

# **THE STAR OF BETHLEHEM DECODED**

3<sup>rd</sup> Ed.

## **Volume 3**

**The Journey Of The Magi From Jerusalem To Bethlehem  
And Evidence Of The Truth Based On What Was Not Said**

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## THE STAR OF BETHLEHEM DECODED VOL. 3

### PART THREE

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### iii. The Journey Begins

There were several different routes through the wilderness which they might have taken. As to which one they would have actually taken, this would depend on when they left Jerusalem; for the timing of when they left would affect where Jupiter would be when they would come to any given intersection later on, which is when they would have to try to determine which path they should follow in order to continue following the Star.

Here in the text we shall examine the path and the timeframe of their departure which will be the simplest to illustrate, and the alternate paths shall be considered in the Appendix. This simplest path happens to be the one which is most consistent with them having spent two and a half hours in Jerusalem after they had first arrived at the palace while Herod first consulted with his counselors, while the Magi then gathered information about what roads and towns they could expect to come across out in the wilderness, and while they then may have taken the time to plan their journey as carefully as they could on the basis of what they had found out before they left.

That being said, let us assume that the Magi left Jerusalem at 1:00 A.M. instead of around 10:30 P.M. In that case, they would have had five and a half hours in which to reach Bethlehem by 6:30 A.M. Here I do not mean to imply that the Magi themselves deliberately calculated their speed for the sole purpose of arriving specifically at 6:30; but rather, as I mentioned before, I think they did deliberately calculate their speed in order to follow the Star along the path of a semicircle leading from Jerusalem to Bethlehem, and that 6:30 A.M. simply happened to be the time at which they would have arrived if they left Jerusalem within a certain time frame and then followed a roughly semicircular route.

So, as we shall see in detail herein, if they did leave Jerusalem at 1:00 A.M., the route along which the Star would have guided them would have been 12.72 miles in length; this is within the range of distances which we previously estimated for the length of their journey (*i.e.*, ten to fifteen miles). Now, assuming that they did arrive around 6:30 A.M. by following that route, they would have had a rate of travel of 2.31 miles per hour (MPH). This rate would include any time they may have taken to stop and rest along the way; so while they were actually moving, their speed would have been slightly more than that. And based upon the factors which we considered above about what speed they could have made, we can conclude that the Magi themselves probably would have concluded that any speed close to that would be something which they could accomplish with a reasonable amount of effort. So from that they would have known, before they even set out, that their task would at least be feasible, assuming that there would be no major problems along the way.

So as it turns out, at 1:00 A.M. that night, Jupiter had an azimuth (a celestial compass heading) of almost 104.5 (*i.e.*, about 14.5 degrees south of straight east). Now, since the Mount of Olives lies east-southeast of the Old City portion of Jerusalem, the Magi would have had to go around it (to the south) at the very start of their journey, regardless of which gate they may have used to leave the city walls of Jerusalem.



Jupiter in Virgo just above the horizon (the white horizontal line), showing its azimuth at approximately 104.4 degrees, at 1:00 A.M. local time on December 26, 2 B.C. (2300 UTC on December 25, 2 B.C.).

Images provided courtesy of Starry Night Education. Photograph by the author.



Red line showing the line of sight toward Jupiter (with an azimuth of 104.4 degrees) over the Mount of Olives from the now-closed East Gate (at the left end of the red line) as it would have appeared at 1:00 A.M. local time on December 26, 2 B.C. (2300 UTC on December 25, 2 B.C.).

(Note: The pale yellow line running north-and-south just to the left of center is present-day Route 417, which runs along the start of the ancient Jericho Road; the golden dome of the present-day Dome of the Rock Mosque can also be seen along the left side of this image, just below and to the left of the start of the red line).

Image from Google Earth Pro: <https://google-earth-pro.en.softonic.com/mac> Photograph by the author.

As a practical matter, in order to do so, the Magi would have to have used the road to Jericho, which heads basically east after first curving around the south end of the Mount of Olives. This is the same road which Jesus would come to speak of in His parable of the Good Samaritan, who came to the assistance of a man who had been attacked by highway robbers who had left him half dead. (Luke 10:25-37)<sup>1</sup> So we know right there that this road was quite notorious in public opinion as being a place where one might find robbers during the time of Jesus' ministry, and quite possibly around the time of His birth as well; and so the Magi would have been quite brave in taking this route, especially at night.

#### d. The Actual Route And Timing Of Their Journey

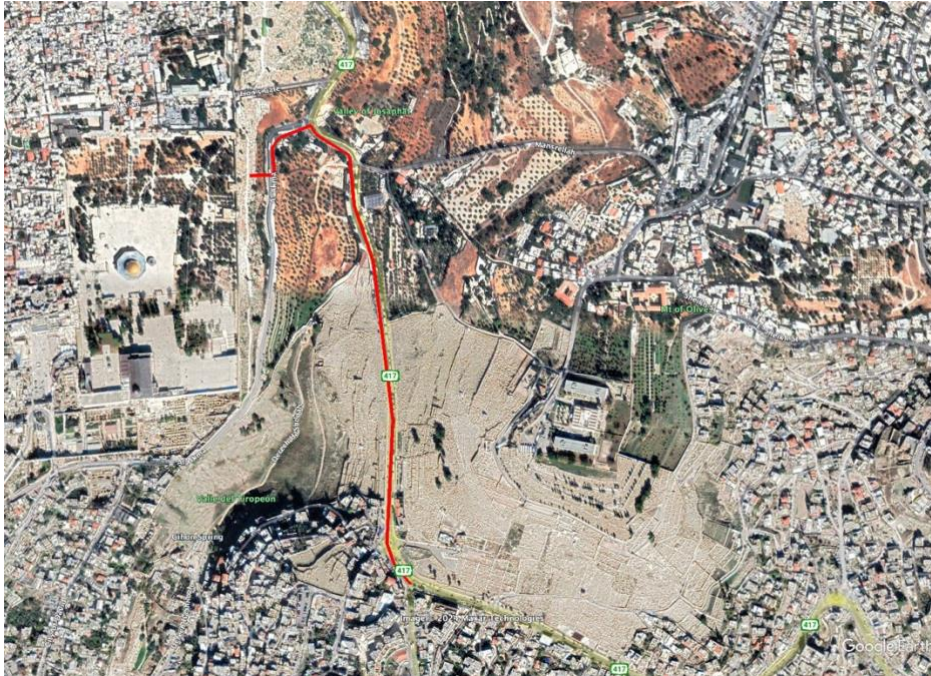
Let us now trace their path over the potential route which we have chosen (*i.e.*, the simplest route) to see whether all of this is consistent with the Biblical account that they followed the Star as they made their way to Bethlehem. As the Magi journeyed along the road to Jericho near the southwest end of the Mount of Olives, they soon may have come upon a road heading basically south. Yet, even if that road to the south did exist back then, I do not see how this could possibly fulfill the Bible's account of the Magi following the Star down to Bethlehem; for this road winds, twists, and zigzags so much that it would have been impossible for them to rely on the Star to guide

<sup>1</sup> <http://biblehub.com/nasb/luke/10.htm>

them.

Furthermore, even though this zigzag road does come to a road further south which does lead straight west from that point to Bethlehem, it is nonetheless the case that with all the zigzagging which this road takes, they would have had no way of knowing just how far south they would have gone by the time they reached the road to Bethlehem; and in the darkness, with presumably no one around to ask for directions, they would have had no way of knowing if that specific east-west road would be the one particular east-west road, among the many others, which they should take.

Although the Magi probably would have known of none of this personally, this is nonetheless something which the residents of Jerusalem no doubt would have warned them about, if they did discuss this road at all. So aside from the fact that taking this zigzag road to the south would have given them no opportunity to use the Star to guide them, taking this road would also have been a completely wild gamble in any event, one which "Wise Men" would not be expected to take, if they had been warned about it by the people in Jerusalem. And given the location of this road --- at a point (or just a few feet past the point) where they still could have seen torchlight along the walls of Jerusalem, and coming at the bend where they would turn east around the southwest end of the Mount of Olives---it would probably not have been difficult for them to identify it as a road which they would have been told by the residents of Jerusalem to avoid if this road even did exist at that time at all.



