A: Assertion 1 is false.

# Stage III:

In order to escape Conclusion A (which destroys their work in *War and Peace*), they invented **another assertion**, first appearing in their reply to our criticism in *Chance* [8]:

MBBK did not build their list according to the constraints WRRR+HR. They did it according to WRRR alone.

Let us denote this new claim by **Assertion 3**. They repeated this assertion in their paper [1] in *Statistical Science*. (See Appendix, A).

(1) The claim that MBBK worked constrained by rules WRRR alone is ridiculous. As they wrote in *Chance* ([8], see this quotation in the Appendix, A) WRRR are only spelling rules, not selection rules for names and appellations. On the other hand, they wrote in their *Chance* article [10] that L1 set "heavy constraints" on the preparation of L2, that is, constraints governing the selection of names and appellations.

If MBBK insist that they only exploited the flexibility in WRRR (or broke them) "to the same extent", while ignoring the "heavy constraints" which L1 imposed on the compilation of L2, then they obviously did not do "the same thing" as Havlin did.

(2) In any event, this claim is patently false. MBBK's attempts to rewrite history should be rejected. Suffice it to quote from Prof. Cohen's confirmation of their list, given at their request:

"After studying your list, I understand that it was prepared according to the same criteria as presented by Prof. Havlin, and that it contains some differences from Havlin's list, which are also based on findings in the Responsa Project." (Transtaled from the Hebrew, emphasis mine).

Thus we see that their list was indeed arranged according to HR. In Appendix (A) we bring a series of proofs that their original claim was that they exploited the flexibility of Havlin's rules and that they broke them "to the same extent" as WRR. See the Appendix (B) for an illustration of how one lie makes many.

#### Conclusion: Assertion 3 is false.

Therefore, Conclusion A remains correct and **Assertion 1** is a lie, calculated to mislead the public.

# Summary:

MBBK's claim that they "did the same thing" as WRR (Assertion 1) can easily be put to the test by using an independent expert (Challenge I). MBBK refuse to participate in Challenge I, knowing that it would immediately destroy their claim. In their efforts to evade this challenge they became entangled in a web of falsehood.

Their excuse for their refusal – that Havlin's rules were prepared *a posteriori* to fit L2 – is a tacit admission that these rules fit L2 and not their *War and Peace* list. This is tantamount to admitting that their claim – that they broke the rules to "the same extent" – is false (Conclusion A).

In order to escape Conclusion A, they invented the assertion that they never tried to work according to Havlin's rules (Assertion 3). We have brought clear evidence that this assertion is false. Hence, Conclusion A remains correct.

#### Note:

For the purposes of the present article, it would have sufficed to prove that Assertion 1 and Assertion 3 were false.

However we claim that also Assertion 2 can be refuted, thus proving Conclusion B and again affirming the validity of the phenomenon. In the Appendix (C) we point out the absurdity of Assertion 2 which claims that Havlin's professional and logical rules (see Chap. III) were "cooked" *a posteriori* to fit lists that had been made with no rules. We also propose additional **challenges** to put this claim to the test.

#### Let us summarize this debate in a table:

MBBK:	<b>Assertion 1</b> – We exploited the flexibility in the rules of WRR's work or	
	broke them to the same extent as WRR.	
WRR:	<b>Challenge I</b> – An independent expert will use WRRR+HR (the rules of	
	WRR's work) to prepare a new list.	
MBBK:	Refusal	
	Conclusion A	Conclusion B
WRR:	<b>Assertion 1</b> is false	Torah Codes are genuine
MBBK:	<b>Assertion 3:</b> We didn't work	<b>Assertion 2:</b> HR were fabricated
	according to HR	to fit L2 a posteriori
WRR:	Evidence is given that	<b>Assertion 2</b> is impossible (in the
	<b>Assertion 3</b> is false	Appendix we explain the logic)

# Chapter Two MBBK's False Data

MBBK assert that they exploited the flexibility available in the selection of appellations to "cook" a list which succeeds in *War and Peace*. This supposedly proves that the "wiggle room" in the selection of appellations was "more than enough" to produce an artificially strong result for WRR's second list.

Actually, MBBK prepared **two** lists. The first, which we will denote by BM1, was originally publicized on the Internet in September '97 by Bar-Natan and McKay [12] and is discussed in their article in *Statistical Science*. Following our sharp criticism they altered it, thereby creating a second list, which we will denote by BM2. This list is presented in the final version of their article "ELSs in Tolstoy's *War and Peace*" [13] on the Internet, and in their paper in *Statistical Science*.

#### A. The Cohen affair

To support their claim that they "did the same thing" as WRR, MBBK rely on the authority of Professor Menachem Cohen. They did this in their *Statistical Science* paper as well as in their earlier publications. This reliance was expressed in various ways as we will see below.

(1) They claim that the changes they made to L2 to "cook" BM1 were based on *research*.

#### We retort:

They are absolutely right in recognizing that their list *should have been* based on research. Since their experiment requires a list of names and appellations which is correct both bibliographically and linguistically – only professional research can supply it.

#### **But:**

It is not true that their list is actually based on proper research. We will explain why:

(a) They knew quite well that without <u>research done by professional bibliographer</u> their work would be worthless. Therefore they claim in *Galileo* [14] that their list was indeed "based on research." They write:

"Dror Bar-Natan and Brendan McKay, assisted by Prof. Menachem Cohen from the Faculty of Jewish Studies of Bar Ilan University, accepted this challenge..." (Transtaled from the Hebrew).

