The Authenticity of the James Ossuary and the Jehoash Tablet Inscriptions – Summary of Expert Trial Witnesses

As a collector of antiquities for many decades who has seen tens of thousands of ancient pieces originated from the Land Of Israel, and based on the opinions I received from various experts with experience and understanding in numerous relevant areas who examined the items, I maintained that there is no foundation for the IAA's allegations that these items are forgeries. The authenticity of each one of these two inscriptions stands at the heart of this unique trial, and the Court is expected to render its decision on this issue.

See Also: Final Reports on the Yehoash Inscription and James Ossuary from the Israeli Antiquities Authority

And

Essays on the James Ossuary and the Temple Tablet from Bible and Interpretation

By Oded Golan
Tel Aviv
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In December 2004, accompanied by great fanfare in the local and international media, a bill of indictment was filed by the Israel Antiquities Authority (IAA) and the State of Israel against me (Oded Golan) and against four antiquities dealers from Israel. I am the owner of a very large, important collection of antiquities originating in the Land of Israel. According to the bill of indictment, I and my co-defendants were charged with involvement in the forgery of antiquities and/or the sale of forged antiquities of significance. In the early stages of the trial, after a small number of witnesses were heard, charges against three of the defendants were dismissed, and the trial continued against me and Robert Deutsch, Israel's leading antiquities dealer.

On October 3, 2010, the prosecution and the defense concluded their closing arguments, after scientific opinions had been submitted and all the witnesses had been examined. The Jerusalem District Court is expected to render its decision in the near future.

The main charges against me included involvement in the forgery of half of an inscription inscribed on an ossuary (known as the James Ossuary), which bears the words "Ya'akov bar Yosef Achui D'Yeshua" which means "Jacob son of Joseph, brother of Jesus", and in the forgery of the inscription known as the Jehoash (Joash) Inscription (also known as the Jehoash Tablet or Bedek Ha'bayit Inscription, named so because of some similarities between its text and the account of renovation works in the Temple in Jerusalem, executed by King Jehoash, that appears in Kings II Chapter 12).,

I have consistently denied these accusations. Moreover, as a collector of antiquities for many decades who has seen tens of thousands of ancient pieces originated from the Land Of Israel, and based on the opinions I received from various experts with experience and understanding in numerous relevant areas who examined the items, I maintained that there is no foundation for the IAA's allegations that these items are forgeries. The authenticity of each one of these two inscriptions stands at the heart of this unique trial, and the Court is expected to render its decision on this issue.

I testified, and the defense presented evidence, proving that the ossuary in question (bearing the inscription in entirety) had been purchased by me over 35 years ago (from around 1971-1976), probably from Jerusalem antiquities dealer Ot'man Waz-waz, and has been in my collection since then. The Jehoash Tablet was shown to me in the late 1990s by Hasan Akilan ("Abu Yaser"), an antiquities dealer from East Jerusalem, and was later given to me.

To date, 116 hearings took place, testimonies of 138 witnesses were heard, over 12,000 pages of transcripts were recorded, and hundreds of expert opinions, scientific reports and other exhibits were presented to the court. The witness list includes 52 experts in various fields (stone patina, archaeometry, geology, geochemistry, bio-geology, stable isotopes, carbon-dating, preservation of antique stone objects, stone engraving, restoration, forensic science, archaeology, paleography, epigraphy, Semitic languages, biblical research, photography, and others).

Thirty-six antiquities dealers, collectors, conservators, museum employees, and auction house employees testified at the trial, as well.

Dr. Gideon Avni, of the Israel Antiquities Authority, who was in charge of the "Writing Committee" that examined the James Ossuary and the Jehoash Tablet on behalf of the IAA in 2003, posted an article on *The Bible and Interpretation* website a few weeks ago (in March 2011), which implies that both inscriptions are forgeries.

This article is misleading, and its contents, and especially its conclusion, clearly contradict the many (actually, the vast majority of) expert opinion and testimonies heard in court, including testimonies of prosecution expert witnesses representing the IAA and the state of Israel, which paint a picture that is diametrically opposite to Dr. Avni's statements: All the recent scientific tests and indications point to the inscriptions being ancient.

Publication of Avni's article (on behalf of the IAA) at this timing, when the Court is expected to decide on the authenticity of the inscriptions, creates a concern that its purpose is to make a last-minute effort to sway the opinion of the Court.

Based on solid scientific grounds, reflected in dozens of items of evidence, testimonies and scientific reports submitted and heard in Court over the last six years, including the prosecution's owns witnesses, it is now possible to determine that the *entire inscription* on the *James Ossuary* is ancient.

Scientific evidence also shows that *Jehoash Tablet inscription* could not have been engraved within the last 100 years.

For the convenience of your website readers, following is a brief summary of the testimonies and expert opinions that were heard or presented during the trial, organized separately with reference to the James Ossuary inscription and the Jehoash Tablet Inscription.

Readers, equipped with the information below, can judge for themselves and draw the obvious conclusions from the expert testimonies and opinions.

A. Summary of testimonies and opinions referring to the James Ossuary

According to the bill of indictment that was prepared with the assistance of the IAA, the James Ossuary itself was determined to be ancient even before the trial began, and the first half of its inscription (the words "Ya'akov bar Yosef") was determined to have been engraved in the first century AD. Therefore the trial focused mainly on the authenticity of the second half of the inscription (the engraving of the words "Brother of Jesus").

(1) The Ossuary Inscription – Opinions concerning paleography, script, and language

1. Prof. Andre Lemaire (prosecution witness, who testified for the defense after the prosecution decided to forgo his testimony to support the prosecution) is a world-renown paleographer and archaeologist who specializes in ancient Hebrew and Aramaic inscriptions. He examined the ossuary and the inscription in 2002 and

published a scientific paper on it in 2003. Lemaire testified that the entire inscription is ancient and was engraved in a single event. He stated that he has no doubt that the entire inscription was ancient and he found no reason to believe the contrary.

2. Dr. Ada Yardeni (prosecution witness), paleographer and researcher of the Hebrew University of Jerusalem, whose experience spans several decades. In recent years, she has concentrated on the scientific publication of the corpus of all the early Aramaic inscriptions discovered in Israel. Dr. Yardeni testified that she examined the inscription in 2002 and has no doubt whatsoever, that the inscription in entirety is of ancient origin, and that it was inscribed by a single individual. She stated, "If this is a forgery, I quit."

3. Prof. Hagai Misgav (prosecution witness), expert in Hebrew and Aramaic ossuary inscriptions (his doctoral thesis was on this topic), and member of the IAA committee on the determination of the authenticity of the inscription, testified that he found no indication of forgery in the inscription.

4. Prof. Shmuel Ahituv (prosecution witness), expert in Hebrew inscriptions, and member of the 2003 IAA Committee on the determination of the authenticity of the inscription, examined the ossuary inscription at the request of the IAA, and found no indication to support the allegation that the inscription is a forgery or is modern. In his opinion the text and the paleography of the inscription make it "difficult to rule out the authenticity of the inscription."

5. Prof. Yosef Naveh (prosecution witness), found no indication that the inscription is a forgery.

6. Archeologist Y. L. Rahmani (of the IAA), who published the corpus of ossuary inscriptions in the IAA's possession, examined the inscription and found no indication that suggests that the inscription or any part of it is a forgery (the prosecution waived direction examination of this witness).

7. Dr. Esther Eshel (prosecution witness) testified that her own doubts concerning the authenticity of the inscription were based on a mere "feeling" and not on scientific grounds, and she cannot rule out the possibility that the entire inscription may be ancient, even it emerges that the two halves of the inscription were engraved by different people (which is the case for several ossuaries that have been discovered in excavations in Israel).

8. Prof Roni Reich is an archeologist and researcher of Jerusalem (prosecution witness who testified for the defense after the prosecution decided to forgo his testimony), who studied and observed hundreds of excavated ossuaries in his years of work in the IAA and the university. He testified that to the best of his

understanding and judgment, the entire ossuary inscription is ancient and there is no reason to doubt its antiquity or authenticity. Prof. Reich noted: "In my opinion, each of the features of the inscription on its own and together, without exception, indicate that this is an authentic inscription from the late Second Temple Period."

9. Prof. Gabriel Barkay is an archeologist (defense witness) who testified that he examined the ossuary in the IAA's possession *at his own initiative*, and to the best of his understanding and judgment, the entire ossuary inscription is ancient and he found no scientific evidence to doubt its authenticity.

10. Dr. Gideon Avni, who headed the "Writing Committee" appointed by the IAA in 2003 to examine the ossuary paleography and its inscription, has never submitted a report or opinion on the ossuary or the Tablet to the IAA or to the Court. Dr. Avni viewed the James Ossuary when it was exhibited to the public in the ROM in Toronto in 2002. At the time he made no statement expressing doubt or suspicion concerning the item's authenticity. Dr. Avni did not attend a single court hearing, and to the best of the knowledge of the undersigned, he never received copies of court transcripts or examined the hundreds of items of evidence submitted to the Court.

In summary, the vast majority of the experts who testified, either for the prosecution or for the defense, concerning writing, language, and archeology (including members of the IAA Writing Committee Prof. Hagai Misgav, Pro. Ahituv, Prof. Roni Reich, and Dr. Ester Eshel) stated that they believe that the inscription was engraved by a single individual in the first century AD that there is nothing in the evidence presented to the Court that rules out the authenticity of the inscription.

