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IN DEFENSE OF THE SIRIUS MYSTERY

Did extraterrestrial beings from the Sirius system teach astronomy to primitive African tribe? The evidence says yes.

By Robert K. G. Temple

MOST THEORIES about "ancient astronauts" have failed to impress scholars, who hold that such speculations are based on poor research, flimsy evidence and bogus information. One book, however, has attracted respectful attention even in England's prestigious scientific journal *Nature*: Robert K. G. Temple's *The Sirius Mystery* (St. Martin's Press, 1975).

The book deals with the mythology of West Africa's Dogon tribe, which possesses information about the composition of the Sirius star system (and our own solar system as well) that conforms to modern astronomical knowledge. The Dogon know, for example, about a smaller star (astronomers call it Sirius B) which circles Sirius — even though this star is invisible from Earth. But that is not all they know.

Temple writes, "They know that the star's orbital period is 50 years, which it really is. They know that Sirius A is not at the center of its orbit, which it is not. They know that Sirius A is at one of the foci of Sirius B's elliptical orbit, which it is. They know that Sirius B is the smallest kind of star, which it is. They know that Sirius B is composed of a spe-

cial kind of material which is called *sagala*, from a root meaning 'strong,' and that this material is heavier than all the iron on earth, etc., all of which is perfectly true."

The Dogon make a further claim: that the Sirius system contains a third star, around which orbits a planet populated by intelligent beings. This belief, unlike the others, has not as yet been confirmed by astronomers. The Dogon also say that Nommo, a being from the Sirius system, founded civilization on Earth.

In an article published in *FATE* ("Ancient Astronauts in West Africa?", November 1978 issue) James E. Oberg takes issue with Temple's conclusions. He suggests that the Sirius beliefs are not nearly so old as Temple contends, that in fact they may have been passed on to the Dogon by European missionaries. He disputes the contention that an earthlike planet could exist in the Sirius system and questions Temple's assertion that he has traced the Sirius myth into antiquity. "We need more reliable evidence — especially theories that can be tested," he says.

Temple's reply follows:

IN MY BOOK *The Sirius Mystery* I suggested that astronomical information which the Dogon tribe of Mali, West Africa, possesses about the Sirius star system may have come from extraterrestrial sources. The key word here is *may*. Nowhere do I say, as James Oberg claims I do, that I have been able to "establish the certainty that the informants were extraterrestrial." I make crystal-clear at all times that what I have suggested is an *hypothesis only*.

Oberg says that I remark on the absorption of a Christ-figure into Dogon culture — "obviously a recent addition" in his view. I nowhere suggest that a Christ-figure was absorbed into the culture. There are some such elements present but I believe them to be indigenous; there is no anthropological evidence this is a *recent* addition to the Dogon's belief-system. "Christ figures" — Osiris for one prominent example — existed in mythology long before Christ was born.

According to Oberg I maintain that "the inhabitants of Sirius are aquatic because in Greek the word for 'Sirius' sounds like the word for 'siren,' a mermaid." Not true, as anyone who had read my book carefully would know. On page 65 I refer, entirely in passing, to the Greek word for siren and its similarity to the word for Sirius, drawing absolutely no conclusions of any kind.

Oberg remarks that Dogon beliefs about the four moons of Jupiter are wrong because Jupiter has over a dozen moons. He neglects to mention that Jupiter has only four *major* moons; the rest are tiny insignificant bodies by comparison. Although tech-

nically "moons," they are hardly in the same category. I dealt with this matter on page 28 of my book.

Oberg writes, "Europeans . . . talked about the discovery of a third star in the Sirius system, although later investigations ruled out that possibility." Again, not quite true. A third star in the Sirius system, named Sirius C by the astronomers who saw it, was observed repeatedly by different astronomers in the 1920's. Attempts to see this star in recent years have been unsuccessful and an apparent perturbation in the motion of the primary star, Sirius A, thought to have been detected earlier and linked to a third star in the system, has been disproven. This, however, has no bearing whatever on the question of whether or not an outer star exists; such a star would cause a perturbation over a much lengthier period than the one scientists thought they had observed.

So the possible existence of a third star in the Sirius system has not been "ruled out" by any means. To the contrary, it remains a distinct possibility.

In fact, the description by the Dogon tribe of a third star in the Sirius system maintains that it is four times lighter in weight than Sirius B, which in modern astronomical terms would mean that it is what astronomers call a red dwarf star. In recent years we have discovered that red dwarf stars can be flare stars; in other words, they flare up by one or two magnitudes and then subside again. What makes this so interesting is that the Dogon information not only predates astronomy's discovery (made in the 1970's) that red dwarfs can be flare stars but also provides a possible explanation of how a

star in the Sirius system could be seen and later not seen. Can it be that there is indeed a Sirius C and that it is a red dwarf which in the 1920's flared and became briefly visible from Earth before subsiding again?

