Kenneth Kitchen’s Atom Bomb
David Rohl replies to Kenneth Kitchen

Following the publication of A Test of Time: The Bible – From Myth to History and the broadcast of the three-part documentary series ‘Pharaohs and Kings’, a number of scholars have raised objections to various aspects of the New Chronology theory. Much of the reaction was perhaps to be expected – more of an emotional response than one of articulate and reasoned criticism. Many decided simply to dismiss the theory out of hand, without intellectual effort on their part to challenge the detailed chronological evidence put forward. Moreover, few were prepared to consider the broader implications of the historical model of Israelite archaeology which the New Chronology has raised. This type of reactionary scholarship only serves to demonstrate an age-old observation aptly encapsulated in a quotation from Max Planck:

A new scientific truth does not triumph by convincing its opponents and making them see the light, but rather because its opponents eventually die, and a new generation grows up that is familiar with it.¹

On the other hand, some scholars have made an effort to articulate their criticisms – mainly because their work has been directly challenged by the New Chronology theory. These rebuttals have been directed at detailed points of the chronological arguments rather than at the overall scheme. An historical model as wide ranging as the New Chronology may have its problems in the detail but there are many strengths and interesting propositions in its broader perspectives. However, as is the case with all historical models, its survival depends on whether those detailed problems, highlighted by critics, are insurmountable and therefore terminal to the new theory on offer. In this case, as I hope to demonstrate, my critics’ best efforts fall far short of the killer blow which they believe they have administered. Indeed, their arguments are instructive on a different level, giving the unbiased reader an eye-opening insight into the quality of the intellectual weaponry at the disposal of conservative academia.

I did not rush to respond immediately to criticisms of the New Chronology because my priority was to complete the second volume in the A Test of Time series. In addition, I thought I would allow sufficient time for the big guns to be trundled out so that I could deal with their best salvos all in one go. The task of writing Legend: The Genesis of Civilisation now complete, I have chosen to respond to two very prominent scholars in particular – Kenneth Kitchen and Philippe Brissaud – because they are widely quoted as having satisfactorily debunked the New Chronology.

Kitchen and Brissaud have confidently saluted forth as champions of the establishment view in Egyptology. I was flattered to learn that Professor Kitchen had felt it necessary to respond to the New Chronology in the Preface to the latest edition of his Third Intermediate Period in Egypt.² Brissaud, on the other hand, chose to publish a rambling article in the Bulletin de la Société Française des Fouilles de Tanis, volume 10 (1996) – the organ of the French archaeological mission to Tanis of which Monsieur Brissaud is Field Director. Neither publication affords an opportunity for a response on my part or from any other New Chronologist. As a result, those responses find their place here in the JACF, in the German publication Biblische Archäologie am Scheideweg? – Für und Wider einer Neudatierung archäologischer Epochen im alttestamentlichen Palästina, edited by Peter van der Veen and Uwe Zerbst³ and at www.DavidRohl.appleonline.net.

I will deal here with the most telling of the criticisms – those which the authors themselves have stated to be the ultimate proofs of the fallibility of the New Chronology theory.

In a letter widely circulated by Kitchen to his evangelical and academic colleagues the following statement occurs:

I mentioned to him (i.e. Rohl during his visit to Liverpool) one tiny Egyptian text that totally destroys the case for all these would-be revisionists (my atom-bomb, chronologically). At Deir el-Medina in Western Thebes, a graffito in Year I of king Merenptah, Inundation Season, mentions the workmen viewing the waters of the actual Nile inundation at that time. This is only possible every fourteen centuries, because the Egyptian calendar (365 days) was 1/4 day too short, and ended a day too early every four years. So, its summer months had crept into winter by 730 years, and it only came right again after 1460 years or so. It was right under Merenptah in the 13th century BC, as it was in the 2nd century AD (Censorinus), and had been in the 28th/27th centuries BC. But NOT at intervening times. So, dropping 500 years with Velikovský, or the odd 250/350 years with James and Rohl is totally and definitively excluded. I told him (Rohl) about this, gave him a copy of the text, but of course it appears in neither the (TV) programme nor the book.
This is a confusing piece of writing to those unfamiliar with the arguments and which therefore needs some explanation. First, it presupposes that Sothic dating is an established tool of Egyptology. This is far from the truth. It assumes that the Egyptian civil calendar was never altered or adjusted, in spite of its obvious problems. Moreover, it has been demonstrated that some of the so-called Sothic dating anchor points are questionable and, as Manfred Bietak points out, they 'should not be used any more' for chronological determinations. However, although I wish to state here that I do not for one minute accept Sothic dating as a useful chronological methodology, I am (and have been) prepared to argue within its tenets for the sake of scholarly debate and so as to demonstrate that, even playing by Kitchen's rules, it is possible to undermine his entire argument.