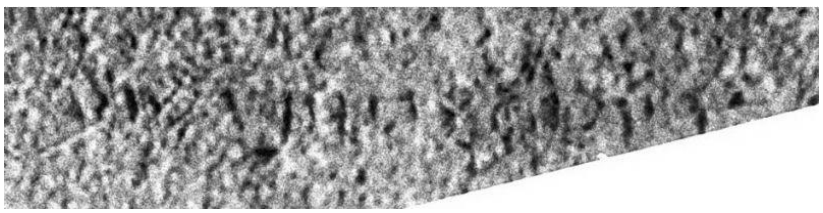
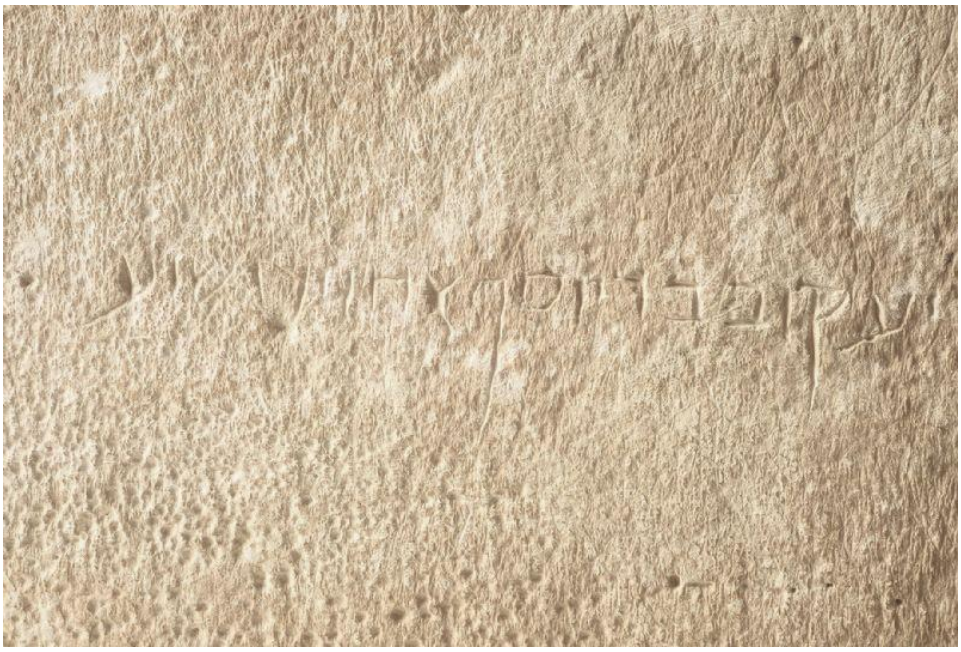


Image 1 (above): Magnification of a section of the ossuary inscription, taken from an old photograph of the ossuary in the Golan family home in Tel Aviv in the mid-1970s.



Images 2-3 (above): Photographs of the inscription before it was cracked on route to the exhibition in Canada (photographed by Ran Arda, 2002).

Image 4 (above): The ossuary (without its lid) in a photograph taken in 2002, before it was cracked.

(2) Scientific tests of the Ossuary patina and engraving

11. Orna Cohen is an archeologist and chemist, and senior antiquities conservator for the IAA and Israeli museums, who specializes in the conversation of ancient stone items. Orna Cohen was also a member of the committee appointed in 2003 by the IAA to examine the ossuary inscription. She testified that she examined the ossuary inscription several times, in different light conditions (including under ultra-violet and infra-red light) and under different magnifications, closely examining one letter at a time, and studied the inscription as a whole. Orna Cohen testified that she found natural bio-patina in several letter grooves of the words "brother of Jesus" (het, yod, shin, ayin ,"ח "ע" "ש" ,"י" "), which had developed at the bottom or on the sides of the grooves over centuries, and in some of these letters she found that the bio-patina that appeared continuously gliding down from the surface of the ossuary into the depths of the grooves. She stated that it was consequently possible to determine with certainty that the words "brother of Jesus" had been engraved in ancient times.

    Cohen also testified that the bio-patina (varnish patina) that she identified inside the letter grooves was identical to the patina on the surface of the ossuary (whose authenticity is not in doubt), and that the bio-patina in several grooves was covered with a fine, soluble substance that is not similar to patina (and is apparently the remains of detergents used to treat the ossuary. For more on cleaning the ossuary, see below).

12. Prof. Wolfgang Krumbein (defense witness) is a world-renown German expert on patination processes, stone patina, geology, and bio-geology, who examined the ossuary in Jerusalem and analyzed samples taken from patina sampled from inside the grooves at the University of Hannover. He testified that he identified with certainty bio-organic patina that developed naturally in the depth of several letters, in both halves of the inscription. He stated that the composition and morphology of the bio-organic patina that he found require at least 50-100 years to develop, and probably reflect a development process of several thousand years. He also stated that there is no known technique to accelerate the growth of such patina through artificial means in a manner that produces such features in a shorter period of time.

    Prof. Krumbein testified (as did Drs. Ilani and Rosenfeld of the Israel Geological Survey, stone conservation expert Orna Cohen and Dr Rahimi of the ROM museum) that the biogenic patina that was identified at the depths of several letter grooves is entirely consistent with the features of the patina found on the surfaces of the ossuary itself, whose antiquity is not contested. Therefore the inscription must be ancient.

13-14. Dr. Shimon Ilani and Dr. Amnon Rosenfeld of the Geological Survey of Israel (defense witnesses) are experts in archaeometry (the scientific testing of archeological artifacts) and stone patination processes, who previously conducted numerous studies for the Geological Survey and the Israel Museum, and others, testified that when they examined the ossuary inscription in 2002, they identified with certainty natural varnish patina (bio-patina) at the depth of letters in all parts of the inscription and they have no doubt about the ancient provenance of the entire inscription.

Dr. Ilani and Dr. Rosenfeld also identified scratches on the ossuary surface, which had apparently been created by fragments falling from the ceiling of the cave in which the ossuary was stored, reflecting wear and tear over a very long period of time. The researchers presented photographs that show that the scratches penetrate continuously into the depth of several grooves of the inscription, and bio-patina also developed in some of these grooves. This proves that the inscription was engraved before these scratches were made.

15. Prof. James Harrell (defense witness), expert in geology and stone especially those of the ancient world, of the University of Toledo, Ohio, examined the ossuary in Jerusalem and testified that he found no indication that the inscription was forged, either in entirety or in part.

On the contrary, according to Prof. Harrell, all the indications point to the inscription being ancient. In his tests, he discovered that the inscription had been partially cleaned in the past yet some traces of natural patina still remained inside the letter grooves. He found that the isotope values of oxygen and carbon that were measured in the carbonate sampled from several letter grooves by Avner Ayalon are consistent with the isotope composition of conventional Israeli detergents which were most probably used to clean and treat the ossuary inscription. Harrell stated that it is probably "a cleaning residue both because it looks and feels like one, and because it has a similar isotopic signature". This explains Ayalon's discovery of the "suspect" isotopic values of oxygen in the granular carbonate substance that he sampled from the grooves of several letters, and the soft, gray, granular material found in the letter grooves by Goren, Ayalon, ROM Museum Laboratories, and Orna Cohen (possibly these were the same substance)..

Harrell suggested that, based on the evidence, Yuval Goren and Avner Ayalon may have mistakenly sampled and tested this material from the inscription grooves instead of or together with the natural varnish patina that was found under the granular substance.

16. Dr. Dan Rahimi of the ROM in Toronto, where the ossuary was exhibited in 2002 (prosecution witness), testified that ROM researchers identified natural

patina (varnish patina) under a layer of granular substance that appeared in the letter grooves (apparently traces of the detergent used to clean the ossuary). All the features of the patina were identical to those of the patina on the ossuary surface, which is unanimously considered to be ancient.

According to reports by the ROM laboratories, the museum treated the ossuary after it had cracked in transit from Israel to Toronto, and repaired the crack by adding reinforcement and conservation materials that contain carbonates, among other things, and some of these materials may also had found their way into the grooves of several letters, and may also have been sampled by mistake by Ayalon.

17. Prof. Yuval Goren (a prosecution witness), an expert in petrography of potsherds and clay / silt (a field that actually has no relevancy to the examination of the ossuary inscription) and a former IAA employee, submitted an opinion on the ossuary at the IAA's request in 2003. In that opinion, Prof. Goren stated that he did not identify any natural patina of the type called varnish in any of the letters of the inscription. In his evidence-in-chief in court he stated that discovery of natural varnish patina in a single letter groove would allow us to determine that the inscription is ancient in entirety.

(Varnish patina is a layer of a biogenic source: that is, it is a thin layer caused by continuous secretions and activities of micro-organisms such as bacteria, fungi, algae, and yeast on the stone and inside some of its grooves, over several centuries; Varnish patina develops on ancient items, mostly on a small area of their surface. This type of patina frequently contains carbonate, created by the activity of the organisms and their metabolic processes, and secretions).

However, during the trial, a photograph from a presentation given by Goren in 2003/4 at Tel Aviv University came to light (the photograph was discovered independently by the defense, since Goren had not presented it to the IAA or the Court). This close-up photograph of the letter "shin" in the word "Yeshua" proves that already in 2003/4, Goren had identified varnish patina in the depths of the middle stake of the letter 'Shin" (and on a presentation he made he even labeled this an "ancient groove"). Moreover, in 2007, under cross-examined, Goren finally admitted that in 2003 he actually *had* identified with certainty also varnish patina inside the grooves of the letter "ayin" of the word "Yeshua" [Jesus]. This finding was never reported in the opinion that he submitted to the IAA or in the paper he submitted to the court even during his earlier evidence-in-chief testimony in court, for the prosecution.