It may be possible to know this within our lifetimes. The orbiting observatory of the 1980's will carry equipment fully capable of making a search for Sirius C. An apodized optical telescope might be capable of doing the same from Earth even sooner. Or eventually a spinning infrared interferometer, suggested recently by Dr. R. N. Bracewell, might bring results.

Such a search of the Sirius system should be carried out. The Sirius system is the only star system for which we have testable predictions made by a possibly extraterrestrial source from the past. The basis of science is supposed to be the use and testing of predictive mechanisms. We have in the Dogon information a predictive mechanism which it is our duty to test, regardless of our own preconceptions. If a Sirius C is ever found again this would go a long way toward confirming the accuracy of the Dogon claims. More specifically, if a Sirius C is ever discovered *and found to be a red dwarf*, I will conclude that the Dogon information has been fully validated.

The Dogon also mention a period of rotation of Sirius B: "It revolves upon itself over the period of one year and this revolution [sic — rotation] is honored during the celebration of the *bado* rite." This rotation is astronomically possible but whether it is correct or not we cannot yet know. Here, then, is another datum to be in-

vestigated when it is possible.

Another is the Dogon description of a strange proximity effect in the Sirius system. The Dogon maintain that when Sirius B is close to Sirius, Sirius becomes brighter and when it is farthest away, Sirius B gives off a twinkling effect suggesting, they say, several stars to the observer. Page 40 of my book contains a Dogon diagram of the elliptical orbit of Sirius B around Sirius, with the closest and farthest positions of Sirius B indicated on the diagram in relation to Sirius A. For the representation of its farthest position, the Dogon have shown Sirius B as "a small cluster of dots [which] represent the star when it is furthest from Sirius."

When it becomes possible to observe the Sirius system from a satellite, will we discover something of this kind? Will it be possible to detect, from an observatory based on the moon, the proximity effect and the twinkling — if they truly exist — in less than the 50 years it takes for Sirius B to move around Sirius A? Although it may be years or even decades before we know the answers, these questions should be clearly stated now because, as I have said, predictions are the essence of science and here we have some.

When Oberg says that "astronomers [do not] believe that any earthlike planets could exist [in the Sirius system] long enough for life to emerge and develop," does he mean *all* astronomers — or just those with whom he has discussed the subject? He certainly cannot include the many astronomers I have talked with; they tell me that a life-bearing planet could

have evolved in the Sirius system.

The consensus of astronomical opinion — I hope Oberg notes the phraseology and learns something from it — seems to be that a life-bearing planet, if it existed, would have to be in orbit around an outer star in the Sirius system, for if it were in orbit around an inner star, conditions would not be favorable. In fact, this is precisely what the Dogon maintain is the case. Once again we find Dogon information conforming to scientific knowledge.

The Dogon clearly state that this life-bearing planet known as *nyān tolo* or *enegirin* or *emme-girin* (the latter two names being puns on each other) orbits around the star *emme ya* which they say is the third star in the Sirius system and which I have referred to as Sirius C. The Dogon state that this star, Sirius C we may call it, "travels along a greater trajectory" than Sirius B. It is obviously, then, an outer star. They also say that its orbital period is the same as that of Sirius B, namely 50 years, although another account says 32 years.

The existence of these two different figures, both treated as authentic by the priests, suggests that the orbital period may have become garbled. According to Kepler's laws an outer star could not have an orbital period less than that of an inner star, so an outer Sirius C cannot possibly have an orbital period of 32 years around Sirius A. On page 26 of my book I show a Dogon diagram of the orbit of the planet *nyān tolo* around Sirius C. This planetary orbit is represented as being clearly elliptical and it protrudes outwards from what appears to be a

widely distant orbit of Sirius C around the inner Sirius system. The implication of this diagram is that Sirius C not only has a "greater trajectory" but is a very far outer star.

The Dogon information about Sirius C's orbital period, then, must be not only garbled (or perhaps concealed in line with a secretive tradition) but only partially true; these figures of 50 years and 32 years may represent periodicities in the orbit dependent on C's proximities to Sirius B or something of a similar nature.

Recently the question of a possible third star in the Sirius system has received renewed attention in the astronomical community. Drs. Richard Donnison and Iwan P. Williams of the University of London, their interest stimulated by *The Sirius Mystery*, decided to take a closer look at the matter. They have published an article called "Possible Orbits for a Third Star in the Sirius System" in the technical journal *Astrophysics and Space Science* (56, 1978, pages 479-82) in which they point out that the visual observations of a Sirius C did not agree with the perturbation thought to be detected in the 1930's in connection with an inner third star but disproved in the 1970's. Regarding a possible Sirius C, they say, "No visual detection has been made of such a companion since 1929. This does not, however, rule out the presence of a third component orbiting the binary pair at large distances. The visual detection made in the late 1920's might then be explained in terms of projection effects making B and C appear close for a short time. It is, therefore, of interest to determine under

what conditions a third body could be present in the Sirius system without disrupting the system."