Red line showing the route from the East Gate (mostly along present-day route 417) to the north end of the "zigzag" road at the southwest end of the Mt. of Olives.

Image from Google Earth Pro: <https://google-earth-pro.en.softonic.com/mac> Photograph by the author.

Moving on, the overall route along the road to Jericho from the East Gate to the junction of that road with the road down to Abu Dis is a distance of 1.66 miles. If they traveled at a speed of 2.31 MPH, it would have taken them 43 minutes and 7 seconds, causing them to arrive at 1:43:07 A.M.

Now, to some it may seem that since we are dealing with estimates, it may be pointless to worry about how many seconds each segment of their journey would have taken, and that perhaps I should just round off the travel times to the nearest minute. And it may even be the case that my pursuit of accuracy down to the very last second goes beyond the degree of precision which the equipment which I use (Starry Night, Google Earth, and my computer) could be expected to support. But since my methodology will be subject to intense scrutiny by potential critics, I would prefer to keep things as precise as I can during the fact-gathering stage, and then draw conclusions or do any rounding off at the end rather than do so at the end from a set of data which could be deemed to be compromised by imprecision. And if all this does in fact assume a degree of precision which my equipment might not be able to support, this would entail no harm, for such a misstep as that would produce no error in the actual, final conclusion in this particular part of our inquiry; and so, any such a misstep could be properly ignored at this point.

Now, the road to Jericho as seen from that intersection has a compass heading of 89 (one degree north of straight east), whereas the road down to Abu Dis has a heading of 162 (18 degrees east of straight south). And at this time (when the Magi would have arrived at this intersection), Jupiter would have come to an azimuth (compass heading) between the two, at just over 112.75 (*i.e.*, 22.75 degrees south of straight east).<sup>2</sup> So which road would the Magi have taken? (See the following illustrations.)



View showing Jupiter at an azimuth of about 112.75 degrees (as noted on the display) at 01:43:07 local time on December 26, 2 B.C. (23:43:07 UTC on December 25, 2 B.C.) as seen from Jerusalem Images provided courtesy of Starry Night Education. Photograph by the author.

<sup>2</sup> as seen from Jerusalem, which would be essentially the same as from that intersection



The road from the East Gate to the intersection of the Jericho Road with the road down to Abu Dis.  
Image from Google Earth Pro: <https://google-earth-pro.en.softonic.com/mac> Photograph by the author.



The intersection of the road to Jericho with the road down to Abu Dis.  
The red lines radiating from the upper-left show the eastbound heading of the road to Jericho on top (89 degrees), then the azimuth of Jupiter when they would have reached this intersection (approx. 112.75), and finally the heading of the road down to Abu Dis (162). Image from Google Earth Pro: <https://google-earth-pro.en.softonic.com/mac> Photograph by the author.

Now, in addressing the question of which road they would have taken, it is important to keep in mind that the Magi would have known that Jupiter could not go backwards (eastward) in its apparent motion across the sky (*i.e.*, it could not decrease its azimuth), and that it could only have an ever-increasing azimuth due to its movement to the west as the night moved on. Therefore, the Magi would have known that it would make no sense to continue along the road to Jericho at this point. For Jupiter, having reached an azimuth of almost 113 already, could not have gone back to an azimuth of 89 or less (the heading toward Jericho) for the remainder of the night. Therefore, they would have known that they should take the road heading south to Abu Dis, which is where the ever-changing azimuth of Jupiter was leading them toward, anyway.

Furthermore, as I said above, they had probably asked the residents of Jerusalem about what roads to expect, and when they should expect to find them, as they made their way to Bethlehem. So the astronomy of the matter, as applied to geography, probably confirmed something they had already been told to expect.<sup>3</sup>

More importantly, this is also consistent with Scripture. Consider the Koine Greek word which is translated (in English) into the phrase “went before”, when it says that the Star “went before them”. (Matt 2:9; KJV)<sup>4</sup> It is the word *proegen* [pro EE’ gen],<sup>5</sup> from the word *proago*<sup>6</sup> (pronunciation:

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<sup>3</sup> Originally I had thought that they may have continued along on the road to Jericho. But that conclusion was based on the idea that they may have left Jerusalem as soon as Jupiter first became visible over the Mount of Olives that night, which would have brought them to the road down to Abu Dis hours earlier, when Jupiter’s position in the sky would have suggested that they should stay on the road to Jericho at least as far as to the modern-day town of Jahalin (which may or may not have existed 2,000 years ago).

As we can see from the above discussion, however, Scripture makes it clear that they would have had at least some delay in leaving Jerusalem that night following Jupiter’s rising, and it probably would have been quite a considerable delay, causing Jupiter to move into a position which would suggest that they should take the road down to Abu Dis when they reached the intersection with the road to that town rather than staying on the road to Jericho. (Also, even if for some reason they were able to leave Jerusalem immediately upon the rising of Jupiter, it is the case that although the path east to Jahalin and then southward would have been longer, they would have left Jerusalem so much earlier that they would have had more time that night to cover the additional distance, anyway.)

<sup>4</sup> <http://biblehub.com/kjv/matthew/2.htm>

<sup>5</sup> <http://biblehub.com/lexicon/matthew/2-9.htm>

<sup>6</sup> <http://biblehub.com/greek/4254.htm>

<https://www.howtopronounce.com/proago>). It can be translated in various ways, including “precede”, or “led the way”.<sup>7</sup>

Here’s how this would apply in the present context. When the Magi reached this intersection (assuming that they would have arrived around the time we are considering), as they were faced with the question of whether they should continue heading east, on the one hand, or start to turn to the south, on the other hand (which they knew they would have to do very soon, anyway), Jupiter itself had already started heading south of the road to Jericho prior to the time that they got there. In that sense, it *preceded* the Magi in starting to go south. And its shifting azimuth, at that point, could also be said to *lead the way*, and to point them southwards themselves, because the shifting azimuth of Jupiter at that point would be leading them away from the road to Jericho; and this is particularly the case since the Magi would have known that the ever-increasing azimuth of Jupiter would cause it to be heading more and more to the south at that moment, thereby coming more and more into alignment with the road south, the whole time.

This is entirely consistent with the sense of the Greek word itself in that verse; for at that point, when it comes to starting to head south (which they knew they would have to do eventually), the Star “went before them”. It’s as though an angel were hovering in the heavens above, pointing the way and whispering, “Pssst! Hey, fellas, look! It’s this way. Down here.”

All that being said, the road to Abu Dis goes all the way through the town of Abu Dis, and after passing through Abu Dis it comes (in modern times, at least) to a fork in the road at a distance of 0.58 miles south of the road to Jericho. At 2.31 MPH, it would have taken the Magi 15 minutes and 4 seconds to get to that point, bringing them there at 1:58:11 A.M. At that point, Jupiter would have had an azimuth of just over 116.25. The fork to the east-southeast (*i.e.*, the left fork, assuming it did exist at all 2,000 years ago), has a heading of about 113 degrees, whereas the fork to the south (*i.e.*, the right fork) continues virtually straight south at a heading of 181 (though only for about 300 feet before turning to a heading to the south-southeast of about 150). In ancient times, of course, both forks may have existed, or perhaps one but not the other. In any event, given the fact that there were probably communities to the south which would have wanted to be connected to both Jerusalem and Abu Dis, and given the fact that Abu Dis would likewise would have wanted to be connected to those communities to the south, it is fairly likely that at least one of these forks (and possibly both) did exist back then.