To his credit, Goren re-examined the ossuary inscription at his own initiative several days after he concluded his self-contradictory testimony, and in May 2007, at his own initiative, he sent a letter to the prosecutor (Jerusalem District

Attorney's office) which he affirmed that he identified without any doubt natural varnish-patina in depth of the letter "ayin" in the word "Yeshua" (Jesus), and that he also identified what is "probably" natural patina on the sides of the grooves of the letter "het", that glides continuously from the surface into the depths of the letter grooves. These findings add to his previous statements and photographs from 2003 which show clearly such natural patina embedded deeply also in the grooves of the letter "shin". (Notably, all paleographers concur on the matter of the shape of the letter "shin", and consequently there is no doubt that the patina that Goren identified was in the middle stake of this letter).

From the evidence presented to the Court, it emerges that Goren's original opinion (report) of 2003 apparently referred to samples of a substance that was mostly made of traces of detergents that were trapped in several letter grooves, which he (either due to his lack of expertise in stone patina or due to negligence) erroneously treated as a substance that he believed was an artificial product designed to imitate carbonate patina, while disregarding the natural varnish-patina underneath this substance that had developed inside the grooves of some of the letters over centuries. This natural varnish patina was identified at the bottom or sides of the grooves of seven letters by all the stone and patina experts who examined the ossuary inscription, including Dr. Ilani, Dr. Rosenfeld, Prof. Krumbein, Prof. Harrell, Prof. Kronfeld, Orna Cohen, Jacques Negeur, Dr. Dan Rahimi, and others) and is also clearly seen is several close-up taken by the IAA in 2003 (note: in most places, the varnish patina existed beneath the grayish granular substance).

Notably, in his original report that Goren submitted to the IAA in June 2003, and in a paper he published in Journal of Archeological Science in 2004, Goren stated that he did not identify any varnish patina in any letter, and he stated that the absence of bio-patina in the grooves could be explained either if the ossuary inscription is a forgery, or if the inscription had been cleaned in modern times. The IAA adopted only the first alternative explanations, and from then on proceeded to argue that the inscription was a forgery.

Towards the end of his cross-examination in 2007, Prof. Goren stated to the Judge (June 19, 2007, p. 2018) "Therefore, ultimately, if you are asking me here to draw some conclusion, the conclusion is that I am undecided. I am deliberating."

18. Dr. Avner Ayalon (witness for the prosecution), is a geo-chemist of the Geological Survey of Israel in Jerusalem, and works on paleo-climate (research of climate changes through time). Although he is not an expert on patina on antiquities, he proposed to measure the isotopic composition of the oxygen and carbon in carbonate patina and to compare it to the isotopic composition of

carbonate found in stalactite caves in the Jerusalem area. He suggested that if the isotopic values are similar, this would prove that the carbonate patina on the item may be natural, and if the isotopic values are dissimilar, this would prove that the patina is not natural and most probably a forgery.

Ayalon based his theory, which he developed in the form of what he called a climate reconstruction model, on several assumptions – all of which turned out to be mistaken.

Ayalon assumed:

1. Carbonate patina develops on antiquities and in a process that is similar to the development of stalactites in a cave.
2. The source of most of the carbonate on the antiquities is created by carbonate that deposits from rain water that trickles down into the ground (stalactites in caves develop from this water source).
3. The formation of carbonate patina on antiquities always occurs in isotopic equilibrium.
4. Carbonate patina is deposited and formed on antiquities in a continuous process of several thousands of years; Since the period of development is so lengthy, it is possible to use climate data (temperature, annual precipitation, water composition, etc.) averaged over hundreds of years to perform the paleo-climate calculations.
5. The climate and precipitation in Israel have hardly changed in the last 3,000 years.
6. Both carbonate patina on antiquities and stalactites in caves are hardly affected by environmental contaminants.

However, during the trial, experts in patina, geology, and stable isotopes testified that:

1. Stalactites have morphology, thickness, period of development, sources of water, and other features that distinguish them from most of the carbonate found on antiquities. The development process of stalactites, over thousands of years, is different from the development of carbonate patina on antiquities.
2. Most carbonate patina on antiquities originates from biological activity. The organisms (bacteria, fungi, etc) change the stone surface as they feed off elements on the stone, and they leave secretions on and around the stone, which include carbonates. Rather than sedimentation and in contrast to the formation of stalactites that are formed from the deposit of carbons from rainwater, these biological activities does not take place under isotopic equilibrium as Ayalon assumed.

Other common natural sources that explain the presence of carbonate on antiquities includes the adherence of carbonate particles in the soil of a *tel* (ruins of an ancient settlement, containing building debris, stone, limestone, and plaster that contain various combinations of carbonates), or particles that fell off a cave ceiling, or the deposit of dust on objects (dust may contain foreign particles including carbonate particles, and may have traveled enormous distances before it is deposited).

3. Carbonate patina originating in sedimentation processes (deposition of carbonate from water) on antiquities is created in very brief and discontinuous events, usually lasting between several hours to a single season, in contrast to the period of hundreds and thousands of years that is required for a stalactite form.

4. The isotope data that Ayalon presented (from stalactite caves) as comparative data (based on averages of over several thousands of years) are irrelevant to patination on antiquities because Ayalon based his conclusions on incorrect assumptions that patination on antiquities occurs when the carbonate in rain water deposits on objects in a process that lasts thousands of years, and therefore it is possible to use climate data that are averaged over hundreds of years. However, since the process in which carbonate in water deposits on antiquities are very short (ranging from hours to one season), even when carbonate from rainwater deposits on antiquities, the specific climate data at the time must be known. Without this, it is incorrect to use averages over thousands of years. For example, it appears that the climate in Jerusalem in many years, such as the period between the first to fourth centuries AD, was significantly different from the climate averaged over several thousand years. Rainfall has a significant impact on isotopic values of the carbonate that settled from the rainwater: the rainfall in the 1st-4th centuries AD were almost twice the scope of subsequent periods – as Dr. Ayalon's own paper shows (!) (published in Quaternary Research, issue 71, in 2009). Ayalon concealed the findings of this study although he completed the study before he testified in court.

5. Ayalon also ignored the fact that during many hundreds of years, items of antiquity lay in soil which is usually rich with contaminants such as ancient building debris, which contains carbonate from building materials such as limestone, marble and chalk, which have a different isotopic signature than carbonate that is deposited from rain water), and in soil that frequently contains stone fragments which may be of a foreign source (such as fragments of imported marble pillars or airborne dust originating from a great distance).

> Furthermore, the climate and temperature in ancient tells is significantly different from that in stalactites found deep in caves, in which the temperature is almost constant during all hours, days and months (typically a tel (ancient mount) is also the site of enormous fires in the course of history, and the temperatures of the soil varies from day to night and from one season to another, in contrast to cave environments). Finally, most items of antiquity undergo some cleaning and handling process in which foreign substances that contain carbonate and other contaminants may be introduced.

All Ayalon's assumptions, on which he based on his theory about carbonate patina on antiquities were found to be mistaken and inappropriate for examining the authenticity of patina on antiquities. (Therefore it should not come as a surprise that no research institute or organization in the world has adopted his climate reconstruction model to test the authenticity of carbonate patina on stone items.)

When Ayalon measured the isotopic values of the granular substance in the letters grooves and compared them to the isotopic values of stalactites in Jerusalem caves, it is not surprising that he found that isotopic values of most of the samples did not match the values of stalactites. He therefore determined that the carbonate he sampled from the inscription grooves is not natural patina. Lacking any experience in antiquities and in patination antiquities, he assumed that the difference stems from forged carbonate patina that was produced to create the appearance of patina, and not from a natural source or from residue of detergents used or cleaning).

Interestingly, the isotopic values from two of Ayalon's samples (from the letters "ayin" and "het" in the words "Ahui di Yeshua") did match natural and authentic patina, and so he ignored these data and even concealed his findings from the letter "het' from his opinion to the IAA and from the scientific article that he published with others in a respected scientific journal. Since other researchers also found natural bio-patina (varnish patina) inside these very letters, it is almost obvious that Ayalon sampled natural patina from inside these letters grooves. It should also be stated that Ayalon discovered different isotopic values in different letters. This would not be the case had the granular substance been artificially manufactured and applied to the inscription simply to create an appearance of natural patina.

Not only was Ayalon's model lacking any scientific foundation whatsoever or relevance to a test of authenticity of the carbonate patina on the James Ossuary or Jehoash Table – Ayalon and his colleague Goren did not identify and therefore did not sample the natural patina which was visible in at least seven

of the letters of the James Ossuary inscription. Instead, they sampled, mostly, a soft, grayish, granular soluble substance even though it is clear to any expert of patina and/or stone antiquities that this material could not be patina or even could not purport to be patina. The granular substance was found (as explained by Orna Cohen and ROM laboratory officials) on top of the natural patina that Ayalon and Goren "missed". Anyone with experience in patina of ancient artifacts would immediately notice, based on the appearance, form, color, solubility, and softness of the grains, that this material is not patina and is so unlike patina that it cannot fool anyone with some experience in stone antiquities into believing that it is patina.

Even Ayalon admitted under cross examination that the substance that he sampled might have originated from other natural sources and was not necessarily a forgery; He stated that the isotopic signature of the substance does not rule out the possibility that it may have come from grains of stone originating in the collapse of a cave ceiling and/or stone fragments in the soil erosion that accumulated in the cave and/or the sedimentation of dust and/or remains of the detergent/s used to clean the ossuary.

The director of the Israel Geological Survey, Dr. Amos Bein (a prosecution witness) was already in 2003 aware of the possibility that the inscriptions are authentic. In a letter to the Minister of Education dated June 27, 2003, he wrote, "Ayalon's test does not contradict the possibility that the inscriptions themselves are original…" During the trial, a video excerpt was presented showing Dr. Bein in an interview with Simcha Jacobovici, (a documentary film producer) saying "We never determined that the ossuary's inscription is a forgery."

