

# ADELAIDE INSTITUTE

PO Box 3300  
Adelaide 5067  
Australia

Mob: 61+401692057

Email: [info@adelaideinstitute.org](mailto:info@adelaideinstitute.org)

Web: <http://www.adelaideinstitute.org>

Online  
ISSN 1440-9828



December 2009 No 472

## King Solomon's Tablet of Stone

**NARRATOR - JACK FORTUNE:** In July 2001 a unique inscribed tablet of stone mysteriously appeared in Israel. It was an archaeological marvel that seemed to solve one of the Bible's great riddles. Tested by some of Israel's top scientists, it revealed that in the heart of Jerusalem, 3,000 years ago, one of the legends of the ancient world had really existed - the magnificent temple of Solomon. But that was just the beginning, for there was another mystery hidden within the stone - one that would have shattering consequences around the world.

Tonight Horizon tells the extraordinary story of "King Solomon's Tablet of Stone". In Jerusalem during the summer of 2001 a secret meeting took place that would shake the world of archaeology.

**BOAZ GAON:** The story starts when this very renowned professor receives a mysterious phone call from a person by the name of Izak Tsu. He's asked to meet him with another renowned professor. This person appears with a briefcase. He opens up the briefcase and very dramatically takes out this beautiful black stone with an inscription on it. They look at the stone and it's beautiful, it's important, they're amazed. The mysterious stranger was a private investigator. And the inscription on his black stone was in ancient Hebrew. What it revealed was a wonder. For the inscription seemed to offer proof of something long searched for but never found - that nearly 3,000 years ago, in the centre of Jerusalem, there really had existed the place the Bible calls "The House of the Lord", the magnificent temple of Solomon.

**PROF HUROWITZ:** The biblical tradition tells that when Solomon built the temple and dedicated it, the first thing he did was he brought into the temple the Ark of the Covenant. The temple was built to house the Ark of the Covenant - the shrine containing the Ten Commandments - the word of God written in stone. So the temple symbolised God's personal residence on earth among his people in his chosen city. The Bible describes the Temple of Solomon in awe-struck terms. The main room was panelled with cedar and overlaid with fine gold. The King also ordered his workers to make two winged cherubim and cover them with gold. According to the biblical story, the Temple in Jerusalem lasted from the time of Solomon in the 10th century until it was destroyed in 586 BCE by the armies of King Nebuchadnezzar of Babylon.

**N:** And that has been the source of the mystery ever since. For even though the Bible describes Solomon as the grandest of the Old Testament kings with a mighty empire, no trace of him, his empire or his temple has survived. The bible said Solomon's Temple stood on the temple mount, in the heart of Jerusalem. Today one of Islam's holiest mosques stands there. At its edge is the Western Wall, where Jews from around the world come to offer their prayers. But this wall was never part of the Temple of

Solomon. It was actually built almost a thousand years after Solomon. With this lack of evidence, some archaeologists began to doubt much of the Solomon story.

**PROF FINKELSTEIN:** There are a few pottery shells from the 10th century on the ground, a wall here and there maybe, but nothing monumental. We are left with no archaeological evidence for the great kingdom of Solomon. We are left only with the text, and the text was put in writing relatively late.

**N:** But all that was before the discovery of the stone. A few months after the private investigator revealed the stone in the Jerusalem hotel, he took it to one of the country's leading scientific establishments - the Geological Survey of Israel.

Here, experts were asked to determine the stone's authenticity on behalf of its anonymous owner. One of the first things scholars noticed was that the stone was black, like Israel's only other royal inscription from the same period. Then they looked at the wording of the inscription. This described detailed building repairs to a temple - carried out by a King Jehoash - who had lived a century after the time of Solomon, while his temple still stood. The bible describes similar repairs to the Temple of Solomon, carried out by King Jehoash. The passage in Kings 2, chapter 12 begins by describing King Jehoash raising money for the repairs.