Since Bar-Natan and McKay do not have the expertise in rabbinical bibliography needed for such an enterprise, the reader must reasonably deduce that Prof. Cohen prepared the list. But in reality, <u>Cohen neither assembled this</u> list, nor did he even assist in its compilation.

When I pointed this out in my response in *Galileo* [5], they tried to wriggle their way out and said:

"Contrary to what may have been understood from our article, the list of names examined in *War and Peace* was not prepared with Prof. Cohen's help. It only underwent his evaluation in comparison to the Havlin list." (Transtaled from the Hebrew).

#### (b) So who did the actual work?

List BM1 was actually compiled by Mr. Aryeh Levitan who himself has little knowledge in rabbinical bibliography and lacks previous experience in this field. Hebrew is not his mother tongue. In fact, he only began learning it approximately at the time that Prof. Havlin was making his list. This caused many errors in Levitan's work. We consider it an exaggeration to call such work "research." It seems patently absurd to pit an amateur like him against a world famous authority of Prof. Havlin's caliber.

#### (2) **Prof. Cohen's confirmation:**

MBBK invoke the written confirmation of Prof. Cohen, whom they present as "an expert," to convince us that they did "the same thing" as Havlin did. Explaining what they mean by doing "the same thing," they write that they worked within the framework of the rules (i.e., WRR's spelling rules and Havlin's rules) or broke them "to the same extent" as WRR.

#### **However:**

This reliance on Cohen is no less misleading than their shameful trial to convince us that Cohen took part in the preparation of BM1 (see section 1 above) for the following reasons:

- (a) Cohen is not an expert in rabbinical bibliography.
- (b) Cohen did not supply the appropriate "goods" i.e., he did not give the **right** confirmation needed for their claim.
- (c) Cohen did not examine their work seriously.
- (d) Their quote of Cohen distorts his words.

Let us elaborate:

#### (a) Prof. Cohen is not an expert in rabbinical bibliography.

Professor Cohen is an expert on the Bible and **not** on rabbinical bibliography, the relevant field. Nevertheless, MBBK present him as an expert in this field. This is how he is presented, for instance, in their article in *Chance*: "Menachem Cohen, a colleague of Havlin's from the Faculty of Jewish Studies at Bar-Ilan University."

The following analogy will illustrate this point: Suppose that a chemist's opinion is used to invalidate work done in the field of particle physics and that he is billed as "an expert" and "a colleague" of the physicist who did the original work merely because both of them are in the Faculty of Natural Science. Would this not be considered misleading?

But this is precisely what MBBK have done in our case. Professor Cohen is an expert in the accuracy of Biblical texts, but **not** in rabbinical bibliography which is a completely different field. Since this subject is outside of his field how can his opinion be presented as that of "an expert"?

In conclusion **MBBK** have no "expert opinion" to rely on. By contrast, Professor Havlin has an international reputation in rabbinical bibliography and has authored hundreds of publications in this field.

- (b) Furthermore, Cohen did not even give them the confirmation they needed.
- 1. Cohen's letter contains an "unfortunate error." MBBK freely admitted that they broke Havlin's rules in compiling their list (and they give examples of this). Cohen, however, generously testifies that their list "was prepared according to the same criteria as presented by Prof. Havlin"! He writes:

"After studying your list, I understand that it was prepared according to the same criteria as presented by Prof. Havlin, and that it contains some differences from Havlin's list, which are also based on findings in the Responsa Project. In light of the above, I see no essential difference between the two lists for the purpose of using them for ELS experiments in any text." (Transtaled from the Hebrew, emphasis mine).

- 2. They could not have received confirmation from Cohen that they "broke the rules to the same extent as WRR" since such confirmation would have required a quantitative and detailed examination, which Cohen never performed.
- It is clear from his letter that Cohen thought that MBBK did in fact adhere to the rules.
- Havlin wrote to Cohen on Jan. 16, 2000 complaining that MBBK were using Cohen's letter misleadingly. He asked Cohen either to make clear that he never performed the necessary quantitative and detailed examination, or, if he did, to publicize his findings. Cohen never bothered to reply.
- Finally, Cohen was asked over the telephone (on Apr. 27, 2000) whether he had performed such an examination of the list. He answered in the negative.
- (c) Cohen did not examine their work seriously.
- 1. This is obvious, because Cohen writes that MBBK's list was prepared according to Havlin's rules, contrary to MBBK's assertion that they broke these rules (they even give examples of this).
- 2. Cohen states in the above letter that MBBK's changes are based on "findings in the Responsa Project." But this contradicts MBBK's own explanations for their alterations, which include many changes **not** based on the responsa project!
- 3. In an earlier letter, where Cohen states his opinion about Havlin's rules at MBBK's request, there are several mistakes which indicate that Cohen was not familiar with the material. For details see [15][16].
- (d) MBBK quote Cohen's letter in their article in *Statistical Science* misleadingly. The excerpt of this letter quoted above (see section 2) says three things:

- 1. Cohen confirms that list BM1 "was prepared according to the same criteria as presented by Prof. Havlin." MBBK must conceal this statement from the reader, since it contradicts their assertion that they broke Havlin's rules.
- 2. Cohen confirms that the changes made in list BM1 "are based on findings in the Responsa Project." But MBBK must conceal this statement from the reader, since as they write themselves [12][13], many of their changes are **not** based on findings in the Responsa Project.
- 3. Cohen's final words are a giveaway that his letter was "made to order." He writes: "In light of the above, I see no essential difference between the two lists for the purpose of using them for ELS experiments in any text" (emphasis mine).

