

9. Humphreys, ref. 3, table 1, p. 29.
10. Crank, J., *The Mathematics of Diffusion*, Oxford University Press, Oxford, England, p. 104, 1979. Ignore helium production in past 1 Ma as small compared to previous 1.5 Ga. Then use Crank's eq. (7.3) to show that for time-varying diffusion coefficients $D(t)$, one can replace $D t$ in solutions with the time integral of D . Doing that in eqs. (12) and (13) of Humphreys 2005, p. 50, assuming $D = 0$ before 1 Ma ago, and using values of D from figure 5, gives a retention less than 0.002%.
11. Humphreys, ref 3, pp. 34–36. I got the 87°C diffusivity, about 2×10^{-18} cm²/sec, by simply extrapolating the “defect” line (often seen in diffusion data for natural minerals) in figure 5 here a little down from our lowest point of 100°C. The line is established by the experimental data, and confirmed by diffusivities predicted using observed retention data in our creation model. Erratum: the second exponential in eq. (3) should have a minus sign, as does the first exponential.
12. Humphreys, ref. 3, p. 53. Use the 87°C diffusivity for D and a t of 1.5 Ga (4.7×10^{16} sec) in eq. (16).
13. Humphreys, ref. 3, p. 50. The -100°C temperature, though ridiculously low to any geoscientist, would effectively stop diffusion (pp. 61–62), allowing helium to accumulate for nearly the entire 1.5 Ga. Use the 87°C value for D and a t of 1 Ma (3.1×10^{13} sec) in eqs. (12) and (13).

Is Hatshepsut the biblical ‘Queen of Sheba’?

I read with interest what Patrick Clarke has written in his attempt to discredit the identification of Hatshepsut with the Queen of Sheba.¹ Most of what he has written is devoted to discrediting Velikovsky. I would agree with him that Velikovsky was stretching things in trying to identify the name Sheba with part of the name Hatshepsut. But he has a point in observing that the Hebrew text does not say ‘Queen of Sheba’ but ‘Queen Sheba’. If it is ‘Queen Sheba’ it is not apparent what is meant. If Sheba was a place it is true that most scholars identify it with Yemen in Arabia, but according to Genesis 10:7 Sheba was a grandson of Cush and the land of Cush was directly south of Egypt.

However, Josephus and Jesus Christ were a lot closer in time to these events than we are. The former wrote,

“There was then a woman, queen of Egypt and Ethiopia. When this queen heard of the virtue and prudence of Solomon, she had a great mind to see him. Accordingly she came to Jerusalem with great splendour and rich furniture.”²

Ethiopia is here translated from the word Cush and refers to Nubia directly south of Egypt, a nation the Egyptians frequently invaded and ruled over. Jesus called her “the queen of the south” Matthew 12:42, a term which applies to Egypt.

I never met Velikovsky himself though I did spend time talking to his daughter Shulamit. Velikovsky was a brilliant scholar and is to be congratulated for being the first to ring the alarm bells on the traditional chronology, but I do not agree with all he wrote. He frequently tried to make a play on names which I consider to be unnecessary and sometimes confusing. But to discredit Velikovsky does not discredit the reduced chronology he advocated.

I would also point out that a reduced chronology is not dependent

on the identification of the Queen of Sheba with Queen Hatshepsut. Chronologically it matches, and it would be nice if it is valid, but the crucial issue is not the identification of Hatshepsut with the Queen of Sheba but whether the Third Intermediate Period (TIP) dynasties were successive or contemporary with other dynasties. If Hatshepsut went to East Africa rather than to Jerusalem it makes no difference to the validity of the revision.

Clarke's criticism is mostly negative, citing lack of evidence rather than evidence that would contradict the revision. Arguments from silence can never be regarded as conclusive. He himself wrote, “absence does not prove anything”.

Clarke wrote “The Bible indicates that her principal motive was to test Solomon ‘with hard questions’, and not to obtain goods through an oracle of her god, as the Egyptian text recounts.” True, but it is unthinkable that the Queen of Sheba would arrive empty handed, and oriental custom would require an exchange of costly gifts.

Clarke says “Velikovsky's ‘revised chronology’ has been rejected by nearly all mainstream historians and Egyptologists”, but it would not be correct to claim that no reputable scholars support the reduced chronology. Clarke refers to Peter James and his book, *Centuries of Darkness*. Professor Colin Renfrew of Cambridge University wrote an introduction to that book in which he said, “The revolutionary suggestion is made here that the existing chronologies for that crucial phase in human history are in error by several centuries, and that, in consequence, history will have to be rewritten ... I feel that their critical analysis