**HUROWITZ:** "Jehoash said to the priests, 'All the money, current money brought into the House of the Lord as a sacred donations, have it donated for the repair of the House.'"

**N:** Similarly, the inscription showed Jehoash raising money for repairs.

**HUROWITZ:** "I Jehoash son of Ahaziah King of the land of Judah, when the vow of each person in the land and in the desert was fulfilled to give silver of the holy offerings aplenty."

**N:** Then, when the money was raised, the Bible continues...

**HUROWITZ:** "'They in turn shall strengthen the damage in the house wherever damage may be found.'"

**N:** And the stone said...

**HUROWITZ:** "I repaired the construction and I made the repairs in the temple and the walls all around."

**N:** Professor Hurowitz was sure the stone and the bible were describing the same events.

**HUROWITZ:** I think that we're speaking about the same Royal act of repairs in the temple and the language is also rather similar.

**N:** So, according to both the bible and the stone, King Jehoash first raised the funds and then repaired the Temple of Solomon, one hundred years after it was built. But the scientists at the geological survey still needed to be absolutely sure that the stone really could have come from the Temple of Solomon. So the geologists subjected it to rigorous tests. Using a scanning electron microscope, they set out to determine its authenticity.

First they looked at the patina - a thin surface layer that forms over time on the outside of a rock or stone.

**DR AYALON:** If we see in this sample we have a very thin brown layer, about 1mm thick, that covers the sample.

**N:** The formation of a patina is caused by the interaction of chemicals in air, water or soil, with minerals in the stone itself.

**DR AYALON:** In this one, we see the brown and we can see that it may be thicker or thinner, but it covers all around and goes all around the sample.

**N:** A patina develops slowly and may take thousands of years to form. The geologists studying the stone found that the patina was continuous across the front of the stone and crucially within the inscribed letters. This meant the inscription must have been carved in the distant past. Next, the geologists analysed the chemical make-up of the patina. They were looking for calcium carbonate and other chemicals, which would tell them if it had formed in the Jerusalem area.

**DR AYALON:** They found that the trace elements like strontium, iron, magnesium, and other elements that are in the calcium carbonate, they were exactly the same proportions as in the patina in the Jerusalem area.

**N:** The patina confirmed that the stone came from Jerusalem and that the inscription really was very old. The big question now was, how old? Although it was impossible to date the stone itself, luckily within the patina there were minute particles of charcoal - and these could be carbon dated. The results were conclusive: they were 2,300 years old, so the carving beneath the patina had to be even older. There was no doubt the stone came from the Jerusalem area, and the inscription was thousands of years old. And there was one last discovery that helped clinch the case that it came from the Temple of Solomon. The patina contained tiny flecks of gold - just what you'd expect from a stone that had been through a fire in a temple lined with gold. In January 2003 the Geological Survey officially pronounced the stone to be genuine. Finally, the existence of Solomon's magnificent Temple had been confirmed. And the implications were staggering. If the temple existed, the legend of King Solomon was true.

**N:** And that meant an extraordinary section of the bible could be verified as history. For millions of people of different faiths the authentication of the Stone Tablet was a fantastic affirmation of their belief. Here was a genuine archaeological find that correlated almost word for word with a biblical episode that happened nearly 3,000 years ago. But for the stone itself, the next stage was to find a fitting home. And one place seemed ideal: the Israel Museum in Jerusalem. This remarkable museum is home to a stunning collection of biblical antiquities. They have the Dead Sea Scrolls, the most important biblical manuscripts in existence. They also have Israel's only other royal inscription from close to the time of Solomon - The 'House of David' Stele. This is the only reference to Solomon's father, David, that exists outside the bible. The Stone would be a fitting companion for these priceless artefacts.

**JAMES SNYDER:** We would of course be interested in acquiring something if we felt that it would help to amplify the story which are museum is meant to tell, and our story is the story of biblical archaeology in the ancient Holy Land, so if something were to surface of great significance for the full telling of that story we would be interested.