The words "in any text" are obviously meaningless, since there is no such "professional confirmation" for the list's usage "in any text". This is just one more indication that Prof. Cohen had no idea what he was supposed to be "confirming," and that his letter was simply written up on request.

<u>In conclusion:</u> Cohen's letter is replete with nonsense and misunderstandings between him and those who requested the letter. This is because it was written to order and reflects no proper research on the part of its author.

In light of the above, it is understandable that they quote from this paragraph only the three words: "**no essential difference**." This selective quote misleadingly conceals the three problems just raised.

The inevitable conclusion from "The Cohen Affair" is that:

There is no scientific sanction for their list, and especially not for their claim that they broke the rules "to the same extent" as WRR.

#### B. MBBK's first list.

The deception described above was only one of many.

(1) MBBK claim that list BM1 is not much different than Havlin's list: "83 appellations were left unchanged, 20 were removed, and 29 were added."

#### **But:**

These figures give a misleading impression of minimal alteration. MBBK claim that only 29 out of 112 (83+29) appellations are new, i.e., **25%.** But the 83 appellations in their list include many that are totally irrelevant to their experiment (for details see the Appendix to Chapter II, A). Counting only the relevant appellations, they removed 19 out of 52 and added 24. This means that **42%** were new appellations! This is also the percentage of the new "name-date" pairs in their sample.

(2) They claim that their list is based on professional research.

#### **But:**

We have shown in section A 1(b) that this claim is false.

(3) They claim that the appellations they chose are as correct and legitimate as Havlin's.

#### **But:**

This is also untrue.

In our article "A Refutation Refuted, or How the List of Famous Rabbis *Failed* in *War and Peace*" [15], we explain how their work is based on absurd mistakes in Hebrew and rabbinical bibliography and on **deliberate deception.** 

A similar criticism, expressed even more sharply by experts in rabbinical bibliography, is quoted in the next chapter.

This article does not deal with bibliographical and linguistic analysis. Nevertheless, we have appended one example of obvious deception just to give a taste of MBBK's methods. See the Appendix, B.

#### C. MBBK's second list

Our sharp criticism of their first list forced Bar Nathan and McKay to create a second revised list (BM2). As mentioned before, this list was used in the final version of their article.

For this new and final list they did not bring any sanction, not even from Cohen. Instead the reader is fed two fictions:

(1) The first fiction: The shift from BM1 to BM2 involved only a "small number of changes" and "hardly any of the small number of changes" was due to our criticism of BM1.

#### **But:**

- (a) In fact, this list is significantly different from BM1 (23 out of 131 pairs are erased, and 31 new pairs are added).
- (b) Despite their assertion to the contrary, 11 of the changes were made in direct response to our criticisms, in order to avoid the most obvious mistakes. These changes were a serious blow to the significance of their results and forced them to improve their list by making the rest of the changes.
- (2) The second fiction: BM2 is more similar to Havlin's list than BM1.

#### **But:**

There is no professional sanction for such a claim.

In addition we would like to point out the following deception:

(3) List BM2 (like it's predecessor) was supposed to prove that "the flexibility in the selection of appellations" was sufficient to "cook" a list that would be successful in *War and Peace*. They claim ([1], at the end of sec. 5) that their work in *War and Peace* proves that this flexibility was "more than enough."

In the absence of a protocol, it is important to note what Brendan McKay writes in his June '97 letter to the members of TCODE (an Internet Torah codes discussion group), about the preparation of a new list for trying it on *War and Peace*:

"Using the <u>same</u> rabbis and the <u>same</u> dates, it is possible to make up an alternative set of appellations...". (Emphasis mine).

#### **But:**

Contrary to their claims, MBBK never succeeded in doing so.

They were unable to achieve sufficient statistical significance for BM2 by manipulating the appellations alone. To improve their results they were forced to exploit "flexibility" in domains where it is clear that WRR never did (for example, in the choice of rabbis and dates). For details see [3].

#### **In conclusion:**

- (1) MBBK's greatest deception is their assertion that Prof. Cohen confirmed that they did "the same thing" as WRR, and that Prof. Cohen was an authority in the relevant field.
- (2) Since MBBK admit that they broke the rules, the sole conclusion to be drawn from their work is as follows:

The deletion of 39% of the word-pairs in a given list of similar size, combined with the addition of a quantity of 42% new pairs can suffice to create an artificial success in *War and Peace*.

# Chapter Three Opinions of the Experts

Here are the attestations of three great rabbis renowned for their encyclopedic knowledge of rabbinical literature and for their astute analytical prowess.

**A.** Two of them examined in detail the assertions of MBBK and Cohen against L2 and Havlin's rules. Their opinions are as follows:

"Our acquaintance with Rabbi Doron Witztum goes back many years. He is a Torah scholar, and in recent years has been engaged in researching the hidden information (*remazim*) found in the Torah in the form of equidistant letter sequences. The results of one of these studies, which he performed with his colleague Eliyahu Rips, a professor of mathematics, was published in a prominent scientific statistical journal.