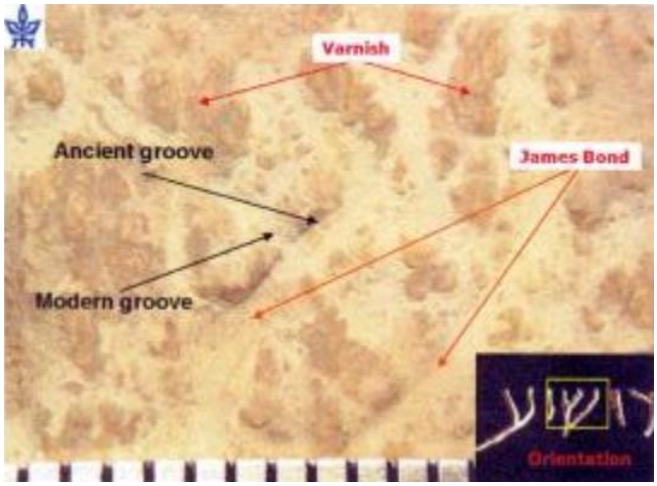
In short - Dr. Ayalon admitted that he had never previously studied (or even held!) an antiquity before he was commissioned to give an expert opinion on the ossuary for the State. He never before had studied patina on antiquities; He never performed any chemical analysis on any of the samples he took; He also did not fully report the findings of his tests, and he concealed data that were inconsistent with his theory from the Court and from his own article (the composition of the samples from the letters "het" and "ayin", and the period of almost 400 years , approximately 2,000-1,600 years ago, characterized by a dramatic change in the rainfall in the Jerusalem area).

19. Dr. Elisabetta Boaretto (prosecution witness), expert in Carbon 14 dating used to date organic materials, examined the ossuary at the request of the IAA, and testified that she found no evidence to support the claim that the inscription was forged or new, and she testified that she (like several other members of the committee) signed the summary opinion of the IAA that stated otherwise because she was requested to do so, and because she was impressed by

statements of Goren and Ayalon who, at the time stated emphatically that they found is no natural patina inside the letter grooves.

20. Mr. Jacques Neguer (prosecution witness), a chemist for the IAA, testified that he identified with certainty indications that the inscription had been cleaned in the past, and at least part of the inscription was cleaned aggressively. Negeur, who was a member of the IAA Committee stated in his testimony (p. 2766), "…I cannot say whether part of the inscription is a forgery or not."

To sum up the scientific tests performed on the ossuary:
Neither the prosecution nor the IAA presented even a single witness who was an expert on ancient stone items, or patina on antiquities and who ruled out the authenticity of the inscription or any part of it. On the contrary, the findings of all the tests, including those of prosecution witnesses Goren and Ayalon, support the argument that the entire inscription is ancient, the inscription was engraved by a single person, and that several letter grooves contains traces of detergent/s that covers the natural varnish patina that developed there over centuries, and was partially cleaned (mainly the first section), many years ago.

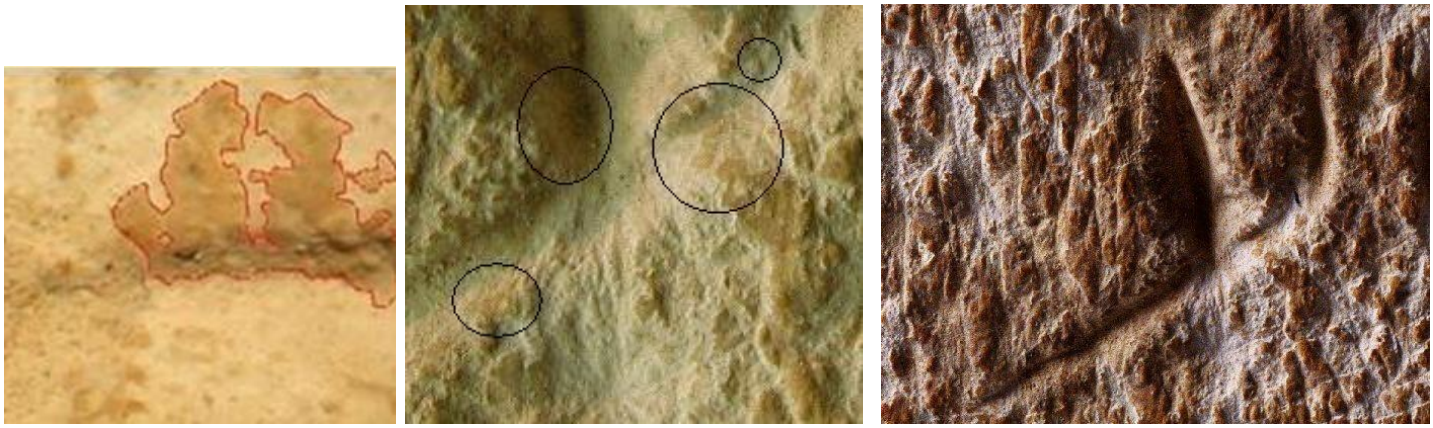


Images 5-9: Authenticity of the James Ossuary inscription is confirmed by presence of natural patina that developed over centuries in several letter grooves:

[Image 5: Upper left] Marking of natural bio-patina (patina varnish) that is seen to slip from the ossuary surface into the depths of the central stake of the letter "shin". (close-up photograph by Jacques Negeur of the IAA, 2003).

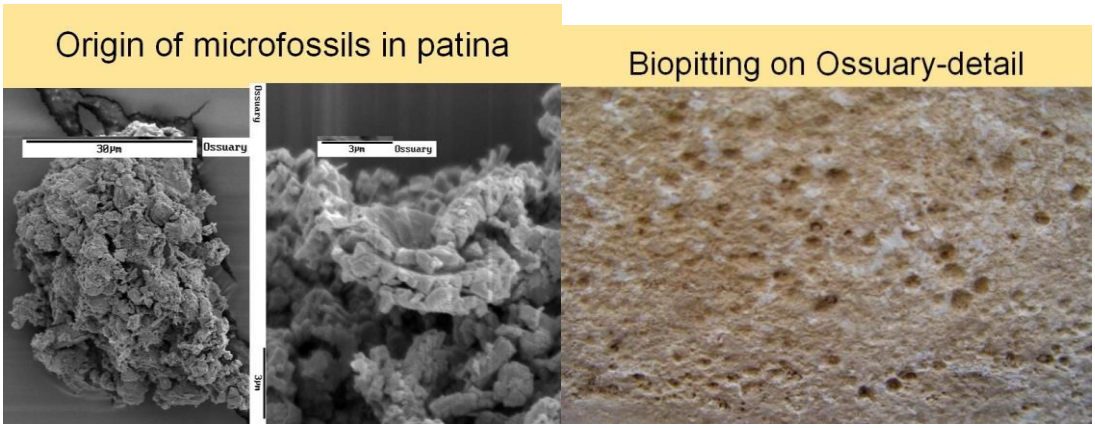
[Image 6: upper right] Slide from Prof. Goren's 2003/4 presentation at Tel Aviv University, showing the close-up of the central stake of the letter "shin" in the

word "Yeshua". In this presentation, Goren described this stake as an "ancient groove".



[Image 7: upper left]: Close-up of the upper groove of the letter "het" in the word "ahui", is clearly evident, slipping from the ossuary surface into the depths of the letter groove (borders of the patina varnish are marked in red; photograph by Prof. Krumbein, 2005).

[Images 8, 9: Top middle and right] Close-up of the letter "ayin" in the word "Yeshua", in which natural, ancient bio-patina (patina varnish) is clearly evident, slipping from the ossuary surface into the depths of the letter groove (photograph by Ran Arda, 2002).



[Images 10-12]: The presence of micro-fossils of a marine origin on the ossuary and inside the letter grooves indicate that the inscription and the ossuary were subject to an identical history. The micro-fossils in the patina origin from adherence of micro-fossil particles in soil that is typical of the Jerusalem region, that penetrated the burial cave (soil erosion that occurred over centuries) that contained the ossuary.



[Images 13-15, above]: Ancient scratches are evident on the ossuary surface (ancient natural bio-patina is evident in the depth of several of these scratches), which also slip into the grooves of several letters – see scratches diagonally traversing the letters "shin" and "ayin" in the word "Yeshua".

3. The James Ossuary - Forensic and photographic tests:

21. Examinations by the Israel Police Forensic Department ("Mazap") indicated that tool marks that were found in the end of the letter "kof" in the word "Yaakov" were found to be identical to the marks found in the letters in the second half of the inscription and therefore the inscription was clearly engraved by a single individual. These findings cannot be explained by a scenario that stipulates that the second half of the inscription was added in modern times, as the bill of indictment claims.

22. Various experts, including Jacques Neguer of the IAA and officials from the ROM laboratories identified clear marks on the inscription that indicate that the inscription has been cleaned. The mechanical actions and detergents used to clean the object (which is a conventional practice in antiquities conservation) removed part of the bio-patina (varnish) from the inscription (mainly from the first half), and let behind traces of detergents inside the grooves of some of the letters. This is probably the grayish granular substance that Ayalon and Goren sampled and which they determined was not natural patina.

Antiquities conservator who works with the universities, museums, and the IAA (Orna Cohen, Rivi Oni, Rafael Braun, Menashe Landman and others) testified that the majority of antiquities undergo a process of treatment and cleaning after they are discovered. Treatment also includes relatively aggressive actions that leave marks and sometimes even damage the items. Such marks are frequently observed on items that arrived via the antiquity market, and were not cleaned professionally (by the finders, dealers, or collectors).

Prof. Kloner, who was also a former District Director of the IAA, testified that the IAA staff typically cleaned ossuaries using a "dry cleaning process" with sharp implements and stiff brushes (that would leave marks), in order to remove the patina that accumulated on the items. Kloner also testified that he personally used to use acrylic paint and he stated that such paint marks are visible on "lots of ossuaries" that were discovered in IAA excavations. Archaeologist Meir Ben Dov said similar things. Therefore the discovery of traces of detergents and/or scratches made by sharp tools, are not suspect and do not indicate that an item is necessarily a forgery.