**N:** With its authenticity confirmed the stone was offered for sale to the Israel Museum. The price was rumoured to be high.

**BOAZ GAON:** There was a series of meetings with the Israel Museum, initial negotiations going on between the two parties, all sorts of sums are thrown around. It's difficult to know exactly what the sum was at that point - some people say three million, some people say four million, some people say ten million.

**N:** But before the museum would part with several million dollars, it wanted to know just one more thing - where exactly had the stone been found? The Bible said that Solomon's temple had been situated on Jerusalem's temple mount. So the stone must have come from there originally.

**JAMES SNYDER:** If an object is excavated then you have a much simpler time verifying its authenticity because you are taking it from its source of excavation.

**N:** However, there are no official excavations on the Temple Mount - because it is home to one of Islam's holiest shrines, the Dome of the Rock. The whole area is politically far too sensitive for archaeology. Still, rumours said the stone had been found in rubble left from recent illegal building projects being carried out on the Temple Mount. But James Snyder needed more than rumour. He wanted the full story of the stone after it had been found.

**JAMES SNYDER:** You want to be able to track the history of the object from the time of its excavation, if it is possible to do so, through its history of ownership until it comes to you.

**N:** It was then that the saga of the stone became very mysterious indeed. Just when the museum wanted to do their own checks, both the private investigator who had first revealed it - and the stone - disappeared. So Amir Ganor an investigator with the Israeli Antiquities Authority was called in. For nine months he searched for the man who had first taken the stone to the Jerusalem hotel.

**AMIR GANOR:** (VO translation): We travelled all over Israel from the north to the south. That detective was a very wily person, he left us very few clues. In the end we found him in an office in Ramat Gan and he told us that he'd been hired by Oded Golan.

**N:** Oded Golan is a businessman and renowned collector, owner of Israel's largest private collection of antiquities. He explained that he wasn't the owner of the stone and that he didn't know where it was. He had just been involved as a middleman.

**ODED GOLAN:** Sometime during 1999 I was called by a very reliable Palestinian dealer that I knew for many many years who ask me to assist him in selling an inscription. It seemed to be very interesting and I was ready to assist him only under one condition, that it will be offered only within Israel and to a museum in Israel after they will authenticize it.

**N:** Golan said that the owner hadn't wanted to be identified, which was why he'd hired a private detective. However, the owner had since died and his widow had the stone. But she was somewhere in the occupied territories and Golan didn't know how to contact her. But Oded Golan did reveal one vital piece of information - where the stone had been discovered.

**ODED GOLAN:** It was found very near to the Eastern Wall in the Muslim cemetery in Old Jerusalem outside the Temple Mount.

**N:** It was stunning news. Here was confirmation that the stone had been unearthed just yards from where the Bible said that Solomon's Temple had once stood. But then, the story of the stone took another remarkable turn. The reason - another, ancient biblical artefact. Something called an ossuary or bone box. Jewish families once used ossuaries to store the bones of the dead in caves and burial chambers. They were commonly

used in Jerusalem, and can still be found in caves today. In 2002, one very special ossuary appeared. Inscribed on the side were the words 'James, Son of Joseph, Brother of Jesus'. It was heralded as the first physical evidence of the existence of Jesus Christ and caused a worldwide sensation. It was displayed for the general public in Canada in the Royal Ontario Museum, and the exhibit received almost 100,000 visitors. And strangely, the owner was Oded Golan. Journalist Boaz Gaon found Golan's connection to both the stone and the ossuary just too good to be true.

**BOAZ GAON:** As soon as we made the link we knew that something is sort of very strange here because the same collector seemed to be linked to these two incredibly dramatic artefacts. It either was an extremely wonderful stroke of luck or something very suspicious.