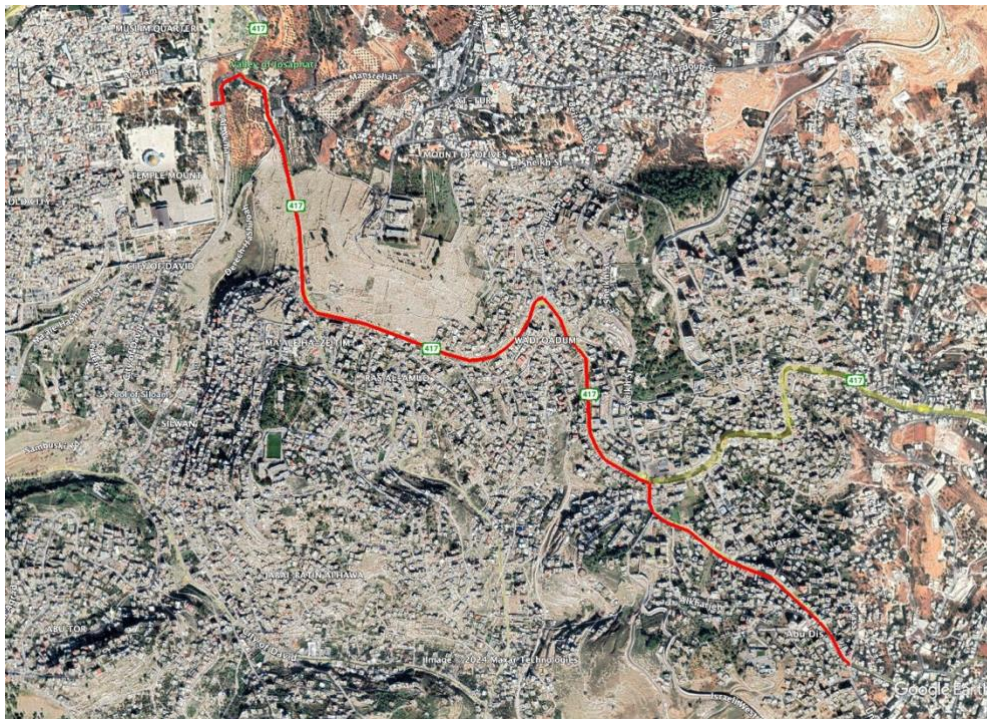
Now, if both of the present-day forks in this road did exist back then, it might have been a moot point as to whether the Magi, while looking down the right fork (to the south), could have perceived the sharp turn in the road to the southeast 300 feet ahead; for in any case, Jupiter, at an azimuth of almost 116.5, had already gone past an azimuth of 113, which is the heading of the left fork (*i.e.*, the road to the east-southeast). So even if the left fork did exist, the Magi could have concluded (unless they had been told otherwise in Jerusalem) that they should take the right fork (to the south) for the exact same reasons which we have just looked at as to why they would have made their turn to the south off of the road to Jericho to head for Abu Dis:

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<sup>7</sup> <http://biblehub.com/greek/4254.htm>



View showing Jupiter at an azimuth of almost 116.5 (as noted on the display) at 01:58:11 local time on December 26, 2 B.C. (23:58:11 UTC on December 25, 2 B.C.) as seen from Jerusalem.



The road from the East Gate to the fork south of Abu Dis, as illustrated by the red line (from upper left to lower center/right). Image from Google Earth Pro: <https://google-earth-pro.en.softonic.com/mac> Photograph by the author.



The fork in the road south of Abu Dis. The road down from Abu Dis (coming from the upper left) is highlighted in light yellow.

The top red line shows the heading of the left fork itself (to the east-southeast, at 113 degrees). The second red line shows the azimuth of Jupiter at the time when they would have arrived at this intersection (almost 116.5). The final red line shows the heading of the right fork, heading almost straight south (specifically, 181 degrees) at that point.

Image from Google Earth Pro: <https://google-earth-pro.en.softonic.com/mac>

Photograph by the author.

Actually, though, it's not entirely that simple. For as you can see from the photos above, the azimuth of Jupiter (116.5) was only just barely past the heading of the left fork (113). And if the Magi had left Jerusalem just a few minutes earlier, or if their rate of travel had been just a little bit faster, then if this intersection did exist back then, they may have arrived here before Jupiter's azimuth even got to the heading of the east fork (113 degrees). This probably would have caused them to conclude that they should take the left fork after all, if that fork did in fact exist back then.

Although this would have taken them more time to make their journey, it is the case nonetheless that they would have come to the same intersections to the south as they would if they had taken the right fork anyway, just a little bit later in the night. Furthermore, if indeed they had left Jerusalem a little earlier, or if their rate of travel had been a little bit faster, then they could have traversed the extra distance in time to reach Bethlehem when I think they did, in any event. I shall get back to that point later herein.

Now, the right fork continues without coming to any apparent major intersection until it reaches an intersection which they would have come to eventually, anyway, even if they had taken the left fork. The distance along the right fork to this intersection is 2.97 miles in length, and they would have covered this distance in 1 hour, 17 minutes, and 9 seconds, getting them there at 3:15:20 A.M. At that time, Jupiter would have an azimuth of just under 142.5 (*i.e.*, just a little south of directly southeast). At that point they might have come upon a road heading virtually straight north (if it did exist at the time), but it would have been obvious that that would not lead to Bethlehem, and that in any event, they certainly would not have been following the Star by taking it.

However, if instead they were to continue on along this same road they were already on, they would be proceeding out of this intersection at a heading of about 81, because the road which they had been on curves to the east by that point (and in fact, slightly to the north of straight east), even though originally it had been heading almost straight south shortly after they left Abu Dis. Now, the only other road leading out of the intersection heads south-southeast, with a heading of 151. That being the case, since Jupiter's azimuth, as we have just seen, would have been about 142.5, it could not have made sense to continue along the road with a heading of 81, and it could only have made sense for the Magi to take the road with a heading of 151, which Jupiter's azimuth, they

would have realized, would soon reach anyway (and which it did in fact reach 18 minutes later, at 3:33 A.M.).

This also would have been consistent with the idea of travelling to Bethlehem in a semicircle, since they would have known from their understanding of mathematics that they should resume heading south again, instead of heading east (or any other direction) as soon as possible. And it also would have been consistent with them following the Star, since Jupiter, at this point, would be leading them (or “preceding” them) away from the road they were on and pointing them southwards instead. See the following illustration:



View showing Jupiter at an azimuth of almost 142.5 (as noted on the display) at 03:15:20 local time (01:15:20 UTC) on December 26, 2 B.C. as seen from Jerusalem and its vicinity.

Images provided courtesy of Starry Night Education. Photograph by the author.



The road from the East Gate to the point where the right fork coming south out of Abu Dis (from the left, in this image) meets the intersection with modern route 4171, as illustrated by the red line.

Image from Google Earth Pro: <https://google-earth-pro.en.softonic.com/mac> Photograph by the author.



The point where the right fork coming south out of Abu Dis (from the left, in this image) meets the intersection with modern route 4171.

The top red line shows the azimuth of the continuation of that road (the east-west portion of modern route 4171) at about 81 degrees. The next red line shows the azimuth which Jupiter would have had as the Magi came to this intersection itself (almost 142.5). The third red line shows the heading of the road leading to the south-southeast out of this intersection, with a heading of 151 (the north-south portion of modern route 4171).

Image from Google Earth Pro: <https://google-earth-pro.en.softonic.com/mac> Photograph by the author.