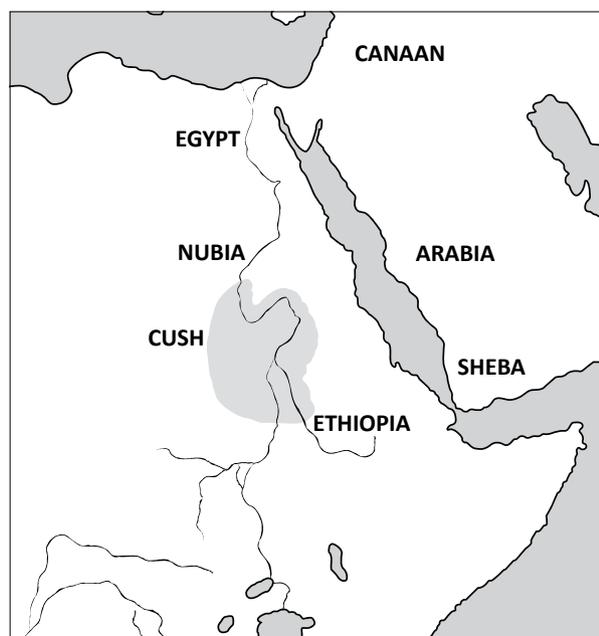


Figure 1. Location of Cush during pharonic times

is right, and that a chronological revolution is on its way” (pp. xiv–xvi).

Professor Renfrew would have to be regarded as England’s top authority on archaeology. He is so highly regarded that he has been promoted to the House of Lords and is now Lord Colin Renfrew. In 2004 Lord Renfrew graciously granted me the privilege of meeting him in the House of Lords for an interview which I published in my magazine *Archaeological Diggings*. I asked him if he still holds the same view about a reduced chronology as he wrote in *Centuries of Darkness*. He assured me that he did and that some other scholars in Cambridge University held the same view.

Clarke cites the quotation, “the ways to Punt should be searched out, that the high-ways to the myrrh-terraces should be penetrated. I will lead the army on water and on land, to bring marvels from God’s land for this god.” God’s land, myrrh terraces—that sounds more like Israel, Jericho and Engedi, where myrrh terraces were to be found, rather than some obscure territory in Africa.

Clarke claims that Egyptian sources never refer to Pharaoh as ruler of Egypt and Ethiopia. Maybe, but Josephus was a Jew and he would be quite entitled to refer to her as ruler of Egypt and Ethiopia, referring to Egypt and Cush which bordered Egypt’s southern border.

So the Queen of Sheba is a side issue. The revision’s main virtue is the identification of Moses and the events of the Exodus in Dynasty 12. This not only illuminates history but provides exciting evidence for the historical reliability of the Bible.

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1. Clarke, P., Why Pharaoh Hatshepsut is not to be equated to the Queen of Sheba, *J. Creation* 24(2):62–68, 2010.
2. Josephus, *Antiquities of the Jews*, Book VIII, chapter VI, p. 180, par. 5.

Patrick Clarke replies:

The article was not an attempt to discredit anyone; it is a step-by-step rebuttal of the idea that the two names refer to one and the same person. It is not about discrediting Velikovsky the man, but his works. If these are shown to be wrong, and of consistently poor scholarship, then that is important, since Velikovsky was the *agent provocateur* in this matter.

Furthermore, as I clearly stated, exposing the bankruptcy of the Velikovsky-inspired chronologies does *not* discredit the credibility of, or the need for, a revised chronology in general, which I support, although this was inadvertently omitted from the article (see Errata on p. 43). This may be the reason Down’s letter comes across as if he is erecting a straw man in the reader’s mind, that to demonstrate the bankruptcy of Velikovsky-inspired chronologies (which include his own) must mean one is attacking the very notion of a revised chronology.

Down’s letter cites authorities in support of a reduced chronology, as if they are supporting a *Velikovskian* revision as does Down, when this is *not* the case. In fact, as my article showed, one of these (Peter James) was part of the group that concluded that Velikovsky’s revised chronology was ‘untenable’. There is also no evidence, and Down cites none, that Professor Renfrew would support Velikovsky’s revisions, so offering citations by James and Renfrew as if they did offer a defence against the matters raised in the article misses the mark.

Sheba was a place of considerable substance and fame. Creationist author Cooper correctly pointed out that: “Minaean inscriptions from north Yemen, and which date to the 9th century BC, tell us that Sheba was that kingdom’s southern neighbour ... Sheba was famous as the Land of Spices (there were four ‘spice kingdoms’—Minaea, Kataban, and Hadraumat ... the vast archaeological ruins, some of whose walls still stand some 60 feet above the desert sands, that the land

was extremely fertile, being watered by ingenious irrigation systems controlled by a great dam that once spanned the river Adhanat.”¹ Yet Down wrote: “Sheba is usually identified with Marib in Yemen, but for this there is only very flimsy circumstantial evidence.”²

Down seeks to dismiss all this sort of evidence by citing Genesis 10:7, while overlooking 10:28 which shows that another Sheba was also a son of Joktan, long regarded by conservative scholarship as a progenitor of tribes in the Arabian Peninsula.

Josephus was a child of his time. He was influenced by the Greco-Roman world view of the day. I believe this matter regarding Josephus is adequately covered in the article.

An atlas will clarify any confusion as to where the Lord Jesus was indicating Sheba lay; Arabia, not Egypt, lies south of Jerusalem. The Lord called her ‘Queen of the South’ precisely because the land of Sheba, her homeland, lies due south of Jerusalem, and it is the ‘ends of the earth’ metaphorically speaking.