"Recently, an accusation was made against these researchers that the results of their study were obtained fraudulently through a conspiracy with Rabbi Prof. Shlomo Zalman Havlin, who served as their advisor regarding rabbinical bibliography. Their opponents claim that the list of names and appellations of 'great men in Israel,' which Prof. Havlin prepared for the purposes of the study, was produced through manipulation to ensure highly successful results. They claim that the fraud is obvious since the rules according to which Prof. Havlin worked (and which he publicized) are meaningless. They further claim that in many cases the composition of the list contravenes the rules.

"Although we are not experts in the science of statistics, these claims are unrelated to statistics. The issue is whether or not an act of fraud was perpetrated. Regarding this point our view is definite – We hereby affirm decisively and unequivocally that:

- (1) Rav Witztum and Prof. Rips are well known to us as decent and upright men of truth, to whom few in Israel can compare regarding their integrity and aversion to falsehood. There can be nothing more malicious and foolish than to cast aspersions of fraud and deception upon them.
- (2) We have investigated Rabbi Havlin's character and discovered that he too is known as a reputable, decent and upright person whose trustworthiness we do not doubt, particularly in his area of expertise and especially in a project open to public scrutiny.
- (3) We checked the rules according to which Prof. Havlin formulated his list of names and appellations of "great men in Israel," and found that they were carefully weighed, according to both professional considerations and common sense, and are reasonable and appropriate.
- (4) The list Prof. Havlin prepared is in keeping with the rules. We found that all of their opponents' individual claims concerning deviations from the rules are false, and are a testimony to their astounding ignorance of, and unfamiliarity with the subject.

In the light of the above, we hereby affirm unequivocally that the work of Rabbi Doron Witztum, Prof. Eliyahu Rips and Rabbi Prof. Shlomo Zalman Havlin does not contain an iota of fraud or deception, and the claims of their opponents are evil and malicious libels. Whoever assists them in this will be held accountable." (Translated from the Hebrew.)

Hereby confirmed in Elul, 5758 [Sept. '98] Boruch Shmuel Ha'Cohen Deutsch Shlomo Fisher

# **B.** And here is the third rabbi's opinion:

BS"D 11 iyar 5759 [Apr. '99]

"...Upon investigation, it is absolutely clear to me that the work done in this area by Rabbi Witztum and Prof. Rips was done completely honestly. They are well known, and also known by me personally, to be men of truth, and their lives have been dedicated to always pursuing truth to the end." (Translated from the Hebrew.)

Yehuda Silman

#### Note:

About a year and a half after our rejoinder to MBBK titled "a Refutation Refuted" [15], McKay posted a long response signed by "Anonymous" on his web-site. Instead of settling the controversy once and for all by accepting "Challenge I" (see Chap. I), he evaded it by presenting this response, which can only serve as a smoke screen.

This work has all the deficiencies of its predecessor, including lies and deceptions obvious to anyone knowledgeable in Hebrew grammar and rabbinical

bibliography. Even the layman who is not expert in these fields, can easily recognize the difference between Mr. Levitan on the one hand, and Prof. Havlin, a world-renowned expert, on the other hand; and between Prof. Cohen's "confirmation" (see "The Cohen Affair" above) and the approbation of the authentic experts quoted above.

# Chapter Four A Methodology that Facilitates Deception

The methodology used by MBBK to create the illusion that they did "the same thing" is a "punitive" method, as they describe it in short in their paper [1]:

"For example, whereas WRR used one common Hebrew spelling of the name 'Horowitz,' we used a different common spelling. When they omitted one common appellation, we inserted it and deleted another. And so on." (Pg. 157)

A detailed description of this method is found in a paper [12] [13] of Bar-Natan and McKay (BM). We will show here that this methodology facilitates deception.

# A. Deceptive scales

Let us examine the "scales" they used to weigh out the "appropriate penalty."

#### Example (1):

BM write [12][13] that "in [his report], written more recently, Havlin acknowledges making many mistakes in preparing the list and says that if he were to do it again, he would have done it differently." However, a careful examination of Havlin's report [4] reveals that no such statements exist. All we find is that in discussing why he omitted certain appellations appearing in the Bar-Ilan responsa database he indicates a few appellations that escaped his notice and another few cases where he cannot recall why he omitted them.

- (a) We counted these cases. There are altogether ten such appellations with the required length of 5-8 letters (a limitation imposed by the program then at our disposal) and which therefore might have been included in the experiment. Of these ten, three do not appear at all as ELS's in *Genesis* (and would therefore have had no effect on the results).
- (b) We investigated what happens when the **seven** remaining appellations are added to the list. Using the original measure of significance, **the results improve by a factor of twenty!** (By the way, even the later introduced permutation test yields a result that is about four times better than for the original list).

Thus it is crystal clear that Havlin did not omit these appellations in order to improve the results. On the contrary, his omissions had a deleterious effect on WRR's results.

Nevertheless, BM used Havlin's omissions as evidence of flexibility, since one could choose whether to include these appellations or not. On this basis they justified their own very selective use of these ambiguities:

1. They only included some of the omitted appellations.

2. While Havlin's "choices" were **disadvantageous** for WRR, BM's choices were beneficial for their results.

#### Example (2):

A "choice" of Havlin's that had no influence on WRR's results at all served as an excuse for a choice on the part of BM that improved their results. (See our article [15], Argument 7).

#### Example (3):

A (supposed) "violation" of a rule by Havlin, which had no influence on WRR's results, justified a violation by BM that improved their results. (See our article [15], Argument 13).