Let us begin by analysing what Kitchen is actually saying. As I understand it, he makes the following basic points.

(a) In the orthodox chronology the reign of Merenptah (OC – 1213–1203 BC) falls not long after the beginning of the Sothic cycle which commenced in 1321 BC.

(b) A graffito from the first year of Merenptah's reign describes the appearance of the Nile flood in the Inundation season, i.e. at the correct period in the Sothic cycle. The flooding of the fields and the calendar season of the flood were thus approximately synchronous and Merenptah's reign must have been located near the beginning of a great Sothic cycle (i.e. not long after 1321 BC).

(c) As a result, this text confirms the orthodox dating for Merenptah and destroys any arguments for a revised chronology, no matter what they are. In the version of the New Chronology published in A Test of Time Merenptah is dated to c. 875 BC.

First I wish to correct what Kitchen says about the circumstances of his first raising this 'atom-bomb' for the New Chronology. It was not during the filming of his interview, as he states in another part of his letter, but at a preliminary meeting which we had in the TV production offices when Dr. Bill Manley (as academic consultant to the series) was also in attendance. Kitchen raised the issue of the Merenptah text and promised to send me a copy of an article written by Professor Jac. Janssen on the subject – not, as he claims, a facsimile copy of the hieroglyphic text itself. I said that I would take it into consideration but that I would need to see the actual original inscription before coming to any conclusions about its implications. Experience has taught me that published articles by Egyptologists are often based on second-hand evidence and that some armchair scholars rarely venture to examine the original object of their interest for themselves. As you will soon learn, this is a prime example of two scholars quoting from secondary library sources to support each others erroneous conclusions. Neither Kitchen nor Janssen had seen the text concerned. Indeed, to my knowledge, Janssen had not visited Egypt for a considerable number of years before publishing his article.

I examined the Merenptah graffito on the first opportunity I had to visit Luxor following the completion of filming. I would very much have liked to have included it in the TV series because (playing by Kitchen's Sothic rules) it strengthens my case that the currently accepted Egyptian chronology is wrong. However, as Kitchen and others fail to appreciate, I was not the Director or Producer of the series and did not control what was filmed or how it was edited. In fact, I did not see the final versions of the programmes until they were broadcast. I made this clear to Kitchen in a letter sent to him shortly after the broadcast.

The Merenptah text concerned has been catalogued as Theban Graffito 862 (Spiegelberg's Graffito XVI) and is located on a smooth cliff-face near the Way Station on the col overlooking the Valley of the Kings (not at Deir el-Medina as Kitchen states). It is one of many rudely carved hieroglyphic texts scribbled near the small stone shrine used by the workmen who bivouacked here between their shifts in the royal wadi.

Janssen (who, as I have said, has not seen the graffito for himself but only the final hieroglyphic published copy) suggested the following translation in his article entitled 'The Day the Inundation Began'.

Year 1, month 3, season of Inundation (Akhet), day 3. This day that the waters of the great flood returned/came to inundation. The Dual King, Balen|re (Merenptah).
There are two errors of reading and interpretation here which Kitchen perpetuates in his 'atom bomb'. Janssen, in fact, himself relied on the reading of W. Spiegelberg published in 1921 which was in direct contradiction to another publication of the text by Professor Jens Lieblein which appeared in 1900. It should be pointed out that Spiegelberg originally published Graffito 862 in 1889 in *Zwei Beiträge zur Geschichte und Topographie der thebanischen Necropolis* (Strasbourg, 1889), p. 16, where he also gave Year 1, month 3. So Kitchen seems to be unaware of the fact that there are two conflicting readings of the date.

1. **The misreading of the date**

By examining closely the actual inscription itself we may observe the following.