This next stretch of road is 2.04 miles in length. As it turns out, this stretch of road comes closest to the very part of the Judean wilderness which I had envisioned as the starting point that I discussed earlier, when I mentioned how I had been trying to envision how anybody could possibly follow the Star to Bethlehem in the first place. The Magi would have covered this particular stretch in 52 minutes and 59 seconds, and they would have arrived at the next intersection at 4:08:19 A.M. At that point, Jupiter would have had an azimuth of almost 172 (just eight degrees east of straight south).<sup>8</sup>

This road then comes to an end at that point. The road which it intersects runs northeast to southwest, and the town of al-Ubeidiya (referred to above) lies about half a mile to the northeast of this intersection. Here again, as mathematicians and astronomers they would have known that in their journey from Jerusalem to Bethlehem along a semicircular route they would eventually come to a point when they should start heading southwest. And since this stretch of road they had just traveled brought them 2.04 miles virtually straight south, after having spent the first part of the night heading roughly southeast, they would have known that it would be time for them to start heading southwest. So it would make no sense---as a matter of geography or astronomy or mathematics---for the Magi to think that they should take the road heading northeast, toward the town of al-Ubeidiya. And with Jupiter having an azimuth at that time of 172, the only logical choice would have been to take the road to the southwest, which has a heading to the southwest of 218; and certainly, the Star itself at this time would be leading them away from any road to the east, since the Star's azimuth would be heading more and more toward 218 for a while as the night wore on. See the following illustrations:

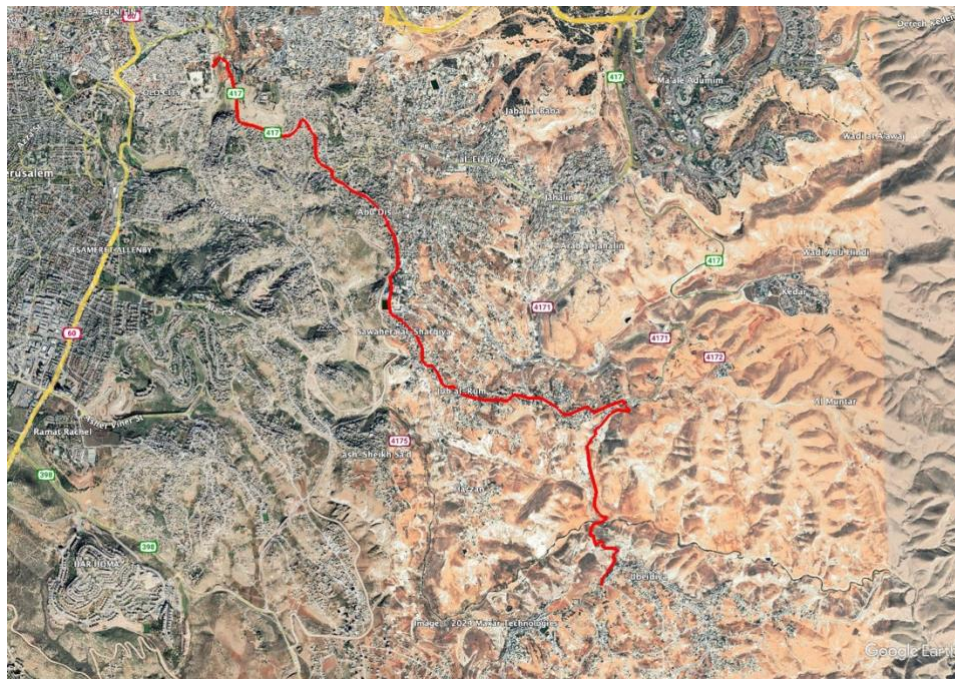
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<sup>8</sup> Following this time, since the Magi would have been leaving Jerusalem behind more and more as they continued toward Bethlehem, the azimuth readings of Jupiter will be given as they would have been determined by an observer in Bethlehem (though this would have differed from those of an observer in Jerusalem by no more than one-fourth of a degree).



View showing Jupiter at an azimuth of about 172 (as noted on the display) at 04:08:19 local time (02:08:19 UTC) on December 26, 2 B.C. as seen from Jerusalem and its vicinity.

Images provided courtesy of Starry Night Education. Photograph by the author.



The road from the East Gate to the intersection southwest of the town of Al-Ubedaiya (Obedayia), as illustrated by the red line.

Image from Google Earth Pro: <https://google-earth-pro.en.softonic.com/mac>  
Photograph by the author.



The intersection southwest of the town of Al-Ubedaiya (Obedaiya).

The top red line shows the heading of the road to the northeast, toward Al-Ubedaiya itself (out of the picture). The next red line shows the azimuth which Jupiter had when in fact they did reach this intersection itself (172). The third red line shows the heading of the road to the southwest (218).

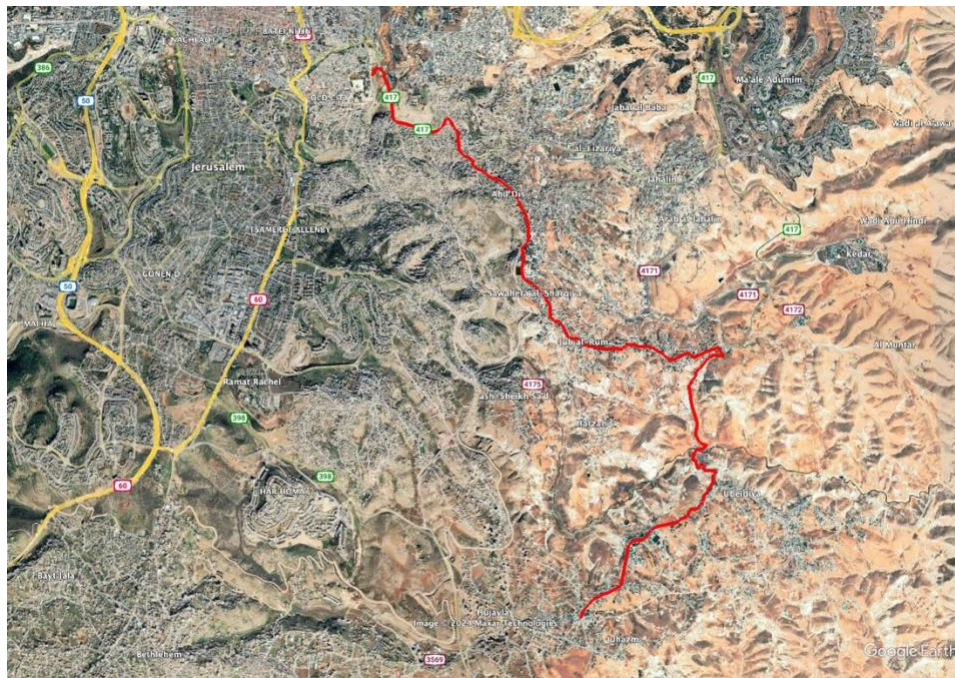
Image from Google Earth Pro: <https://google-earth-pro.en.softonic.com/mac> Photograph by the author.

This next stretch of road is 1.69 miles in length. They would have covered it in 43 minutes and 54 seconds, with them arriving at the end of this portion of the road at 4:52:13 A.M. This would have brought them to an area in the midst of the present-day town of Wadi al-Ara-is. I do not know if that town was in existence at the time, but assuming it was, the only likely major intersections in that town would have led either to the east (which, as we have seen, could not be the correct direction in terms of either geography, astronomy, or mathematics), or to the southwest.

At that point, Jupiter would have had an azimuth of almost 199.75 (*i.e.*, 19.75 degrees west of straight south). And the road they were on would continue to the southwest at a heading of about 231.5. So again, by astronomy and mathematics, it only would have made sense for them to continue on the road which they were already travelling on rather than to change their direction and take any other road. And the Star likewise would have been preceding them to the southwest and pointing them more and more in that direction, and away from taking the other road, which leads east. See the following illustration:



View showing Jupiter at an azimuth of almost 199.75 at 04:52:13 local time (04:52:13 UTC) on December 26, 2 B.C. as seen from Bethlehem and its vicinity. Images provided courtesy of Starry Night Education. Photograph by the author.



The road from the East Gate to the intersection at Wadi-al-Ara-is, as illustrated by the red line.  
 Image from Google Earth Pro: <https://google-earth-pro.en.softonic.com/mac>  
 Photograph by the author.



The intersection at Wadi-al-Ara-is.

The top red line (on the right) goes down a road which leads away from Jupiter. The next red line shows the azimuth which Jupiter had when in fact they reached this intersection (199.75). The third red line shows the heading of the road to the southwest (231.5).

Image from Google Earth Pro: <https://google-earth-pro.en.softonic.com/mac> Photograph by the author.