The examples cited so far relate only to the choice of appellations. But:

### **Example (4):**

They also used their method in relation to the dates and the inclusion of certain rabbis in their list. Here too they claimed that because there were choices made and supposed "violations" on Havlin's part, they were allowed to make commensurate choices of their own to **improve** their results, even though it is clear [3] that the "flexibility" and "rule breaking" were **not exploited** to WRR's advantage!

When it was pointed out to them that several of Havlin's omissions would have improved the results they responded as follows ([18] page 4):

"...the explanation for these omissions can simply be that we are dealing here with human beings who can forget and overlook names, forget to try certain variations, or just be unaware of them altogether at that time."

In other words, when Havlin omits a "detrimental" appellation it proves intentional deceit, but if he omits a "beneficial" appellation it only proves his fallibility.

#### Let us illustrate the perversity of this approach:

Assume that an investigation is mounted to examine the objectivity of Havlin's work. Suppose the investigation shows that there is a certain amount of "flexibility" in his rules, resulting in ten "choices" that had to be made. Five of these choices are found to be to WRR's advantage and five to their disadvantage.

- (a) The logical conclusion to be drawn would be that these choices were not intended to improve the results, thus affirming the integrity of Havlin's work.
- (b) But MBBK would simply dismiss these findings by claiming that all the advantageous choices were deliberate and all the disadvantageous choices were due to fallibility.
- (c) Obviously, if MBBK then make **ten** corresponding choices of their own, all of which are advantageous, they cannot claim to have exploitated the flexibility and broken the rules "to the same extent" as WRR allegedly did!

# **B.** Parody is not science

The work of MBBK is nothing more than a combination of deceptive "weighing" of choices and of false data, facilitated by the usage of their "punitive" method. The final product is just a parody – not science.

In order to demonstrate the absurdity in this parody, we use an illustration taken from a more familiar field. To read it, click here.

Early on in the controversy we suggested a simple alternative to their parody to determine whether WRR's success was indeed achieved solely by exploiting the flexibility of the rules and by breaking them. We have already mentioned this alternative in the Introduction and we elaborated on it in Chap. I ("Challenge I"). There we noted that MBBK rejected this challenge and even turned down a million dollar wager that a list prepared by an unbiased expert using the same set of rules would succeed more in *Genesis* than in *War and Peace*.

#### **In Conclusion:**

There is no substance to MBBk's central claim that they did "the same thing" as WRR did in their work on *War and Peace*.

- 1. We have refuted their claim that they exploited the "flexibility" of the rules or broke them "to the same extent" as WRR did. (Their evasion of "Challenge I" is a tacit admission that this claim has no basis, see Chap. I).
- 2. We have indicated some of the false data included in their assertions (see Chap. II). In addition we have shown that their work is based on mistakes in Hebrew, and on mistakes and deceptions in rabbinical bibliography. (See Chap. III where this is attested to by a number of experts).
- 3. We have shown that their work lacks professional confirmation. (See Chap. II concerning the fabricated confirmation of Prof. Cohen).
- 4. We have demonstrated that their methodology, by which they hoped to create the illusion that they did the same thing we did, is of zero value. Its only "merit" is that it facilitates deception. (See Chap. IV).

# **Epilog**

The draft of this article was written long before MBBK publicized "Dr Emanuel's" list on the Internet.

In our paper "New Statistical Evidence for a Genuine Code in *Genesis*" [17], we demonstrate that a list composed of the names and appellations for L2 prepared by Dr Emanuel, the expert engaged and guided <u>unilaterally</u> by MBBK, **succeeds** in *Genesis*. We may add here that this list fails in *War and Peace*.

It should be obvious, therefore, why MBBK refused to accept the simple option of "Challenge A." They realized that an independently prepared list would succeed even better. Therefore, they chose:

- To ignore our challenge.
- To conceal the true significance of Dr Emanuel's data. For details see [17].
- To forge another list in his name. For details see [17].
- And to make the false claims that we discussed in Chap. I and in the Appendix.

# **Appendix to Chapter I**

#### **A.** Assertion 3 is false.

Assertion 3 claims that list BM1 was prepared by adhering to WRR's publicized spelling rules (WRRR) or by breaking them "to the same extent" as WRR did. It claims further that Prof. Havlin's bibliographic rules were not taken into account.

(1) In their reply to our criticism of their article in *Chance* [8], they stated this claim as follows:

"On the matter of breaking "the rules," our reply is "What rules?" The few rules appearing in WRR (1994) or any earlier document apply only to spellings, not to which names or appellations should be chosen. Even then, they were broken by WRR several times. Perhaps Witztum and Rips are referring to the explanation given in a seven-page letter written by Havlin in 1996, but surely they are not claiming that we should be bound by a set of arbitrary and ad hoc "rules" written down almost a decade after all the data was compiled?"

In the following sub-sections, 2-5, we will prove that this reply is a mixture of feigned innocence and gross falsehood.

**(2)** 

(a) In the introduction to their work on *War and Peace* [12] MBBK claim in our name:

"There is no way WRR (or Prof. Havlin) could have produced these results by fine tuning the <u>choices of names</u> and spellings, as these choices were made following <u>rigid procedures</u>..." (Emphasis mine).