**N:** The Israeli authorities were also suspicious - they raided Golan's apartment and storehouses. There they found the ossuary - perched on a toilet. And they also unearthed the elusive stone. With the artefacts now in their possession, the authorities set up a committee of linguists and scientists, to determine once and for all the authenticity of the ossuary and the stone. Victor Hurowitz, Israel's leading expert on royal building inscriptions, was asked to examine the writing on the stone.

**HUROWITZ:** The language and therefore the style of the inscription is Biblical Hebrew. It's eloquent, it's elegant, it's charming. I enjoy reading it.

**N:** But as he examined it more closely he found something that didn't quite make sense. It was all to do with the key phrase "I made repairs to the temple" or in Hebrew - "bedek a baied".

**HUROWITZ:** The main problem in this inscription is this expression "bedek a baied". In one word, this is an anachronism.

**N:** According to professor Hurowitz, "bedek a baied" had a different meaning in the time of the Temple of Solomon to the meaning it has today. In modern Hebrew it means to repair, but in ancient Hebrew it meant the exact opposite - to damage. So its use in this inscription made no sense at all.

**HUROWITZ:** "Bedek a baied", which means, if I translate, "I made damages to the temple". Now this in a Royal building inscription, where the king is taking pride in what he's done in the temple repairs, to say that he damaged the temple is absolutely ridiculous.

**N:** Victor Hurowitz now had real doubts that the stone had been inscribed in the time of Solomon's Temple, almost 3,000 years ago.

**HUROWITZ:** Unfortunately for the author, where it gets to the main part of the inscription and says I made the bedek a baied, he fouled up and he put in modern Hebrew.

**N:** But not everyone agreed with Hurowitz's interpretation. Professor Chaim Cohen is another expert in ancient Hebrew. He believes that there are so few texts discovered from the time of Solomon that no one can be sure how the language was used 3,000 years ago. It was simply the way the stone had been found that made everyone suspicious.

**PRO CHAIM COHEN:** Had the inscription been found in controlled archaeological excavations it would have prompted scholars to say that now we must re-look at the way we've been seeing the vocalization in our Hebrew bibles to date.

**N:** Professor Cohen believes that if the stone had been found in a formal archaeological dig, no one would have questioned it. They simply would have seen the inscription as clarifying the use of

ancient Hebrew words. Beyond that, he was convinced that the stone could not have been the work of someone who made clumsy mistakes.

**PROF COHEN:** If it is a forgery, then the forger must have been a near genius as far as the level of sophistication that we find in this inscription.

**N:** The linguistic evidence was inconclusive. There was still no hard reason to doubt that the stone had come from the Temple of Solomon. Everything now hung on the investigations of the scientists on the committee. The focus of their attention was the patina - the weathered layer on the outside of the stone. It was this, especially the charcoal particles that were dated to 2,300 years ago, that had convinced the scientists who had carried out the original analysis. Elisabetta Boaretto was asked to re-date those particles.

**DR ELISABETTA BOARETTO:** The radiocarbon age was 2,250 plus/minus 40 years. This is a very nice precise age, and calibrated this corresponded to an interval in time that goes from 200 BC, before Christ, to 390 BC.

**N:** Her results seemed to confirm the original research - the charcoal in the patina was very old. But, it was theoretically possible for someone to have taken charcoal from another source and added it to the patina. For Dr Boaretto, the only way to be absolutely sure of the stone was to look again at the patina in which the charcoal was embedded. The man charged with this task was one of Israel's top archaeological investigators. Yuval Goren is a professor of Archaeology at Tel Aviv University and a geologist. He has a detailed knowledge of both Biblical archaeology and the rocks of the Jerusalem area.

**N:** He began by looking at the patina on the back of the stone. An authentic patina would be firmly attached to the underlying stone.

**GOREN:** This patina on the back of the stone is, actually it was very tightly connected to the stone. We needed a little chisel and a hammer to peel off small samples of the patina.