The road to the next possible major intersection is 1.18 miles long, which they would have traveled in 30 minutes and 39 seconds, bringing them there at 5:22:52 A.M. At that time, Jupiter would have had an azimuth of 216. And during that time, the first rays of dawn would have appeared.

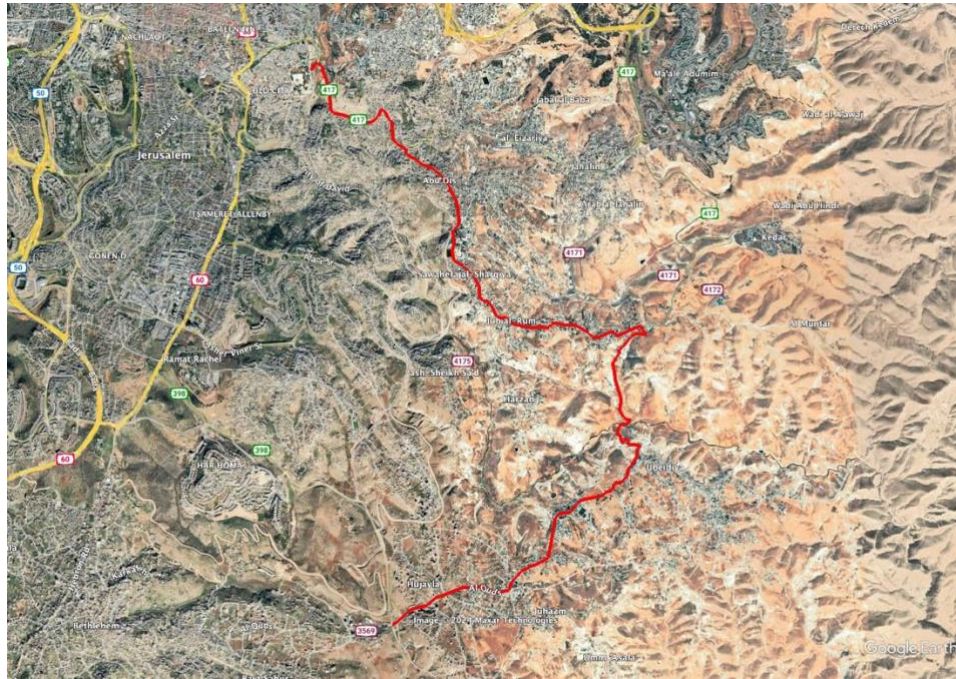
Now, at this point, the road they were on would have intersected with a road we mentioned earlier, the one they would have come to almost immediately after they had left Jerusalem. It is the road which zigzags and turns and twists so much that they would have had a nearly impossible time trying to apply the principles of mathematics and astronomy in order to use that road to follow the Star to Bethlehem. So assuming that that road did exist back then, the Magi at this point (at the start of morning twilight) would have had the choice of either continuing straight ahead or else turning to the north or south. As to the north, for reasons previously given, we can rule that out. As to the south, we must look to astronomy, mathematics, and geography once again to see if taking that route would make any sense.

Bear in mind, though, that as we noted at the beginning, the Magi would have known that in order to accomplish their task of finding Bethlehem in the dark, they would have to have to come to a time when they would have to go straight west in order to be successful. And by this time they could have estimated that they were nearly straight east of Bethlehem (which in fact, they were). So that right there would suggest that they should not go any farther south.

As to astronomy, the heading of the road they were on is about 251, the heading of the road to the south is about 169.5, and Jupiter would already be well past that heading, with an azimuth of about 216, which would be continually increasing. From this we can say with confidence that even if the road to the south did exist at the time, the Magi would have known that if they were to continue following the Star, the road to the south would not be the road to take, especially since they would have known from astronomy and from the passage of time that Jupiter would now start lining up more and more with Bethlehem itself along the road on which they were already travelling, and could not move backwards toward a heading of 169.5 (the heading of the road leading south). See the following illustrations:



View showing Jupiter at an azimuth of about 216 (as noted on the display) as morning twilight begins at 05:22:52 local time (05:22:52 UTC) on December 26, 2 B.C. as seen from Bethlehem and its vicinity.  
Images provided courtesy of Starry Night Education. Photograph by the author.



The road from the East Gate to the intersection at the south end of the zigzag road with the road west to Bethlehem (modern route 3569), as illustrated by the red line.

Image from Google Earth Pro: <https://google-earth-pro.en.softonic.com/mac> Photograph by the author.



The intersection at the south end of the zigzag road with the road west to Bethlehem (modern route 3569).

The red line on the right shows the heading of the continuation of the zigzag road (169.5). The next red line shows the azimuth which Jupiter had when in fact they did reach this intersection itself (216). The third red line shows the heading of the road to the southwest (251).

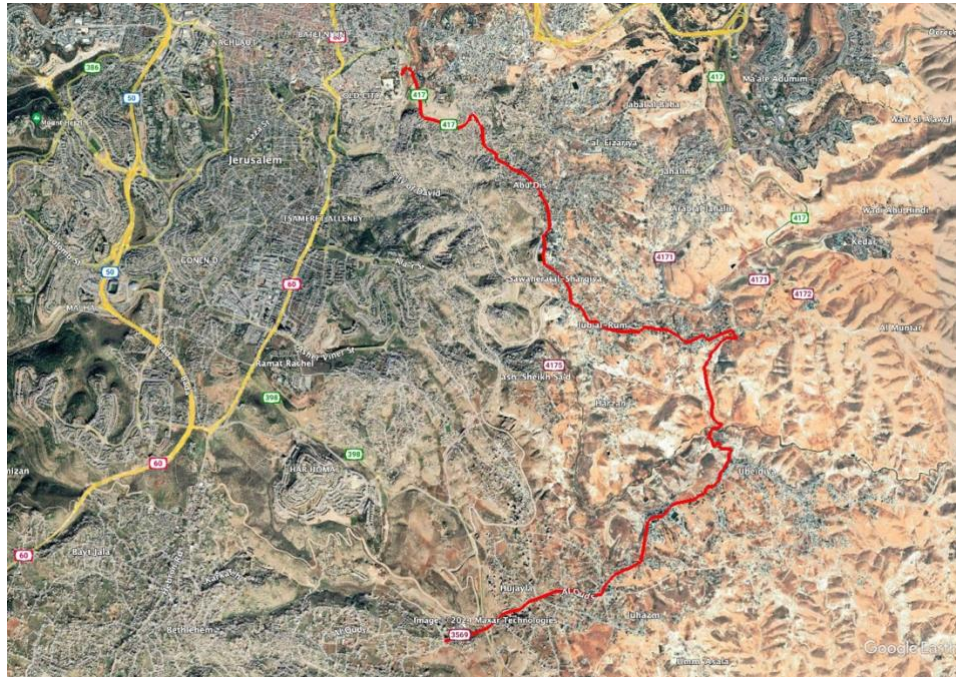
Image from Google Earth Pro: <https://google-earth-pro.en.softonic.com/mac>  
Photograph by the author.

Next we come to a possible intersection with a detour route leading to the southwest; this intersection is another 0.40 miles along the road, and the Magi would have reached that point in the road they were on (whether the detour road itself existed or not at the time) in 10 minutes and 23 seconds, bringing them to this point at 5:33:15 A.M. At that time, Jupiter would have had an azimuth of just over 220.75.

This possible detour road (which I call the Bethlehem Detour), if it did exist back then, goes to the southwest from that point at a heading of about 212, whereas the road they were on would continue at a heading of about 264. So since Jupiter would already be past the azimuth corresponding to this detour road by almost nine degrees, and since mathematics, as we noted previously, would suggest to the Magi that they should head straight west at that point (rather than traveling southwest), they should have been able to know that they should continue straight west instead of heading to the southwest. And once again, the Star itself would lead them away from following the wrong path, as morning twilight came more and more into play, as is shown:



View showing Jupiter at an azimuth of almost 220.75 (as noted on the display) at 05:33:15 local time (05:33:15 UTC) on December 26, 2 B.C. as seen from Bethlehem and its vicinity.  
Images provided courtesy of Starry Night Education. Photograph by the author.