Immediately afterwards they assert:

"The purpose of this note is to show that WRR-Havlin still had some choice in applying their "<u>rigid</u>" procedures – enough choice to generate comparable significance levels in *War and Peace*." (Emphasis mine).

These excerpts obviously refer to both spelling rules as well as to Havlin's bibliographic rules. As MBB themselves write in the excerpt cited in (1), only Havlin's rules relate to the choice of names and appellations. Needless to say, the allusion to Havlin's "rigid procedures" can mean nothing other than his rules.

- (b) The arguments given in the same article [12] to justify changes of appellations (especially claims 9 and 23), clearly show that they attempted to work according to Havlin's rules or to break them to the same extent that they held we did.
- (3) MBBK's articles often state that they worked according to the rules established by the first list L1. Take this example from *Chance* [10]:

"But in fact, the <u>rules and constraints laid down by the first list</u> left sufficient room for maneuvering in the second list..." (Pg. 17, emphasis mine).

Or:

"Is it really possible to "cook" a second list <u>following exactly the rules set</u> by the first list..." (*ibid.*, emphasis mine).

MBBK themselves admit in the excerpt in (1) that the spelling rules are not the rules for selecting appellations. Therefore, it is not the spelling rules (WRRR) which constitute the "heavy constrains set by the first list of rabbis" (*ibid.*, emphasis mine).

Therefore, their *new* interpretation of the word "rules" in their response in *Chance* (see excerpt (1)) – that "rules" means only the spelling rules and not Havlin's rules – contradicts their own their own words in their original article in *Chance*.

(4) A quote from McKay himself indicates that "the rules and constraints laid down by the first list" include Havlin's rules. In a letter concerning the list BM1, that was sent to the members of TCODE (an Internet Torah codes discussion group) about a week after the publication of the first version of his article [12] on BM1, he explains that the arguments accompanying the list,

"...are needed to show that we stayed within their protocols as well as they did. This is necessary because it could be argued that the <u>protocols were fixed by the first list</u> and thus unavailable for adjustment for the second list." (Emphasis mine)."

He then explains how the constraints of the "protocols" confined him: He was forced to restrict himself to choose appellations from a selection of "250+ options," whereas "<u>if the Havlin protocols were ignored</u>" he would have had "400 or more" options.

How can McKay, who wrote the words, "if the Havlin protocols were ignored," claim today that he ignored Havlin's rules!?

(5) Worse still. In the letter of confirmation sent to them by Prof. Cohen <u>at their request</u>, he writes:

"After studying your list, I understand that <u>it was prepared</u> according to the same criteria as presented by Prof. Havlin, and that it contains some differences from Havlin's list, which are also based on findings in the Responsa Project." (Translated from the Hebrew, emphasis mine).

(6) We began this section (see (1)) with an excerpt from their response in *Chance* that was laden with deceit and feigned innocence. We will conclude by noting that in their paper in *Statistical Science* [1] MBBK repeat this lie while rewriting history. In sec. 6 they state that their list was made by adhering to "the rules established for WRR's first list." It is clear from context that they mean only WRRR and not according to HR.

But, as we already have proven, this is absolutely false. In reality, when they compiled their lists, trying to do "the same thing" as WRR, they treated HR as one of the constraints.

#### **B.** One lie leads to another:

We will now show that while preparing their lists for use in *War and Peace* they also used L1R, i.e. the rules derivable from Havlin's first list.

- (1) From the arguments in their article [12] (e.g. no. 2 and no. 14) justifying their changes of the appellations it is obvious that they were trying to work according to L1R (even though they erred and the L1R derived constraints they mention there, never existed.)
- (2) According to MBBK ([1] pg. 163), when they instructed Dr Emanuel how to do "the same thing":

"Emanuel was shown the spelling rules and table of appellations for WRR's first list as they first appeared in WRR (1986). He then compiled a parallel table of appellations . . . attempting to follow the rules and practices of WRR's first list."

Thus, here they define "to do the same thing" as using the rules of WRRR+L1R.

### We now have an impressive list of contradictions:

- (a) Until mid '98 they worked with **WRRR+L1R+HR**.
- (b) In their response in *Chance* [8] at the end of '98 and in their article in *statistical Science* [1] of '99 they claim to have worked with **WRRR** alone.
- (c) In the response [18] ('99) to our refuting article [15], written with the cooperation of Bar-Natan and McKay, it is clearly stated in the introduction (par. 3) that the rules which WRR claim were *a priori* to their list included Havlin's rules. They then say (in par. 5) regarding these rules that:

"We show that, in fact, all of our deviations from the rules (to the extent they can be called rules) are matched by equal deviations from the rules by WRR." (Pg. 7)

Thus they revert to their original claim that they broke the rules (including Havlins's rules) "to the same extent" and worked with **WRRR+L1R+HR**.

- (d) In the introduction of that article they argue that a correct rerun of the experiment by an independent expert should require adherence to **WRRR** alone.
- (e) When Dr. Emanuel was requested to compile a new list (at the end of '98) he was told to work according to **WRRR+L1R**.
- (f) They still rely on Cohen's confirmation [11] (from '97) in which he states that their list is compatible with Havlin's rules, i.e. **WRRR+HR**.

#### What is the reason for this jarring medley of contradictions?

The answer is simple: One lie leads to another!

Our wholly justified criticisms and challenges forced MBBK to retreat behind a tangle of lies. This is nothing new. We have already shown (see our Internet articles) **many** similar examples. As we wrote in the introduction to this article, MBBK's campaign is based not on science but on propaganda, and in propaganda, alas, lies are a useful device.