23. In the trial, two photographs were submitted showing the ossuary in a collection of antiquities in my parents' apartment in the 1970s. By looking at the enlargement of these photos from the 1970s, it is possible to see the words "brother of Jesus", which according to the indictment were inscribed around 2002. The photographs can be dated to 1975-6 based on several indications. The photographs were examined by the former Chief of the Document Operations and Research Unit and the Special Photograph Unit at the FBI Laboratories in Washington DC.

Mr. Gerald B. Richards (who is an adjunct professor of forensic science at George Washington University and a senior consultant to the FBI), conducted test of the photos, including infra-red and ultra-violet tests and found that production of the type of photography paper used in these prints was discontinued by Kodak in the early 1980s. Richards testified that there were many indications that led him to determine that the two photographs are authentic and all their features were consistent with photographs made approximately 30 years earlier.

24. Damage to the ossuary by the police/IAA:
The ossuary inscription was contaminated and seriously mutilated in 2004 when it was in the IAA's possession, when the police (Mazap) made a red silicon cast of the inscription. A portion of the natural patina that was inside the letter grooves was removed when the silicon was removed. Fortunately, despite the mutilation, several traces of natural bio-patina remained inside the grooves of several letters.

Image 16: The word "Yeshua" (Jesus) in the inscription, photographed in 2005 after contamination by the Mazap (Forensic Identification Department of the Israel Police), while the ossuary was in the custody of the IAA. Red substance is the remains of red silicone rubber carelessly used to make a cast of the inscription.

25. After hearing all the scientific opinions and evidence, and toward the conclusion of his closing arguments, the prosecutor in the case, Mr. Dan Bahat, noted that the State would probably dismiss the charges involving the ossuary, and renounce its claim that the ossuary inscription was a forgery had the bill of indictment not involved other charges (p. 11462 of the Court Transcript). His statement speaks for itself on the matter of the James Ossuary inscription's authenticity.

<u>Is the "James Ossuary" the ossuary of James the Just, brother of Jesus of Nazareth?</u>

The identity of the individual whose bones were interned in the ossuary was not the issue of the case and was not discussed in the court. Still, it should be noted:

1. From the size of the ossuary and the name of the deceased Yaakov (the authenticity of these elements is not contested) we learn that the ossuary was used to store the bones of an adult man, whose first name is Yaakov. Ossuaries were used by Jews only in the Jerusalem area, from the end of the first century BCE until the destruction of Jerusalem in AD 70.

2. Notation of the name of the deceased's brother or family member who is not the father of the deceased on the ossuary is very rare (a very small number of ossuaries that bear the name of the deceased's brother, sister, or grandfather are known), and this is an indication of the importance of the deceased in his or her community or family (for example, the ossuary of Shimi brother of Henin, the ossuary of Elisheva sister of Tarfon, or the ossuary of Yehohana the granddaughter of Theofilius the High Priest). Therefore, notation of "Yeshua", brother of the deceased, on the ossuary, indicates that "Yeshua" was a well-

known public figure or person of great importance in the community of the deceased (and possibly the community financed the ossuary).

3. Archeologist Prof. Kloner (prosecution witness) determined, in his opinion submitted to the IAA, that he identified on the ossuary the remains of compass-drawn leaves, superficially carved, using a method known as 'rafter' cut (the technique also known as zigzag). He noted that the engraving and decoration technique made it possible to determine that the ossuary was manufactured and engraved in the first century AD, most probably between the 45 AD and 70. James, the brother of Jesus of Nazareth was in fact stoned to death and buried in 62 AD. This dating of the ossuary by Prof. Kloner, to a narrow band of years, is consistent with the possibility that the ossuary was indeed that of James the Just, brother of Jesus of Nazareth, and significantly increases the probability that the ossuary belonged to this historical figure.

4. Numerous archeologists confirmed that the combination of names "Ya'acov son of Joseph" is very rare and in fact, such a combination has never been discovered on any other ossuary (in contrast to the combination "Jesus son of Joseph" which has been found on at least two ossuaries). Therefore there is a high probability of attributing the ossuary to James the Just, even had the inscription *not* contained the second part of the inscription ("brother of Jesus").

5. Prof. Camille Fuchs, head of the Department of Statistics at Tel Aviv University, examined the prevalence of names of deceased Jewish male individuals in Jerusalem in the first century AD, a period when internment in ossuaries was common (based on a corpus of inscription discovered on ossuaries and other sources). He determined that it is possible to determine at a very high probability (close to 100%) that between the years 45–70 AD, when the James ossuary was manufactured (based on its ornamentation pattern, see above), not more than one adult male Jew with the name Ya'akov (Jacob, Jacobu, James) who had a father named Yosef (Joseph) and died in Jerusalem and whose bones were interned in an ossuary inscribed in Aramaic. Prof. Fuchs stated that the custom of burial in ossuaries inscribed with the name of the deceased was limited to Jewish families who knew how to read (the percentage of the literate population in the Roman era did not exceed 20% even in major cities such as Jerusalem). In that period, ossuaries were used only for individuals whose families (or communities/sects) were sufficiently wealthy to afford to buy a cave and/or pay for internment of an ossuary in a cave.

   This reduces the size of the potential reference population for the statistical analysis of the names considerably. In other words, even had the ossuary been inscribed only with the words Yaakov Bar Yosef (as the prosecution alleged), it would still be possible to determine with an extremely high probability, that the

ossuary had contained the bones of Yaakov (Jacob), the brother of Jesus of Nazareth, who was stoned to death in 62 AD. These findings are in direct opposition to allegations by some archaeologists that the combination of names "Ya'acov son of Joseph" was common in that period.

6. To the best of my recollection, when I purchased the ossuary I was told by the antiquities dealer that it was found around Silwan (the Kidron Valley area) in Jerusalem, and that it reached the antiquities market without any other accompanying items (which is relatively rare).

   In 62 AD, James, the brother of Jesus, was stoned and thrown from the Temple Mount walls by his opponents. According to Christian tradition, he was interned in a rock-cut tomb in the nearby Kidron valley (very near to Silwan!) and one year later his dried bones were re-interned in an ossuary. Later, a chapel and a monastery were built around his grave (this monastery was excavated in the 1960s by British archaeologist John Allegro). According to tradition, in the 7th century, when Muslim invaders arrived, Armenian monks escaped with James' bones to the Cathedral of St. James in Jerusalem, on Mt. Zion and they were placed the bones beneath the principal altar. The bone box (the ossuary) that contained his bones may have been left behind by the monks, in its original burial in the monastery near Silwan and since then, the fate of the bone box remains unknown.

B. <u>Summary of testimony and expert opinions related to the Jehoash Tablet</u>

The expert opinions and findings of the tests conducted on the inscription between 2004 and 2008 and presented to the court, pointed to new findings that were mainly not available to the members of the 2003 IAA committee. Some of these findings were surprising and aroused great interest.

The inscription of the Tablet was examined in 2001-2 by staff of the Israel Geological Survey, who determined that the inscription was ancient. In early 2003, the inscription was examined by other experts on behalf of the IAA, after it had been delivered to the IAA. The IAA quickly published that the inscription was a fake, even before it had completed comprehensive tests on the item, and before it was tested.

It also became clear at the trial that after the IAA received possession of the Table, it was held by police officers, who were negligent in caring for the item, and caused it to break along a fracture line that had diagonally crossed the Tablet midway. . Luckily, the break allowed experts to examine, for the first time, the inner section of the stone and along the break, which had not been previously accessible. Experts

were able therefore to examine this section of the inscription, the patina, and the fracture line itself.

The findings of various stone experts who examined the Tablet, including Prof. Wolfgang Krumbein, Prof. James Harrell, Dr. Shimon Ilani, Dr. Amnon Rosenfeld, Dr. Arie Shimron (the last three, from the Israel Geological Survey), Prof Joel Kronfeld, and Mr. Winkler, and examinations based on close-up photographs of the fracture line taken by Mr. Jacques Negeur, a chemist with the IAA, all unequivocally indicated that the inscription is covered in original varnish patina (biogenic patina of a biological origin, resulting from the extensive activities of microorganisms such as bacteria, fungi, yeast, etc., on the Table and in the letter grooves). The patina is of varying thicknesses (very thin in some parts and very thick in other parts) and there is no doubt that the patina that envelopes the Tablet and its lowered frame and also penetrates into many of the letter grooves – developed slowly over a period of no less than 100 years, and possibly several thousands of years.

This bio-patina was identified by Dr. Ilani and Dr Rosenfeld, who examined the item in the early 2000s, but Prof. Goren (an expert in clay petrography, a field which has no relevance to a determination of authenticity of the inscription), who examined the Tablet in 2003, failed to identify it.

Dr. Ayalon, who examined the inscription that year, similarly did not identify this patina. In fact, both these researchers (Goren and Ayalon) apparently sampled and tested mostly traces of dirt or soil inside the letter grooves, which explains why they stated that the Jehoash inscription had no natural patina and why they claimed that the Tablet inscription is a forgery.

Prof. James Harrell described the work by Goren and Ayalon "sloppy science and flawed reasoning". In his testimony on the Ossuary and the Jehoash Tablet, he summarized his position as follows: "In my testimony I showed that there are logical explanations that explain everything that Goren and Ayalon describe and all these logical explanations do not contradict the possibility that the inscriptions are authentic. I would even suggest that … based on the evidence that I am familiar with, science supports the inscriptions' authenticity more than their forgery." The examinations and tests conducted by stone and patina experts indicated that:

1. The natural patina (varnish patina, from a biological source) adheres very strongly to the stone. According to the opinions of all the stone and patina experts, patina of this kind could not have developed on the Tablet and inside the groove letters in a period of less than 100 years, and it more probably developed over a period of several thousand years.