Velikovsky can only be deemed ‘a brilliant scholar’ after his works have been properly assessed. His Mesopotamian credentials were, to put it bluntly, exposed for the sham that they were; and that is not simply a matter of my opinion. Despite repeated requests to do so, Velikovsky *never* refuted Sachs. And he created more than a play on names; he created alter-egos for earlier kings as he tried to deal with the clumsy mathematics of his chronology.

The Third Intermediate Period (TIP) is a small part of the overall problem; it doesn’t address the problems encountered *prior* to the Exodus. Why does Velikovsky keep pressing the point in his works, that it *does* matter that the Hatshepsut/Sheba synchronism is valid, if in fact it’s a minor issue? The supporters of Velikovsky’s revision need to be careful: the TIP is the tip of the chronological iceberg. For a start, if Jerusalem was not the destination, then those relying on

Velikovskian notions would have to concede that *the Bible would be wrong for a start*. The chronological revision proposed by Velikovsky, or its many mutations, strongly depends on Jerusalem being the object of the Queen of Sheba's journey. Thus in trying to equate Hatshepsut with the Sabaeen queen, Velikovsky makes this an essential pillar of the revision. If this equation fails, then Thutmose III cannot be Shishak. Of course it makes a difference, and I think Down probably knows this. Suddenly, according to him, it is a side issue after 38 pages from Velikovsky, and eight pages in Down's *Unwrapping the Pharaohs*. This argument is no sideshow; if arguments for her identity collapse, it sets off a chain-reaction pulling the revision down.

I can read Egyptian well and thus I can read the Punt text for myself, so I know what the passage says. The writer may think that the Punt known to Egyptian scholars was some obscure territory in Africa, but the scholarly evidence for its existence is there. Pharaohs were sending trading expeditions to the 'obscure territory' from at least the 6th Dynasty.

Others cite the Hymn to Hathor as proof of the northern location of Punt. This poem demonstrates that Velikovsky did not understand the way Egyptian poetry works, as future articles will show, if this journal chooses to publish the others mentioned.

Down's final statement highlights one of the main problems of the Velikovsky Inspired Chronology (VIC). VIC supporters started 'reading' this 'whodunit' in the middle of the story. The Exodus is not the beginning of the story; to understand the true course of history it is necessary to start at the beginning. The articles to come on the other pillars of the VIC will serve to strengthen the case against it still further; in the meantime I can only urge readers to stick to the Bible, rather than to these particular manmade constructions. David Down's passion to defend the

Word of God is commendable, and I share it. But unless we do so with a high regard for truth and scholarship, we risk discrediting the very thing we seek to uphold.

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2. Down, D., *Unwrapping the Pharaohs*, Master Books, AR, p. 121, 2006.
3. Schott, S., *Les chants d'amour de l'Égypte Ancienne*, p. 97, 1956.

Gospel in the stars

The response by Jonathan F. Henry to Ross S. Olson's letter about his article on the Gospel in the Stars (*J. Creation* 23(3):50, 2009) brought back to mind something about the star and Magi I had thought about a few years ago. As a physics teacher the movements of the star of Bethlehem had often bothered me. It wasn't that I didn't believe that God could do absolutely anything he wanted to with a star, because I did. What bothered me was the almost casual manner such a large mass 'bobbed' about the universe without any apparent effect on the earth and how it achieved what it was meant to without some very strange tricks of perspective or violating scientific laws, though this is always possible for God of course. A previous article¹ considers three possibilities for the star: a comet, planet or supernova. I don't believe any of these were involved because of how the star behaved. Arnold Fruchtenbaum also suggests that the star may have been the Shekinah Glory.² I suggest a third alternative.

What did the star do?

The four mentions of the star are all in Matthew; they are

- (i) "We have seen his star in the East and have come to worship him" (Matt. 2:2),

- (ii) "Herod ... determined from them what time the star appeared" (Matt. 2:7),

- (iii) "When they heard the king, they departed; and behold the star which they had seen in the east went before them, till it came and stood over where the young child was. When they saw the star, they rejoiced with exceedingly great joy" (Matt. 2:9-10).

So we have some explaining to do if this is really a star doing these things. Why does it matter what the star did? It does because although God can do anything he wants, there are practical problems with a star here.

The problems

I had accepted, like many people, that God moved a star about in the sky as indeed he could do. But this raises certain problems. The first is how did the kings know the appearance of a star meant anything? I had assumed that being Magi, they used some form of astrology in order to know the star was different from any other and had some significance. I also knew that astrologers in the east had access to Jewish scripture and prophecy but would they recognise the birth of a major 'king' and decide to visit him based on this? How did they know they should do this? I have not heard anything to really convince me that this was the case. So how did the kings get the information to go and follow a star? This was a major undertaking of trust for such a big journey and one seemingly so clearly specified to them. Lots of deities existed and were worshipped, why would this new one be so different and so important that they have to go and worship? Henry touches on this in saying "They would recognise his star as a special or unique object". This I agree with—maybe it was an angel.

There is the problem of following a star; how did the kings do it until it was overhead as in verse 9? Stars are normally so far away that it is impossible to follow one to a fixed point on the earth unless it moves in the process. This is because for the