#### Will McKay try to reconcile these contradictions?

Our experience with Prof. McKay teaches us that the "show" is not over yet. Will his next acrobatics "prove" that he did not try to work within Havlin's rules, despite all his previous statements to the contrary and despite his words: "If the Havlin protocols were ignored"? – Let us wait and see.

### **C**. A refutation of Assertion 2:

Here we will discuss Assertion 2. Disproving it will prove Conclusion B. Assertion 2 implies that Havlin (in conspiracy with WRR) acted according to the following scenario:

- (1) First he "cooked up" L1 using no rules, aiming to create a highly significant success in *Genesis*.
- (2) Then he "cooked up" L2 using the WRRR rules, but no bibliographic rules, again aiming to create a highly significant success in *Genesis*.
- (3) Furthermore, MBBK assert [1] [19] that WRR wished to achieve additional effects of a statistical nature. Therefore the lists were cooked to conform to five additional constraints (see note at end of section). Two of these statistical constraints applied to L1 and three to L2.
- (4) Nine years later Havlin "cooked up" bibliographic rules that would appear to conform to L1 and L2.

MBBK claim that this feat was possible because:

- Havlin's rules are totally arbitrary.
- Havlin's rules leave plenty room for choices at one's discretion.
- There are many discrepancies between the rules and the lists.

Our position is that these rules are professional and logical, and the names and the appellations fit them, and that MBBK's and Cohen's assertions to the contrary are false. See Chap. III for **authoritative affirmation of our position.** 

We furthermore assert that it can be demonstrated empirically that a replication of Havlin's work by an independent expert constrained by these professional and logical rules will again result in successful lists. Therefore we present Challenge II.

#### **Challenge II:**

Let us again summarize MBBK's version of Havlin's procedure:

#### Experiment I:

- (1) He "cooked" L1 and it succeeded in Genesis.
- (2) He "cooked" L2, constrained by the WRRR rules, and it, too, succeeded in Genesis.
- (3) The lists were "cooked" to achieve five additional statistical goals, which imposed serious additional constraints: Two for L1 and three for L2.
- (4) He then "cooked" the bibliographic rules HR *a posteriori* to conform as much as possible with L1 and L2.

MBBK claim that HR do not accord with the lists. There are many discrepancies and much leeway for discretionary choices that was in fact abused. It is possible to examine these two claims with the following experiment.

#### **Experiment II:**

Let an independent expert use the constraints WRRR+HR to prepare two new lists: List LE1 for the personalities of L1 and list LE2 for the personalities of L2.

Then we must examine the following points:

- (1) The degree of similarity between LE1 and L1.
- (2) The degree of similarity between LE2 and L2.
- (3) The significance of the results of LE1 in *Genesis*.
- (4) The significance of the results of LE2 in *Genesis*.

Since this experiment is to be conducted by an independent authority it will eliminate the possibility of abuse of rules or intentional rule-breaking. Therefore, if the two sets of lists are similar and the results turn out to be significant it will show that:

- The rules are compatible with the original lists.
- The constraints HR+WRRR are sufficient to account for WRR's original success.

MBBK may claim that it is possible to create rules that can survive even Experiments I and II. We consider it impossible. But if they insist that they can do "the same thing," let them do just that. The ability to survive Experiments I+II defines the true set of constraints that would have bound Prof. Havlin if the process they outline in Assertion 2 were historically accurate.

#### **Challenge III:**

Let us put their claim to the test experimentally.

#### Let us define Experiment III.

What would "doing the same thing" include?

- (1) MBBK "cooked" list WNP2 (which we referred to as BM2 in the text). This list succeeded in *War and Peace* for the rabbis of L2.
- (2) They must now "cook" a second list WNP1 for the rabbis of L1, which must also succeed in *War and Peace*.
- (3) They must "cook" these lists such that WNP2 achieves two significant statistical goals, and WNP1 three. (See note at end of section. Since WNP2 has already been compiled we will forgo the demand that it achieve these two goals).
- (4) They must create bibliographic rules WNPR which conform highly to lists WNP1 and WNP2.

Then WNPR+WRRR must be given to an unbiased expert to create a list of names and appellations WNPE1 for the rabbis of L1 and a list WNPE2 for the rabbis of L2. In order for MBBK's claims to be reasonable the following must be true:

- (1) WNPE1 and WNP1 must turn out to be similar.
- (2) WNPE2 and WNP2 must also turn out to be similar.
- (3) The results for WNPE1 must be significant in War and Peace.
- (4) The results for WNPE2 must also be significant in War and Peace.

Since MBBK know that their claims concerning the five statistical goals are imaginary, we will be lenient and allow them conduct experiment III without these additional constraints.

<u>We claim</u>: The lists in Experiment II will be more similar and the results much more significant than in Experiment III.

If MBBK accept this challenge, we will set up an independent committee to plan Experiments II and III and establish the necessary criteria.

Until then we appeal to the reader's common sense: Is it reasonable to contend that Havlin's professional and logical guidelines, which do conform to lists L1 and L2 (as attested to by experts, see Chap. III), were merely a *post hoc* contrivance to justify lists that were created without such rules? (Especially in light of the statistical features noted by MBBK, see the note below).