2. Close-up photographs taken by the IAA clearly show that the patina continues down into the depths of several letters. This could not be observed before the

Tablet broke. Since the scholars who personally examined the Tablet all concur that the surface patina on the Tablet, on the frame, and inside the letter grooves could not have developed in a period of less than 100 years, and since the patina glides down continuously into the letter grooves, the engraving, which must have therefore been produced prior to the patina formation, could not have been produced in the last 100 years, and it is not inconceivable that the inscription was engraved many centuries ago.

Findings of the stone and patina experts were published in 2008 and 2009 in several scientific papers, including "Archaeometric analysis of the Jehoash Inscription tablet," published in Journal of Archeological Science 35, (pp. 2966-2972) by Ilani, Rosenfeld, Feldman, Krumbein, and Kronfeld.

3. All the experts, including the prosecution experts, determined that the crack (fissure) which had existed before the Tablet broke, was ancient. The break revealed ancient patina deep inside the crack. Before the Tablet fractured, this part of the Tablet was inaccessible, and clearly no one could have artificially introduced any "fake" patina into the stone, and therefore this finding is a proof that the fissure is ancient.

4. Various stone experts, including an expert with decades of experience in stone engraving (Mr. Chen Winkler), determined that the inscription letters could not have been engraved on the Tablet after the development of the original fracture, because any pressure put on the stone (fine Arkosic rock, which is one of the hardest stones) while making the engraving would certainly have caused the Tablet to break. A stone of this type requires considerable pressure in order to create any engraving on it. Since all experts concur that the crack occurred in ancient times, the inscription could not have been engraved after the original fissure line developed, the inscription must certainly be of ancient origin.

Based on the bio-patina inside the grooves of the letters and on the tablet, and the ancient crack, it is clear that the inscription could not have been made in the last 100 years.

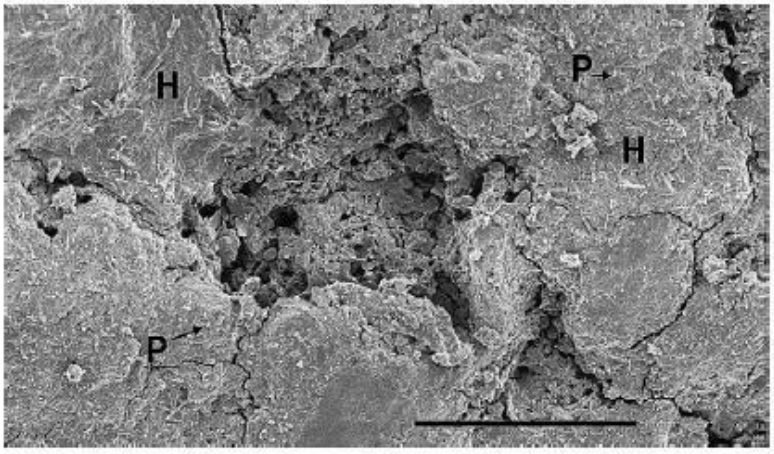
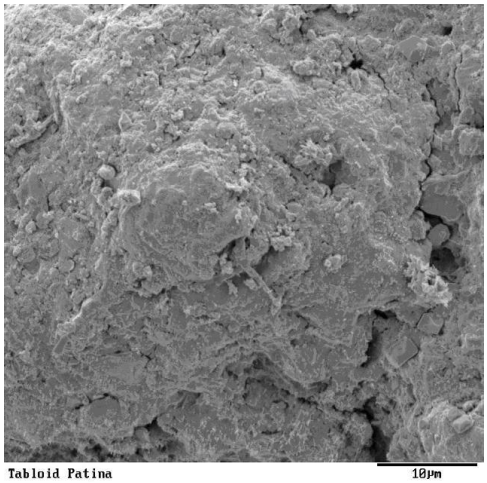


Fig. 10. SEM photo showing the circular pits (P) and fungal hyphae (H) of the patina. The sample was taken from the border between letter incision and the natural rock, near the crack zone (scale bar = 30 μm).



Images 17-18: Electronic microscope image of the Jehoash Tablet and Inscription's patina shows the results of fungal activity on the stone surface over an extended period.

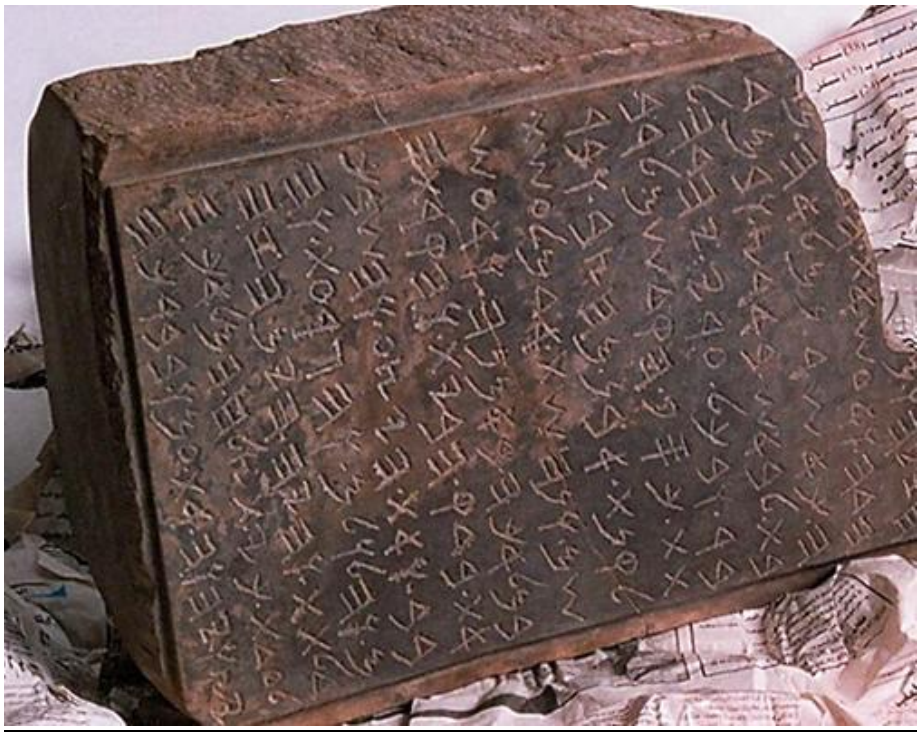


Image 19 (above): Photograph of the Tablet, probably dating from 2001. The crack that crosses the Tablet diagonally, crossing through several letters, is clearly evident.

Image 20(above): Cross-section of the (new) break that was caused along the ancient fracture line, showing the stone, the inscription, and the patina. The photograph (taken by the IAA after the Tablet was broken in 2003) clearly shows the dark biological membrane of varying thickness that envelopes the Tablet and also penetrates into the depths of several letter grooves. The light (white) patina indicates that rainwater penetrated into the fracture line over many years, became trapped and dried inside the fracture, creating a deposit on the sides of the fracture line.

Image 21: The dark, thin membrane, of biological origin, "envelopes" the entire Tablet, including the lowered frame. and appears to slip (glide down) from the surface into the depth of the grooves of many letters.

Additional indications point to the ancient provenance of the Tablet and the text inscribed on it:

5. Close-up photographs of grooves of the letters of the Jehoash Tablet indicate complete morphological continuity between the surface of the Table, covered in dark patina varnish, and the inside of the letter grooves.


Images 22-23: morphological continuity between the surface of the tablet and the grooves of the letters, as photographed by Chen Winkler (left) ad Prof. Krumbein (right)

6. Cross examination of Dr. Ayalon of the IGS indicates that the isotopic tests he conducted on the erosion layers of ancient stone items that were discovered in the Hebrew University of Jerusalem's excavations on the Temple Mount (headed by Prof. Avigad of the Hebrew University in Jerusalem) resulted in isotopic values that were very similar to those measured on the Tablet, yet were very different from values measured on other ancient stone findings from other sites in Israel.

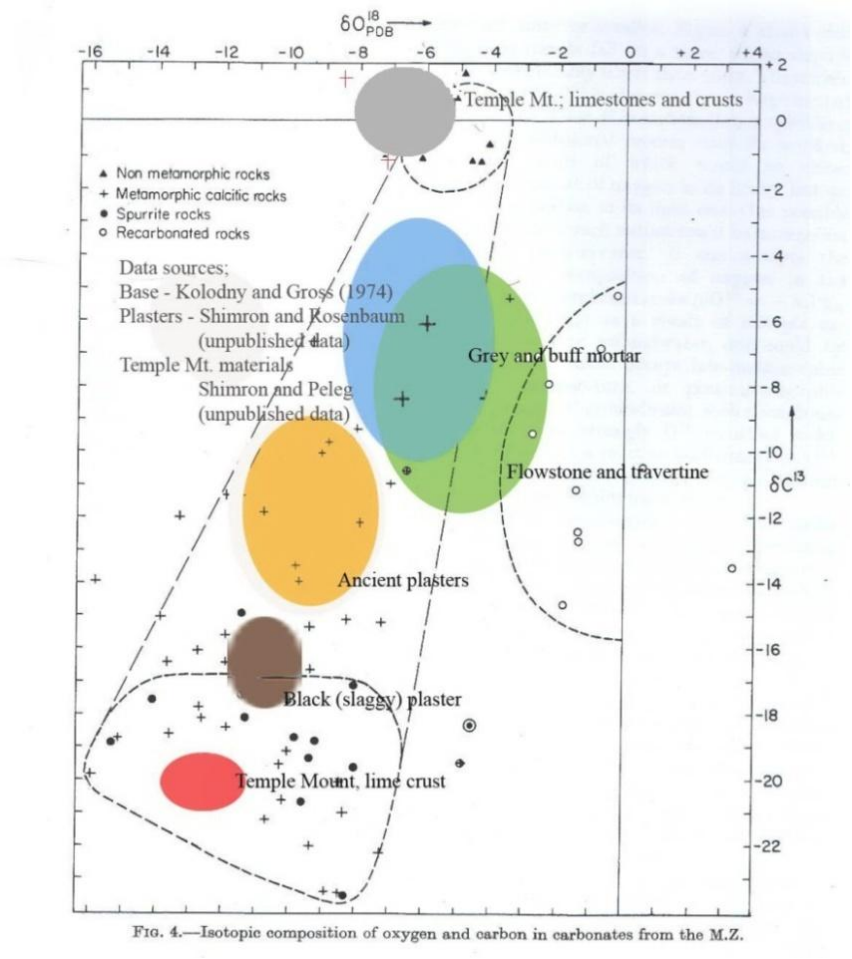


FIG. 4.—Isotopic composition of oxygen and carbon in carbonates from the M.Z.