In order to simplify the problem Williams and Donnison conceive an orbit on the same plane as Sirius A and Sirius B, although they note that researchers in celestial dynamics have known since 1972 that an orbit of a third body need not be on such a plane at all. But within the limitations of the plane, using computers at the University of London, Williams and Donnison established that the Sirius system would be stable if a Sirius C were present at a sufficient distance.

It was discovered that, starting with the shortest possible stable orbit of 275 years, orbits even up to 425 years would still have only a tiny eccentricity of 0.3 and would be nearly circular. The longer the period of the stable orbit, the greater eccentricity it could have and the more elliptical it could become. But even so, the stable orbits are so nearly circular as to make quite a contrast to the highly elliptical orbit of Sirius B. In view of this, it is a remarkable fact — one that goes even further to substantiate the Dogon information — that the Dogon draw a nearly circular orbit for Sirius C (see page 26 of my book).

Since the Dogon lay such stress on the elliptical nature of Sirius B's orbit, one would assume they would do the same with Sirius C, especially since the planet going around Sirius C also is given a highly elliptical orbit. But they do not! The nearly circular orbit which the Dogon assign to Sirius C is in full agreement with the recently elucidated requirements of celestial mechanics.

In their 1978 paper Donnison and Williams report on hypothetical studies which demonstrate quite clearly that Sirius C, if it is to have a stable orbit close enough to Sirius A to support life conventionally, must have a nearly circular orbit. Thus we see that still another aspect of the Dogon information has been confirmed and found to be accurate. Another aspect which remains to be verified is their contention that Sirius B and Sirius C travel in the same direction.

Critics of *The Sirius Mystery*, Oberg included, claim that the Dogon could have received their extraordinarily detailed information about the Sirius system from white men, specifically missionaries. To check this possibility, I wrote to the Father Superior of the White Fathers Mission in Mali and asked when the first missionaries were sent to the Dogon areas. He replied that the earliest missionaries arrived in 1949. By that time anthropologists had already obtained the Dogon Sirius information. I sent a photostat of this letter to journalist Ian Ridpath, whose work Oberg cites approvingly. Ridpath chose to ignore the letter; in a subsequent book he failed to mention what the Father Superior said and asserted that missionaries arrived earlier to implant the Sirius material into the minds of the Dogon.

Could other white men have given this information to the Dogon? We must remember that 1926 is the earliest date at which Sirius B was known in the West to be a white dwarf star. Therefore we must envision a white physicist who rushed out to Africa in a hurry to tell the Dogon before the French anthropologists ar-

rived in 1931! Every anthropologist with whom I have discussed the possibility that white men were responsible for the Dogon ideas has dismissed the idea as impossible. Dr. Germaine Dieterlen, the world's authority on the Dogon and Secretary-General of the Société des Africanistes, said in a BBC television interview that this notion is "absurd." She then held up in front of the cameras an ancient Dogon statue portraying Sirius A, Sirius B and Sirius C together. The statue, she said, is at least 400 years old.

Suggestions that white men gave this knowledge to the Dogon involve other improbable assumptions. And they also ignore the larger body of evidence my book cites. I attempt to show, for example, that the information possessed by the Dogon was known in remote antiquity. To date no one has succeeded in showing that I have erred in any of this material. Superficial critics merely say either that they cannot read that section of my book (which may say something about their reading abilities) or that it is "unconvincing." But something that is unconvincing can surely be *shown* to be unconvincing.

Oberg criticizes a geodetic pattern I discovered. This pattern forms an approximately equilateral triangle. He says that one side is really 376 miles and another side is 432 miles (which of course would make it nonequi-

lateral). But the pattern published in my book was drawn by a professional cartographer who earns his living by drawing reliable maps for an international corporation. He measured the same distances with his customary accuracy and found them to be nearly equal to one another and by no means the lengths Oberg claims.

So we face this problem: the cartographer's measurements do not agree with those claimed by Oberg. Which, then, is correct? Oberg does not tell us what techniques he used to do the measurements and instead makes an unsubstantiated statement. Perhaps he is unaware that the differential curvature of the earth variously distorts distances shown on maps. The cartographer took all such factors into account. Did Oberg? I suspect not. I actually watched the cartographer check my map, since I refuse to publish any map that has not been expertly vetted in that way.

Oberg criticizes me severely for my work in ancient languages but fails to substantiate any of his arguments. He produces no examples to show where I am wrong except for the one about the sirens, which is something I *never said*.

In my view it is pointless to attack someone in print unless you can substantiate what you are saying. Since Oberg cannot do so, we need not concern ourselves with his criticisms of *The Sirius Mystery*.



NOTHING NEW UNDER THE SUN

THE ANCIENT Greeks oriented their houses to capture the sun's heat in winter and reduce its effects in summer. The Romans surpassed them, using glass windows positioned to trap the sun's heat. This was so vital to Roman comfort that a man could be sued for blocking sunlight from his neighbor's house.