The road from the East Gate to the start of the Bethlehem Detour, as illustrated by the red line.  
Image from Google Earth Pro: <https://google-earth-pro.en.softonic.com/mac> Photograph by the author.

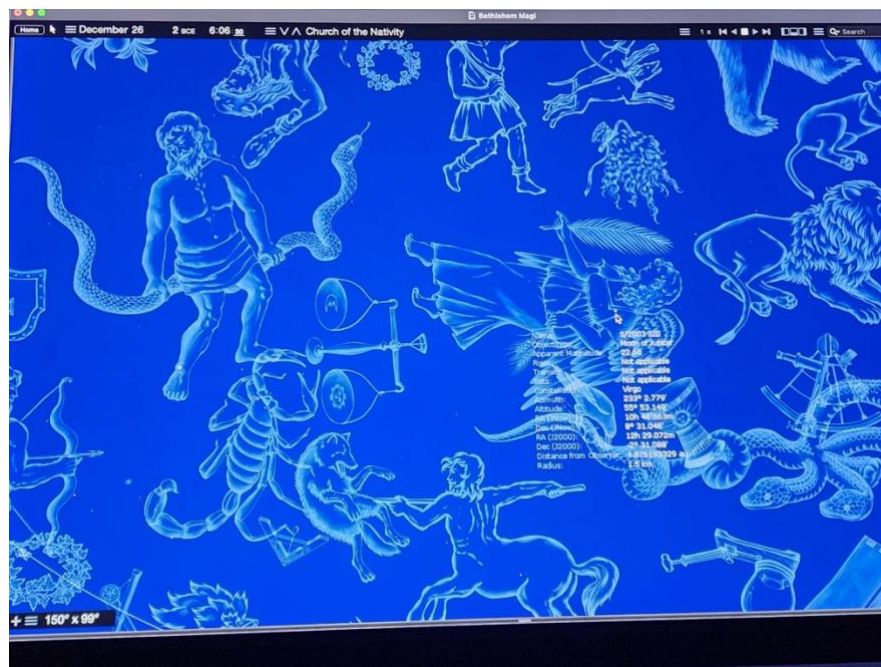


The start of the Bethlehem Detour road.  
The red line on the right shows the heading of the Bethlehem Detour road (212). The next red line shows the azimuth which Jupiter had when they reached this intersection (220.75). The third red line shows the heading of the road to the west (264).

Image from Google Earth Pro: <https://google-earth-pro.en.softonic.com/mac>  
Photograph by the author.

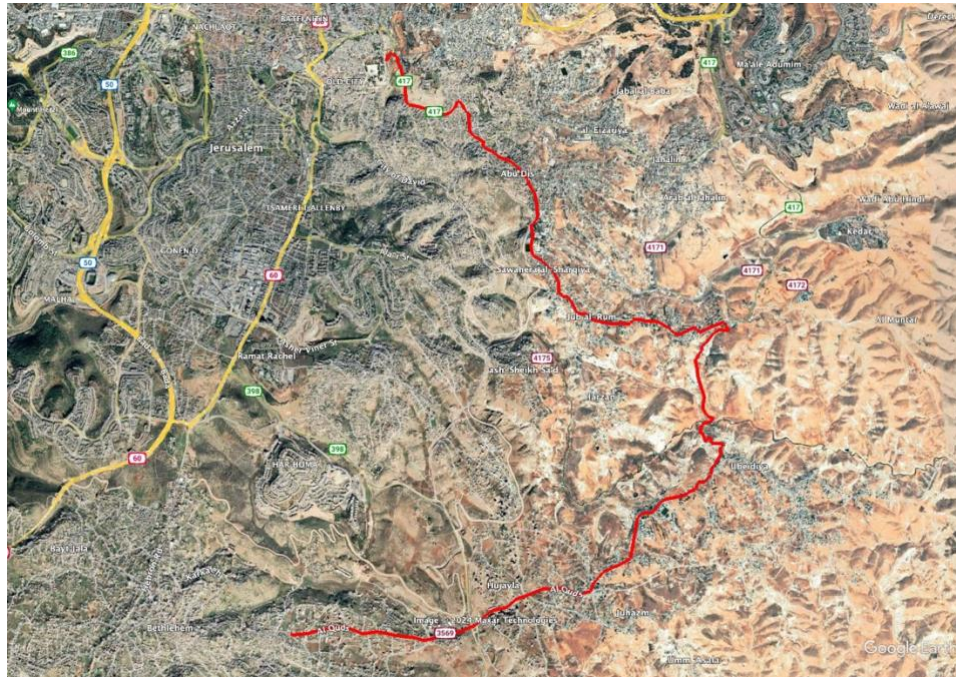
As it turns out, assuming that they did stay on the road they were already on instead of taking the Bethlehem Detour, the next intersection which they might have come across would be the point where their journey along the detour would have ended anyway (if they had taken the detour), another 1.28 miles up the road; for as I point out in the Appendix (find THE BETHLEHEM DETOUR), if they did take the detour, it would lead them back to this road which they were already on at this particular point.

The Magi would have covered this additional distance along the road which they were already on (*i.e.*, if they had gone straight instead of taking the detour) in 33 minutes and 15 seconds, and they would have arrived at 6:06:30 A.M., by which time morning twilight would be getting quite noticeable, and Jupiter would have had an azimuth of just over 233. Of course, for reasons which we have already covered several times before, it would be clear to the Magi that it would make no sense to take the road heading to the southeast out of this intersection, and Jupiter itself would likewise be leading them to the west. See the following illustration:

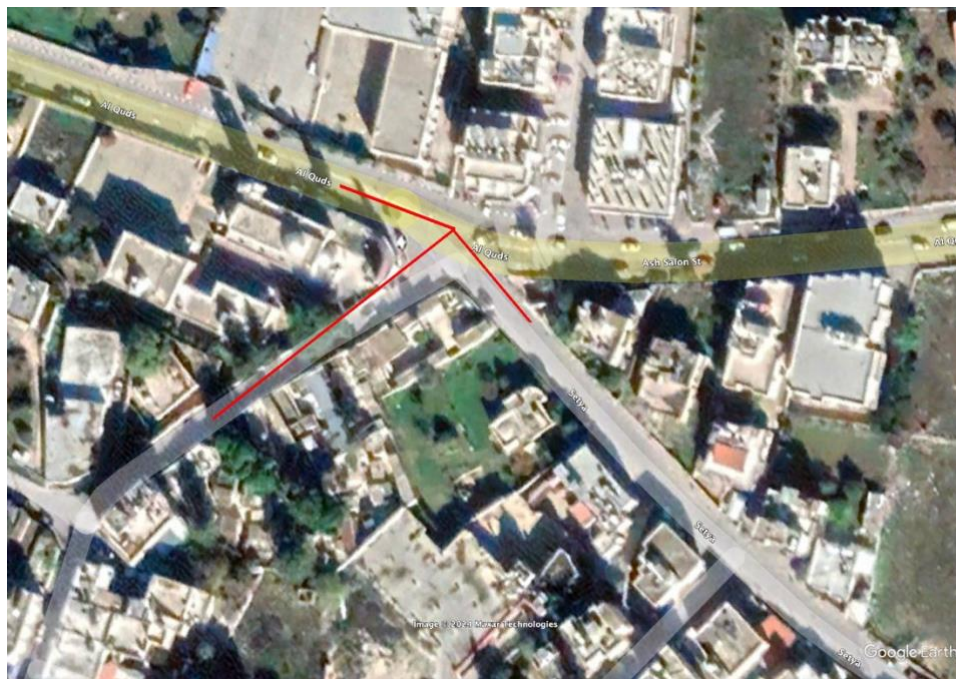


View showing Jupiter at an azimuth of just over 233 (as noted on the display) at 06:06:30 local time (04:06:30 UTC) on December 26, 2 B.C. as seen from Bethlehem and its vicinity.