Image 24: Results of the isotopic tests performed on the carbonate erosion film (patina) of early stone items discovered in the Temple Mount excavations are consistent with the values obtained from the Jehoash Tablet. There is, therefore, a high probability that the Jehoash Tablet originates in the Temple Mount area, as reported by the antiquities dealer Hassan Akilan (from the expert opinion of Dr. Aryeh Shimron of the Israel Geological Survey of Jerusalem).

7. Carbon 14 tests conducted on miniscule organic material (merely several microns in length) found in several groove letters of the Tablet and its inscription showed that the organic material could be dated on average to the second century BC. (Due to the small amount of organic material available for sampling, the laboratories were forced to conduct the tests on the material from several samples taken from different parts of the Tablet altogether. Therefore, the dating is merely the "average" age of the organic material found on the Tablet, and not the age of any specific sample, and the age of the inscription may be earlier than the "average date" because the organic material has been contaminated with later organic substances.

8. Miniscule traces of almost pure gold were found on the Tablet. The size and distribution of these traces cannot be manufactured artificially, as far as we

know. The presence of such tiny traces may indicate that the tablet, at some point in its early history, was close to a fire in which gold-coated wood was burned and sparks from the building flew a great distance. This suggests that the tablet may have been embedded in a building complex connected to the Temple.

9. The archaeologist Meir Ben-Dov, who conducted the archaeological excavations at the southern part of the Temple Mount, presented in court a photograph of a stone slab covered with a thin layer of gold, that was found in his excavations. Ben Meir noted that several similar stones covered with a thin layer of gold, gold, were also found nearby. These unique findings, which are not known from any other archaeological site in Israel, have not published yet in any scientific report.

Image 25: A small ancient building stone from the Temple Mount excavations, containing a thin layer of gold.

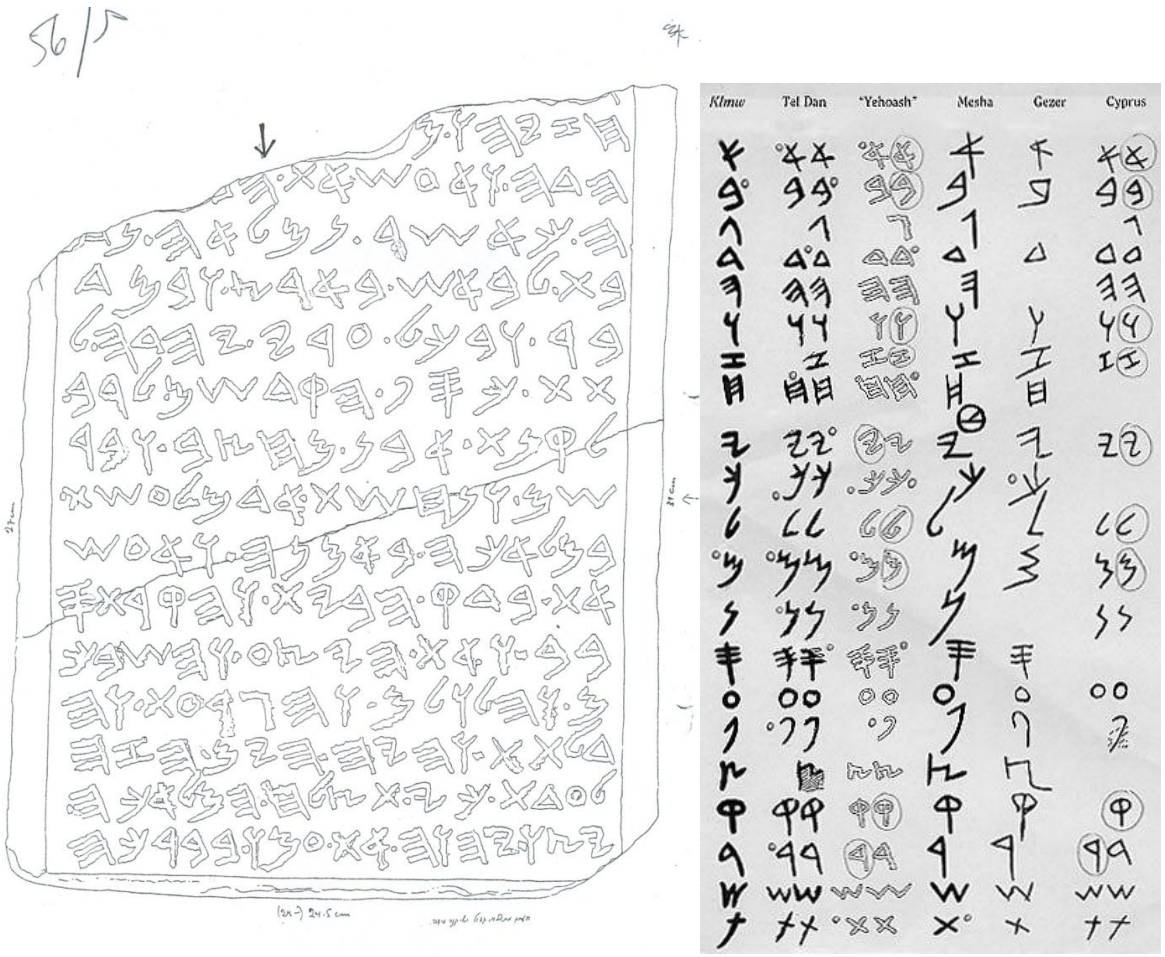
The presence of gold traces on building stones is, as far as known, unique to archeological findings from the Temple Mount of Jerusalem. There is, therefore, a high probability that the Jehoash Tablet originates in the Temple Mount area.

10. A new study (commenced after the beginning of the trial) by Prof. David Adan-Bayewitz of Bar Ilan University showed that captive traces of precious metals such as silver inside ancient artifacts is unique to findings from Jerusalem and has never been discovered in any archeological site located outside Jerusalem.

11. According to the opinions of Prof. Chaim Cohen, Prof. Noel Friedman, Prof. Victor Sasson, Prof. Ronny Reich, Prof. Gabriel Barkay, Prof. Andre Lemaire, and Dr. Ada Yardeni –There is not a single linguistic or paleographic feature of the Tablet that is necessarily inconsistent with the Tablet's ancient origin

12. It is impossible to compare the script (the shape of the letters) on the Table to other early Hebrew inscriptions because no monumental inscription from the 9th century BC has been discovered in archeological excavations in Judea (The Mesha inscription is Moabian, from Jordan, while the Tel Dan inscription is Aramaic from Northern Israel, and both are from cultures and regions that are different from those in Jerusalem and Judea).

13. Dr. Ada Yardeni noted that the letters' shape definitely show Phoenician influence and many letters are similar to letters on Phoenician inscriptions discovered in Cyprus and in North-Western Syria which date to the 9th century. BC.



Images 26-27: right: Chart of the Tablet prepared by Dr. Yardeni and (left): a comparison table of the letter shapes on Phoenician, Aramaic, and Moabite inscriptions from the 9th century BCE prepared by Dr. Yardeni.

14. Prof. Reich noted that the engraver may have been a stone artist of Phoenician origin who was brought to the area to assist in the renovations of the Temple (built in King Solomon's time with the assistance of Phoenician artists and artisans). Evidence of strong ties between Jerusalem and Phoenicia in the 9th century BC only recently has come to light: Prof. Reich testified that dozens of Phoenician bullae (stamp seal impressions) were discovered in the excavations that he conducted in David's City (Jerusalem) after the bill of indictment was filed, pointing to strong ties between the two regions in the 9th century BC.

15. Prof. Misgav, a paleographer and a member of the IAA committee noted that "I wouldn't fall off my chair with shock if this inscription had been found in a licensed excavation."

16. Prof. Chaim Cohen, who conducted an in-depth examination of the entire inscription, and published a lengthy scientific paper on the inscription, claimed that it is not possible to prove that the Jehoash inscription is a forgery based on philological evidence. ("I do contend that the Jehoash Inscription cannot be proven philologically to be a modern-day forgery.")

    He noted that not only did he not find any linguistic anomalies in the inscription, the inscription is consistent with early Semitic languages of the period and specifically Akkadian and Neo-Assyrian. Prof. Cohen published a detailed article explaining how all the alleged anomalies in the inscription can be explained. Prof. Cohen testified (similarly to Prof. Victor Sasson) that the word combination "bedek habayit" is an idiom that should not be explained by translating each of the words separately (as suggested mistakenly by Prof. Avigdor Horowitz and some others). The idiom (phrase) means – the repair and renovation of whatever needs repair, restore and reconstruct in The Temple. This interpretation is also based on a similar Acadian phrase, and is consistent with the King Jehoash statement quoted in verses Kings II 12: 7-8 of the Bible: "ועתה אל תקחו כסף מאת מכריכם **כי לבדק הבית תתנהו**". literally, "Now therefore receive no more money of your acquaintance, but deliver it for the breaches of the house" (that is - deliver it for the restoration of the breaches of the Temple).