#### **Explanatory notes** about the statistical goals:

According to MBBK [1][19] WRR's lists were "cooked" to yield extra statistical effects:

- 1. L1 had two such effects:
- It was "cooked" so that **two** control texts would yield especially "smooth" histograms.
- 2. Three such effects are found in L2:
- It was "cooked" so that the distribution of the results is very similar to that of
- It was "cooked" so that the value of its P2 statistic was very close to that of L1.
- It was "cooked" so that the simplest cyclic permutation of the rabbis' dates yielded an extremely "smooth" histogram.

If MBBK really wished to do the "same thing" as they accuse us of doing, they should be bound by all the constraints we have discussed so far. But because list WNP2 have already been done without these constraints we will be satisfied if they adhere to the following three constraints:

- WNP1 must be "cooked" so that the distribution of the results is very similar to that of WNP2.
- WNP1 must be "cooked" so that the value of the P2 statistic is very close to WNP2.
- WNP1 must be "cooked" so that the results for the simplest cyclic permutation yield an extremely "smooth" histogram.

# **Appendix to Chapter II**

#### **A.** Deceptive figures:

MBBK claim that only 29 out of 112 (83+29) appellations in list BM1 are new, i.e. **25%**. But among the 83 unaltered appellations are many that are totally irrelevant to the subject at hand. Let us explain:

- (1) List L2 is composed of two subsets of appellations:
- (a) The set of standard appellations of "Rabbi X" type.
- (b) The group of **remaining appellations** which we will denote by L'2.

The most successful statistic in WRR's original experiment, was P4, which is defined only for L'2. MBBK's BM1 list is also built of these same two subsets:

- (a) The "Rabbi X" type.
- (b) The remaining appellations, which we will denote by BM'1.

MBBK themselves write (pg. 160) that WRR had no freedom of choice in the "Rabbi X" subset since it was constrained by L1. Therefore MBBK "cooked" only BM'1 and the success of *War and Peace* results solely from this group.

Hence MBBK should really have counted **how many of the appellations** of L'2 remained in BM'1.

(2) The only appellations that affect the results in a given text are those which appear as ELS's in that text, therefore only those should be counted.

Now, let us recount the altered appellations taking these two facts into consideration:

In L'2 there are 52 appellations appearing as ELS's in *War and Peace*. Of these MBBK erased 19 and left 33. They then added 24 new appellations that yielded ELS's in *War and Peace*, yielding a total of 57 appellations for BM'1. Thus the percentage of new appellations in BM'1 is actually **42%**.

Since appellations affect the results through their proximity to dates appearing as ELS's, let us count the changes made to **name-date pairs**:

List L'2 contains 124 pairs appearing as ELS's in *War and Peace*. Of these MBBK removed 48 pairs leaving 76. They then added 55 new pairs raising the total to 131 pairs. Therefore the percentage of new pairs is **42%**.

#### **B.** Deceptions involving appellations:

One of the most foolish deceptions perpetrated by Bar Natan and McKay involved the appellations of Rabbi Moshe Zacuto, number 27 in L2.

In claim 19 of their article [12], justifying the erasure of some of Zacuto's appellations, they claim that "the last name of Rabbi II-27, Rabbi Moshe Zacut (sic.), is זכותו or זכותו or זכותו They argue that this is his signature in his book Kol HaRemez, and also recommend seeing Aba Applebaum's biography of R. Moshe Zacut, Margalioth's Encyclopedia, the Encyclopedia Hebraica, and Shem HaGedolim by R. Chaim Yosef David Azulai (known by his acronym – "Chida").

Accordingly, they erase the appellations משה זכותא, זכותו, משה זכותא and from the list.

#### **But:**

- (1) It is intriguing that in English transliteration they write "Zacut," even though both the *Encyclopedia Hebraica* (on which they rely) and the *Encyclopedia Judaica* use the form "Zacuto." In Marx's article (cited in assertion 18 of their article), the form "Sacuto" is used.
- (2) Furthermore, following their advice we perused Aba Applebaum's biography and were astonished to find that right on the title page R. Moshe is called "Zacuta" in Polish and "Zakuto" in German. In the second chapter (pp.

- 4-5) it says that he was known as ר' משה זכותא, and that he was a scion of the illustrious "זכותא" (Zacuta)" family. To see photocopies from this biography, click here.
- (3) Chida himself uses the form זכותו elsewhere in his writings, for example in *Birkei Yosef* (*Orach Chaim* 581). The form זכותא may also appear there, but we did not survey the entire text.
- (4) R. Moshe sometimes signs himself as זכותו in his letters, and correspondents often address him by this name.
- (5) The title page of *Kol HaRemez Sefer HaTikunim* (with a commentary by the kabbalist R. Yaakov Kopil) mentions the name אכותא. The same form is used in the approbations to the book. These are just a few examples.
- (6) They fail to mention that the forms זכותו and זכותו are mentioned in the Responsa database...

There are additional relevant sources that we have not even mentioned.

The fact that MBBK allowed themselves to indulge in such transparent deceptions proves that they were confident no one would verify their claims.

We included this criticism in our article, "A Refutation Refuted."

Their response [18] to it is even more instructive. They wrote:

"It appears that our original claim that 'the last name of Rabbi II-27, Rabbi Moshe Zacut, is זכותו or זכותו or was not completely accurate." (Emphasis mine).

This is reminiscent of their deception regarding Prof. Cohen's involvement in their work. (See Chap. II "The Cohen Affair" section (1)).

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