Images provided courtesy of Starry Night Education. Photograph by the author.



The road from the East Gate to the end of the Bethlehem Detour, as illustrated by the red line. Image from Google Earth Pro: <https://google-earth-pro.en.softonic.com/mac>. Photograph by the author.

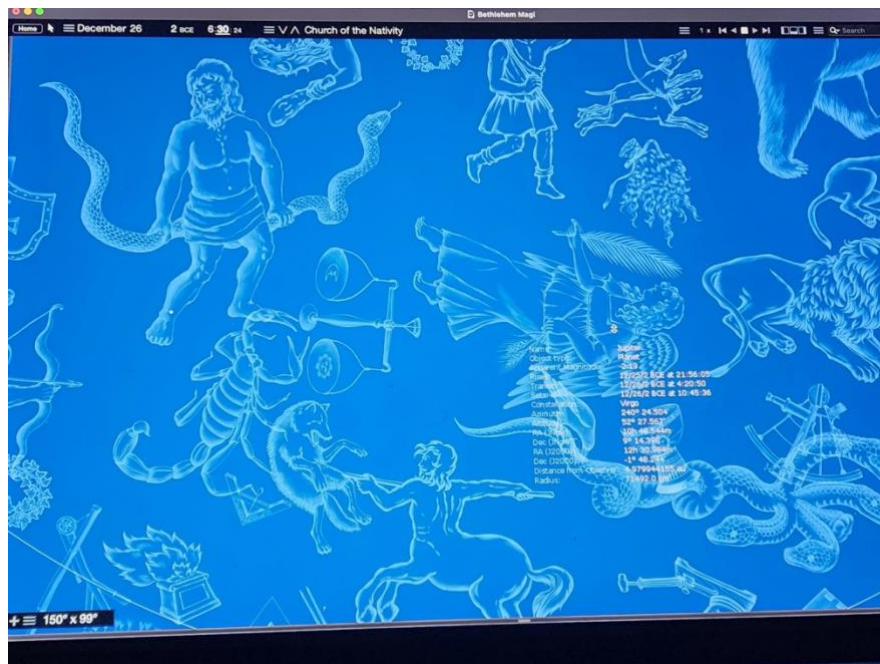


End of the Bethlehem Detour road.

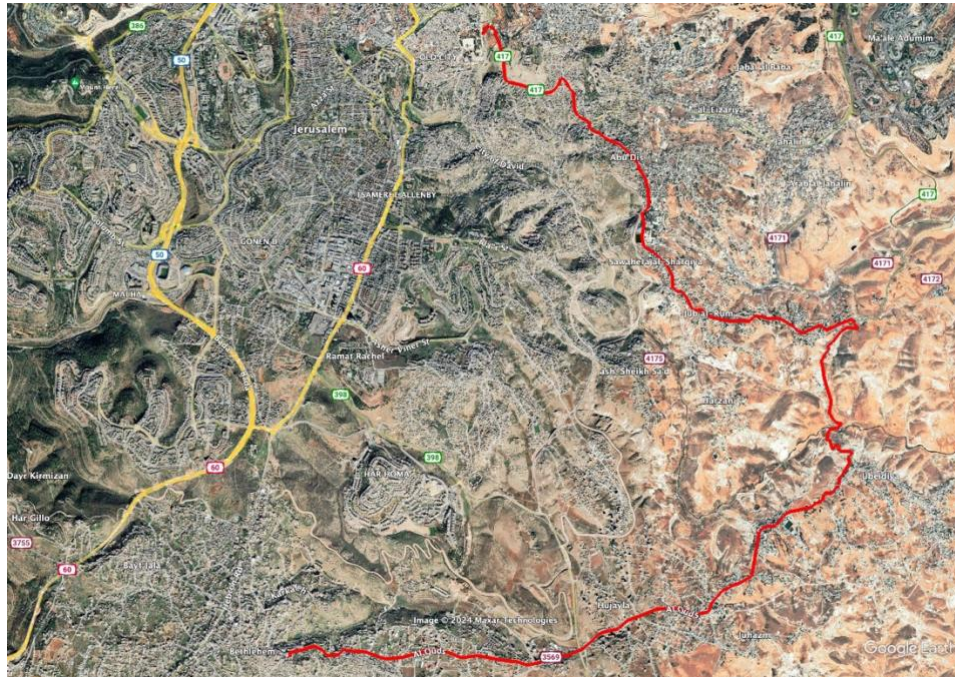
The red line on the right shows the heading going back down the Bethlehem Detour road (142 degrees). The next red line (moving clockwise) shows the azimuth which Jupiter had when they reached this intersection (233). The third red line shows the heading of the road to the west (291).

Image from Google Earth Pro: <https://google-earth-pro.en.softonic.com/mac> . Photograph by the author.

We are now very close to their final destination. This next stretch of road would be 0.82 miles in length, whereupon they would be right in front of the inn, which would be only another 0.10 mile off to their left (*i.e.*, south). (In fact, at that time, it would not be surprising if this road went straight to the door of the inn instead of coming in at an angle, as it does now.) The Magi would have covered this distance (0.92 miles combined) in 23 minutes and 54 seconds, and at this point they would have finished covering the total distance from Jerusalem to Bethlehem (12.72 miles), bringing them to the inn at Bethlehem at 6:30:24 A.M., at which time Jupiter would have an azimuth of just under 240.5. And at this point, since we are finished with the calculations, I think it is safe to round off the final result and simply say that they certainly could have arrived in Bethlehem at about 6:30 A.M., or at least, close to it. This is about eight minutes or so prior to the point at which Jupiter would completely fade from the sky in the morning twilight and become no longer visible. See the following illustration:



View showing Jupiter at an azimuth of almost 240.5 (as noted on the display) at 06:30:24 local time (04:30:24 UTC) on December 26, 2 B.C. as seen from Bethlehem and its vicinity.  
Images provided courtesy of Starry Night Education. Photograph by the author.



The entire route of the Magi (in red), starting along modern route 417 (at the top, left of center), and then making its way to the southeast, then to the south, to the southwest, and then to the west to enter into Bethlehem (near the bottom, to the right of the left edge).

Image from Google Earth Pro: <https://google-earth-pro.en.softonic.com/mac>. Photograph by the author.



The red line shows the final path of the Magi from the end of the Bethlehem Detour road (on the right) to the location of the ancient inn, a site which is now occupied by the Church of the Nativity. At the end of their journey, Jupiter would have had an azimuth to the west-southwest (almost 240.5). Image from Google Earth Pro: <https://google-earth-pro.en.softonic.com/mac>. Photograph by the author.

What this means is that I have now proven scientifically (*i.e.*, through the sciences of mathematics and astronomy) that if certain roads which are present today were also in existence

2,000 years ago (or roads approximating the ones which are present today), it would have been at least possible for a group of Magi to have followed a “star” (Jupiter) one night from Jerusalem down to Bethlehem.

Now, some readers may be wondering why I would mention the Magi going to the inn where Jesus was born. For even though Jesus was apparently born in a stable and then placed in a manger in the stable (probably at the inn), the Bible does say that when the Magi arrived, they went into the house where He was and found Him there. (Matt 2:11)<sup>9</sup> And quite obviously, a house is not a stable.

In answer to that, I believe that the Magi would have first gone to the inn for several reasons. For instance, when the Magi came to Bethlehem, they would have had no idea just exactly where the child was; for as I said, prior to the time that the Star “stood over” the place where the child was, they would have had no reason to think that it would lead them there.

That being said, allow me to hypothesize for the moment that when the Magi arrived in the tiny village of Bethlehem, they would have been looking for the place which would be their presumed destination during the total length of their stay in that village: the inn. And in any event, they probably would have concluded that the inn would be the most likely place to begin their inquiry of the villagers in their quest to learn the location of the child, anyway, since the only other place in a village where one might commonly gather news (the synagogue) would have been closed at this time, a Friday morning.