    Prof. Cohen also addressed the phrase "יצו יהוה את עמו בברכה" ["May God (thus) ordain his nations (his people) with a blessing") which ends the inscription (עמו = עמיו). The interpretation of the word "בלולים", and all the other linguistic issues that allegedly caused several scholars to argue that the inscription is a forgery.

    Furthermore, Prof. Chaim Cohen testified that the inscription reflects a grammatical rule of biblical Hebrew that has never been published before, and which allows us to understand several cryptic biblical verses for the first time.

17. Early Hebrew inscription researcher Prof. Victor Sasson and biblical language researcher, the late Prof. Noel Friedman, also found no inconsistency between the inscription and the language of the First Temple Period, and published more than one article on this point. According to these experts, the inscription is surprisingly consistent with what we would expect of a First Temple Period inscription, and all alleged anomalies that others have attempted to attribute to the inscription are no more numerous or significant than the linguistic/epigraphic anomalies found in all the other early Hebrew inscriptions whose authenticity is not contested, such as the Shiloah (Siloam) inscription, the Tel Dan inscription, the "Superintendent" inscription, the Mesha Stele Inscription, the Ekron Inscription (a combination of Phoenician and Hebrew script in a Philistine inscription), and others.

18. Several researchers including Prof. Andre Lemaire made various suggestions regarding the date that the tablet text was written and the inscription was engraved (which were not necessarily identical). One possibility is that the inscription was engraved in the 9th century BC (during the reign of King Jehoash). A second possibility is that the inscription is a copy made in the 2nd century BC of an earlier inscription from the First Temple Period, whose condition had eroded over time, possibly the inscription was renewed during the Temple renovations by Shimon Ben Yohanan Hacohen (The High Priest) mentioned in Book of Ben Sira (Note that the average age of the organic material sampled from the Tablet by the Weizmann Institute is consistent with this period). A third possibility, which has also been suggested by Prof. Lemaire and others, is that it is a 19th century forgery based on the text of an ancient inscription.

19. Senior IAA officials (Ganor and Dahari) insinuated to the media that the Ossuary and/or Jehoash Tablet inscriptions are forgeries that were made by an Egyptian jewelry maker. The individual was located and questioned, and he categorically denied any involvement in forging the James Ossuary inscription or the Jehoash Tablet inscription. (A comprehensive interview with him which took place in Cairo was published by Jacky Hugi, the Middle East commentator for Ma'ariv, on June 13, 2008 and recently also by Hershel Shanks of the BAR magazine). He was never deposed or called to testify in Court for the prosecution, even not by video conference. This insinuation seems very ridiculous in view of the scientific evidence that proves that the engraving could not have been made in the last decade/s.

The position of the IAA and several scholars on antiquities discovered outside licensed excavations

1. Prosecution witness Prof. Israel Finkelstein of Tel Aviv University (a colleague of Prof. Goren, mentioned above), testified: "I consider everything that comes from the antiquities market after 1967 as not being authentic until it is proved otherwise."

   Prof. Finkelstein's remarks offer the background to the IAA's policy on the items presented in Court, which is designed to restrict the freedom of action of antiquities dealers and collectors in Israel. Some researchers have an opinion that is similar to that of Prof. Finkelstein, and they intentionally avoid publishing any item that comes from the antiquities market. As a result, many (perhaps even the vast majority) of the items discovered in Israel, which have found their way into collections all over the world, have never been the subject of scientific research and publication because of this position.

   Notably, the IAA (Mr. Ganor) estimates that over 90%(!) of all the antiquities discovered in Israel in the last 35 years were not discovered in licensed excavations and most of them found their way to the antiquity market. He confirmed that although trade in antiquities is legal in Israel and state policy imposes supervision on trading in antiquities to prevent important antiquities (discovered outside licensed excavations) from being removed from the country (which is the situation in neighboring countries) – he personally would prefer to shut down the antiquity trade altogether. Other researchers share his opinion. (His position is in contrast to official state policy that was made after a thorough study of all the potential repercussions of discontinuing trading in antiquities).

   In a paper published on the *Bible and Interpretation* website in March 2011, Gideon Avni stated that the James Ossuary and the Jehoash Tablet inscriptions are suspected of being forged, because they were not discovered in an authorized excavation. However Avni does not cite any scientific argument to support his position or which rules out the authenticity of the James Ossuary inscription or the Jehoash Tablet inscription. He merely states, "… The fact that the "James" ossuary had not been discovered in a proper archaeological excavation fueled the notion of it being an act of artistic forgery."

2. However, in the course of the trial it became apparent that almost none of the important inscriptions ever to have been discovered in Israel were discovered in licensed excavations (including the Dead Sea Scrolls, Mesha Stele, Shiloah (Siloam) Inscription, the burial inscription on the item used to transfer the bones of Kings Uziyah, "The superintendent Inscription (Asher Al Ha'bayit)", King Hezkiyahu and King Ahaz's royal bullae, Bar Kochva weights, hundreds of Edomite and Hebrew ostraca which came from south-west Judea, and others), and the few ancient inscriptions that were discovered in licensed excavations were not found in the relevant archeological strata (including the King Shoshenq (Shishak) inscription discovered in Meggido, the Tel Dan

inscription, the Gezer Tablet, etc.). Therefore in the last 100 years, licensed excavations made a very small contribution to the discovery of ancient Hebrew inscriptions and to a greater understanding of their history. Dr. Avni himself admits in his article that even when an ossuary is discovered in a licensed excavation, we do not know for certain whose bones it contained and therefore the excavation does not contribute much to our understanding of the historical background. He offered two examples of this: the Yehosef bar Kayafa ossuary and the ossuary of Ariston from Apamea. Although these are names familiar from the Mishna and other sources, Avni argues that there is no certainty that the ossuaries belong to those same individuals.

Even antiquities that are discovered in a licensed excavation are occasionally, and for some time, considered forgeries that were planted in the dig (such as the Tel Dan inscription that mentioned the House of David, the Ekron inscription that means Kings Achish and Padi, and the ossuary of Nicanor of Alexandria who donated a gate for the Temple of Jerusalem (whom Avni mentioned in his paper), and which were suspected by several researchers as being forgeries, although all are now universally considered authentic ancient artifacts. .

3. In the course of the trial, a newspaper item appeared in Ma'ariv (the Israeli evening newspaper) was presented to the Court. The item reported in January 2003 an interview with Dr. Uzi Dahari, Deputy General Director of the IAA. At that time, the James Ossuary was on exhibit in Toronto, and the IAA was searching for the Jehoash Tablet, and no one from the IAA examined either item. Although the IAA had not yet examined or tested these two items at that time, Dr. Dahari stated that the ossuary inscription and the Jehoash inscription are forgeries! Dr. Dahari later headed the committee nominated to examine the authenticity of these two items and was responsible (together with Mr. Amir Ganor of the IAA) for misleading publications concerning the items.

   This is also true for Prof. Yuval Goren who hastily published a long article on the Internet in January 2003 in which he challenged the authenticity of the Jehoash Tablet, and was even interviewed for a program broadcast on Israel TV, before he had even viewed or examined the inscription. After he did so, he was appointed by Dr. Dahari as head of the IAA committee that examined the authenticity of the Jehoash Tablet.

<u>Summary and a personal note</u>

Filing of the bill of indictment against the original defendants was accompanied by press conferences, internet postings, interviews, and manipulative leaks of half-truths to the press and documentary production crews from all over the world, by the IAA, which alluded to the discovery of a global network of antiquities

forgerers who allegedly operated for over 20 years, forging hundreds of rare antiquities that had been sold to museums and collectors all over the world for millions of dollars. IAA statements also implied that most of the important archeological items that came from the antiquities market, including the James Ossuary, are fake and therefore collectors and museums would do best to avoid purchasing items that come from the antiquities market (although the antiquities trade is legal in Israel).

I have declared that I am not an antiquities dealer. I have been collecting antiquities from a very young age (close to 50 years). In Israel it is legal to collect antiquities.

I never sold or offered for sale any item to any museum outside Israel; I never remove any item of antiquities from Israel without a license from the IAA. I sold (or exchanged) very few pieces over the years, much fewer than any other known collector in the world. In the trial, not even one collector or museum testified that that they were sold forged items by me. The James Ossuary has been in my collection since the 1970s. I received the Jehoash Tablet a quarter of a century later, in the late 1990s – and yet the IAA stated in the press (as did Dr. Avni) that both items "suddenly appeared together."

Throughout the course of the trial, as a defendant I was precluded from making public material from the trial or related to the trial, while the IAA regularly appeared in conferences in and outside Israel, posted information on the internet, and in IAA publications, and gave numerous interviews to local and international press, manipulatively disseminating selective information and partial truths concerning the items and the course of the trial. (A complaint was recently filed with the Attorney General on disseminating false information in the Israeli media before the court decided on those issues).

The IAA certainly has cause to be embarrassed by its conduct of the entire affair and it seems that for this reason it is continuing, to this very moment, to attempt to influence the court's decision.

Nonetheless, the numerous testimonies and scientific reports prepared by dozens of experts who appeared in court, both on behalf of the prosecution and on behalf of the defense, summarized above, speak for themselves. Readers have mainly been exposed to statements of the IAA until now, but it is time that they learn the bigger picture of all the evidence that emerged during the trial, so that they can draw their own conclusions.