(a) The four vertical strokes which represent the year(s) and months of the inscription do not read I 111 (i.e. Year 1 month 3) as with Spiegelberg in 1921 but rather I111 (i.e. Year 2 month 2) as Lieblein originally had it in 1900. This can be demonstrated by observing that the first two strokes (reading from right to left) are taller than the last two and start at a higher position (Figs. 1 & 2). (Right to left line carvings on rocks begin at the top of the vertical strokes or at the right of a horizontal stroke. The start position of a stroke therefore indicates the intended relationship (distance and height) between one stroke and its neighbour rather than the end of a stroke which may be deflected by imperfections in the rock surface. Any measurements must therefore be made from these starting points.)

(b) Moreover, the crescent glyph which represents the month sign only covers the last two strokes (Fig. 2, E). It begins after the second (taller) vertical stroke and does not cover it. This is clear evidence that the scribe meant to indicate two months and not three.

(c) The spacing between strokes 1 and 2 at the top (Fig. 2, B) is wide, whereas between 3 and 4 (Fig. 2, D) it is narrower. The gap between strokes 2 and 3 (Fig. 2, C) is also greater than between 3 and 4 (though not as large as

![Fig. 1: The original Gr. 862 carefully highlighted for reading purposes.](image-url)
Fig. 2: The crucial year and month date – actual (top) and the French epigraphic survey (bottom). It is clear that the French version does not show the curve of the month sign (E) starting below the second stroke from the right, but in both versions the month sign only covers the last two strokes on the left, giving ‘Year two, Month two’. Stroke 2 is therefore a year stroke and not a month stroke. The date is unequivocally Year 2, Month 2 of Merenptah and not Year 1, Month 3.

It is interesting to note that Janssen dismisses another of Spiegelberg's original 1889 texts as a Nile flood record because:

His (Spiegelberg’s) suggestion that graffiti 883 is also a ‘Nilinschrift’ (Nile text), as he calls them, is probably not correct since, as we shall see below (note. 63), its date does not suit that interpretation.

Note 63 states:

So it appears that graffiti 883, if W. Spiegelberg read the date correctly as II peret (of year 4), cannot by any means refer to the beginning of the inundation …

Circularity abounds here. Texts are rejected by Janssen because they do not conform to chronological expectations, then the remaining filtered texts are subsequently employed by Kitchen to argue for the accuracy of the conventional chronology.

But returning to the correct (Lieblein) reading of Graffito 862, what difference does this make to the position of Merenptah’s reign in a Sothic chronology? Actually quite a lot! If the inundation began one month earlier (i.e. month 2 rather than month 3 of Akhet) then this 30-day difference amounts to a 120-year shift in the reign of the king. This is because the calendar slips by 0.25 of a day every year and therefore a full day every four years. A shift of 30 days thus requires 120 years (4 x 30) to have elapsed in the Sothic cycle. Already the conventional dating of Merenptah has thus slipped by more than a century. So much for proving the correctness of Kitchen’s chronology. But there is more.

2. The mistranslation of the verb hay

In an extraordinary circumlocution of the obvious Janssen, in his article, suggests a whole new meaning for the verb hay. This he clearly does in order to conform to the conventional dating of Merenptah. How else can one understand his remark ‘The dates prove this (i.e. his translation) is indeed what is meant’. Kitchen then accepts Janssen’s 1987 ‘translation’ of the verb hay because it fits the accepted chronology. He then proceeds in 1996 to argue that the graffito demonstrates the accuracy of the conventional chronology – once again an extraordinary circularity.

To my knowledge, in the context of water, the verb hay is always related to the action of ‘going down’, ‘descending’ or ‘retreating’. Thus the obvious translation of Graffito 862 is that ‘the great flood began to go down’ i.e. the inundation began to recede on day 3, month 2 of Akhet. What does Janssen do with the obvious reading of the text? He dismisses it and opts for a quite different Nilotic phenomenon – the day that the great inundation returned, i.e. began to flood the fields. This is a use of the verb hay for which there is no parallel.

What would be the purpose of recording such an observation? Are there any other Egyptian records of this inundation event? Not to my knowledge. However, we do have numerous records of the highest level the flood reached in a given year – and that, by definition, is the day upon which the level began to recede or go down. This event in the flood calendar was indeed significant because it marked the beginning of the period leading up to the planting of the crops for the coming year. The Egyptian workmen of Western Thebes would be able to calculate when the ploughing of the fields and sowing of seed could take place. They were also able to celebrate the end of the rising of Hapy, the threat of a high and