**N:** This was clearly a natural patina. But then professor Goren examined it under the microscope. He expected it to be made of calcium carbonate, which is local to the Temple Mount. But what he saw was this - a patina made only of silica. This could not have formed in Jerusalem. In other words - the patina on the back of the stone could not have come from the Temple Mount.

Puzzled, Professor Goren turned his attention to the patina covering the inscription on the front of the stone. Here, he did find calcium carbonate, just as one would expect of a patina formed in Jerusalem. But now there was a new mystery - how could the patina on the front of the stone be different from that on the back? The answer began to emerge as Professor Goren sampled the patina from within the carved letters. Strangely - it didn't seem to be bonded to the stone in any natural way at all.

**GOREN:** The patina is very loosely connected to the stone. Here we can see how it reacts to me scraping it with a matchstick and you can see that it easily peels off the letters as opposed again to the patina on the back side.

**N:** And when he studied the patina on the front of the stone in detail he found something else even stranger - tiny marine fossils, called forams.

**GOREN:** Within the patina they are quite common, here we can see one, and here we can see another two.

**N:** These fossils could only be found if the patina formed beneath the sea. And the Temple of Solomon was nowhere near the sea.

**GOREN:** Of course one can't expect to find such fossils of plankton, of marine organisms, in patina that is created in the land environment.

**N:** This was a complete mystery. It seemed impossible for a patina from a temple built in Jerusalem to contain the fossils of sea creatures. Then came the most telling detail of all.

**GOREN:** When the letters are cleared, the inner part of the letter is exposed and as you can see here it is very freshly cut, you can see even the little lines, the little parallel lines of the chisel, or even maybe some drill, some electric bit or drill with which the letters were engraved, which is of course very unusual for ancient inscriptions.

**N:** So he put it all together - the inscription had been recently carved. There were two different patinas. And the one on the front contained marine fossils - impossible if it had formed in Jerusalem. He concluded the patina on the front of the stone was artificial - a mixture to which gold and iron age charcoal had been added by hand.

**GOREN:** And therefore I believe that the stone, or not the stone of course, but the inscription is not genuine.

**N:** Alarmed by what he'd found with the stone, Professor Goren turned his attention to the James Ossuary. Again he found a similar story - a freshly cut inscription with an artificial patina applied over the top. On the 18th of June 2003, the Israeli Authorities delivered their conclusion.

**DR DAHARI:** Good day to you, to all of us. The patina in the letters in both items is a modern forgery covering the letters.

The conclusion is that the two inscriptions are modern inscriptions. This is a forgery, totally, without any doubt about it.

**N:** The two most important biblical finds in a generation were proven to be fakes. There was no archaeological proof for the existence of Jesus Christ. There was no evidence for the existence of The Temple of Solomon. There was now outrage in the world of Israeli archaeology. How had the forgers succeeded in fooling some of the country's top scholars? How had they managed to pull it off? Yuval Goren, whose work had helped expose the forgery, was determined to find the answers.

**GOREN:** Forgeries are a contamination of science, of archaeology as a science. Science is being biased, history is being biased, archaeology is being biased, and there is, the more sources like that appeal, forged, fake sources like that appeal, of course science is more distorted.

**N:** He began his investigations with the black stone itself. His analysis showed the stone was of a rock type that was not indigenous to Israel. He knew that for the inscription the forgers had needed an old black rock already cut to a rectangular shape - and he thought he'd worked out how they had acquired it. Just up the coast from Tel Aviv is an old crusader fortress. The stones in its walls have already been cut to shape. Some of them are black. And many are not local - the crusaders brought them here.

**GOREN:** Ships that used to come to this place were loaded sometimes with ballast stones, to hold them balanced, and then they used to unload them, and so these stones were in many cases reused for buildings. This stone is a dark stone, it's obviously not a local stone to this area, which is already carved, it was probably carved to its rectangular shape in order to place it as the dressing of this wall, and so somebody coming to such a place could find dark stones like that, that are already made up to a rectangular flat shape.

**N:** Professor Goren was now certain: the stone used for the inscription must have come from this, or a similar, Crusader Fort. But for the forgers getting hold of an old stone of the right shape was just the first step in making an inscribed tablet capable of fooling the experts. The team of forgers must have included a scholar of ancient Hebrew, to write the elegant inscription. Then they would have needed a master stone carver who could inscribe it. But above all else, the thing they had to get right, was the patina. Just how had it been possible to concoct a mixture that had convinced Israel's top geologists that it was an ancient patina from

Jerusalem's Temple Mount? To solve this puzzle the investigating authorities brought in geochemist Avner Ayalon. He dissolved samples of the patina in acid to produce a gas containing different types of oxygen atoms called isotopes. Each isotope has its own unique atomic weight - and the quantity of each isotope in the gas can be determined using a mass spectrometer. Measuring the ratio of these different isotopes tells Doctor Ayalon the temperature at which a patina has formed. His results were revealing. The patina on both the inscription and the ossuary had formed at temperatures far too hot for them to have occurred naturally.

**DR AYALON:** The temperature which I calculated, 40 to 50 centigrade, for sure, it is much higher than natural temperatures that prevailed in the Jerusalem area in the last 3,000 years.

**N:** This high temperature gave Dr Ayalon a clue as to how the patina had been formed. He believes the ingredients of the patina must have been ground up, with hot water being added to help them dissolve.

**DR AYALON:** Someone grinded calcium carbonate. You grind it and mix it with hot water. If you use hot water then you get a much better cementation of the artificial patina which had been cemented to the artefacts.

**N:** One of the crucial ingredients was chalk. It was this that had provided the calcium carbonate for the patina. It also explained why forams had been found. They are very common fossils in chalk. The patina mix also included a little bit of soil from the Jerusalem area, some gold and some iron age charcoal. These were masterly touches introduced by someone who knew exactly what would convince the experts. In the summer of 2003, after the biggest archaeological investigation in Israeli police history, Oded Golan was taken into custody. It was then that investigators realised they could be dealing with more than just the stone and the ossuary. When police searched Golan's apartment they found a hidden workshop filled with tools and half made artefacts. There was this large dark stone - very like the stone used for the Temple of Solomon Inscription. Then there were these tools, including a drill and drill bits. And there were also boxes of soil that could be used in a fake patina. But what was most suspicious were the artefacts. Some were in the early stages of preparation, like this casting for a bronze statue. And some appeared finished, like these royal seals, or bullae.

**BOAZ GAON:** What happened was that the Jehoash inscription revealed this Pandora's box filled with antiques and artefacts that have been sold to various museums and various collectors for various very large sums of money during the past 10 or 15 years.

**N:** The implications of this were immense. Collectors around the world have paid hundreds of thousands of dollars for supposedly ancient seals, painted pottery shards and other artefacts that came through Oded Golan's associates. Dozens of these items have now been examined by Professor Goren, and all have been revealed to be forgeries. Police now suspect that artefacts made by the same team of forgers have found their way into leading museums around the world.

**BOAZ GAON:** The interesting question is now, from the list of artefacts that are currently shown in various museums in Israel, in London, in New York, in Paris, are they fake? Are they authentic? If Oded Golan was linked to any of them does that mean that they are forged? And this is going to be dramatic.

**PROF FINKELSTEIN:** Everything which came to the market in the last 20 years or so, things which did not come from an excavation, should probably be considered a fake unless otherwise proven.

**N:** It is a deeply shocking revelation. And beyond that, there is something even more disturbing. The forgers were playing on the desire of millions of people to see the bible confirmed as history. It is an immensely cruel and cynical thing to have done. And for those in search of Solomon and his great temple, it means their goal is as far away as ever.

<http://www.sbs.com.au/whatson/index.php3?proqdate=10:07:2005>