#### H. The Proper Placement Of The Star

Of course, one question which arises in the midst of all of this is the question of whether every star in the heavens, or only certain stars, could qualify under at least some circumstances as being possible candidates for being the star which the Magi could have followed from Jerusalem to Bethlehem. In answer to that, first of all, when considering stars to the south, this feat could not have even been attempted for any star with a declination of -58 (“minus fifty-eight”) or any further to the south than that, because none of those stars could ever rise above the horizon as seen from Jerusalem. In fact, no star with a declination of -40 or less would have been above the horizon long enough for the Magi to complete this journey if they did leave around midnight or later that night.

Looking in the opposite direction, if the Star had a declination too far to the north, the Magi could not have followed it around the south end of the Mount of Olives when they left Jerusalem, because it would not be seen to the south of the Mount of Olives at that point, but rather, it would be seen to the north of the Mount of Olives. Since their journey would thus begin by having them start out traveling to the northeast before they would then turn to the east and then to the southeast, the loop they would have to take to follow the star to Bethlehem would have been much longer, and they could not have made it to Bethlehem before the end of morning twilight unless they travelled at a much faster rate than our original estimates provide for.

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<sup>9</sup> <http://biblehub.com/nasb/matthew/2.htm>

What this also means, as a practical matter, is that in any event, if they did go around the south end of the Mount of Olives, then in order for the Star to be in the proper position so that they would make the proper turn down the road to Abu Dis, the Star could not have had a declination greater than +20 (“plus twenty”), for then the azimuth of Jupiter when they reached that intersection would have been less than 89 (the heading of the road to Jericho at that point), and this would have led the Magi to continue along this same road toward Jericho instead of leading them to turn south when they would have had to.

Taking all of this together, this means that the band of declinations which the Star could have had would have been from between -40 to +20, a span of 60 degrees of declination. And since the total span of declinations in the heavens is 180, the span of 60 degrees within which the Star could have been is only one-third of the sky that was visible at any given moment.

Then there is the fact to consider that only the stars which were already above the horizon at the time when they left Jerusalem could be considered. At any given moment, half of the stars are above the horizon and half are below. So that right there eliminates one-half of the one-third of the remaining sky as being the possible position of the Star, leaving us with just under 17 percent of the total sky to consider.

At this point we must further consider the fact that in order for the Magi to have followed the star, it first of all would have to have been at least roughly in the east when they started out from Jerusalem,<sup>10</sup> and then to the south later on, and finally at least roughly to the west as their journey to Bethlehem ended. By eliminating those stars which were already west of the meridian when their journey would have begun, we can eliminate half of the remaining sky, leaving us with just over 8 percent of the total area in the heavens; and because stars which would have been too far to the east when they left Jerusalem could not have moved into position to guide them to the west as they approached Bethlehem, we can eliminate half of what remains, leaving us with just over 4 percent of the sky to consider.

Now, on that night, at about the time that the Magi would have left Jerusalem, Jupiter was in fact within that area of 4 percent of the sky which would be a possible location for the Star of Bethlehem. And this, of course, adds more evidence in support of the conclusion that Jupiter may indeed have been the Star of Bethlehem. For what other object within that 4 percent of the sky on any given night would the Magi have seriously considered at all throughout that entire era?

## 1. The Best Way To Use The Heavens As A Timepiece

Not only was the Star in the 4 percent of the sky where one would want it to have been if one were to use it as a guide from Jerusalem to Bethlehem, but it is also the case that the Star was in the best position for a star to be in if one were to use it as a timepiece. For as it turns out, not all parts of the sky are equal in this respect at any given moment, either.

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<sup>10</sup> This is true both as a matter of Scripture (following a star which rose in the east) and, as we have seen, as a matter of astronomy.

To understand this point, let us first consider something about earthly coordinates. For instance, the earth is just over 24,000 miles in circumference.<sup>11</sup> This means that at the equator, the earth will travel at a speed of just over 1,000 miles per hour in order to complete one rotation in 24 hours. Since we know that the earth will rotate by 15 degrees of longitude in one hour, we can know that at the equator, 15 degrees of longitude encompasses just over 1,000 miles of land or sea.

Not so, however, near the earth's poles. At 89 degrees North latitude (or 89 degrees South latitude), each spot on the earth will only have to travel about 400 miles in rotation during any 24 hour period. This means that 15 degrees of longitude at 89 degrees North or South latitude will entail a travel of a little less than 17 miles of land or sea each hour, a much shorter distance than just over 1,000 miles.

Likewise then, if a person in the northern hemisphere looks up in the sky to a Declination of +89 ("plus 89"), the arc which a star at that Declination will encompass as it turns over the course of 24 hours will be much smaller than the arc of an object above the celestial equator. This is most easily envisioned for an observer at either of earth's poles during the respective hemisphere's winter.

For instance, an observer at the North Pole looking virtually straight up would see a star at Declination +89 (such as Polaris, the North Star) trace out a very small, tight circle, whereas with respect to an object at the celestial equator, which would be seen right at the horizon by someone at the North (or South) Pole, it would have to travel all the way around the entire length of the horizon in a circle in a 24 hour period. This is, of course, a much, much larger arc than the arc which the North Star would trace out.

Here's what this would mean in practical terms for anyone located anywhere at all on earth who would want to use the heavens to keep time. The apparent distance across the sky which an object at the celestial equator would appear to move with respect to the horizon would be about 60 times the distance which an object within one degree of the North or South Celestial Pole would appear to move in the same amount of time.

To look at it another way, an object at Declination +89 would take one hour to move the same distance in its arc around the sky that an object at the celestial equator would take to move in only one minute. So if you were to want to use the heavens as a timepiece, it would be far easier to use objects which lie along or near the celestial equator for keeping time---particularly for measuring very small increments of time, such as five minutes---than it would be to use objects far from the celestial equator.

As it turns out, on the night that I believe the Magi travelled down to Bethlehem, Jupiter was in fact very near to the celestial equator, with a Declination of about +10. Now, the cosine of 10 degrees is 0.98; so the movement of Jupiter across the sky over any given unit of time would be virtually the same as for an object directly on the celestial equator itself. Thus, on this particular

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<sup>11</sup> <https://www.space.com/17638-how-big-is-earth.html>

night in December of 2 B.C., Jupiter fulfilled this aspect of being usable as a timepiece.

There is another aspect to consider as well. That is the fact that when it comes to timekeeping, it is easier to use a celestial object with respect to its horizontal motion across the southern horizon (for the Northern Hemisphere) than it is with respect to its vertical motion up from the eastern horizon or down toward the western horizon.

Now, an object will move the same distance across the sky over any given period of time no matter where it is. And at any given moment, part of its motion will be vertical (the extent to which it is either rising up from the horizon or setting), whereas another part of its motion will be horizontal (the extent to which the object is moving across the horizon from east to west). When the object rises its motion will essentially be all vertical, and as an object crosses the meridian, its motion will essentially be all horizontal.

Between the time it rises and the time it reaches the meridian, its motion will be a combination of horizontal and vertical: mostly vertical at first, and then more and more horizontal (and less and less vertical) as it approaches the meridian. Once it is past the meridian, the whole thing happens in reverse: mostly horizontal, and then more and more vertical (and less and less horizontal).

It is with respect to its motion across the horizon that one can most easily keep track of how much time has elapsed. For as it moves across the horizon one can see how far it has moved with respect to the landscape and with respect to any objects on earth directly in front of the observer. By contrast, as it moves up or down, the sky itself will not provide objects in the foreground to act as a reference point for judging how far it has moved. Of course, there might be trees or buildings which could serve as reference markers, though the scarcity of such along the path which the Magi took would prevent that option from being practical.

So in other words, measuring the motion of an object as it crosses the meridian from left to right generally makes it easier to judge how far a celestial object has moved (and therefore makes it easier to judge how much time has passed) as compared to when it is rising or setting. And as it turns out, at the time when the Magi came to their first point of decision (the junction of the road to Jericho with the road to the town of Abu Dis), Jupiter had an azimuth which was just over 65 degrees east of straight south (*i.e.*, about 113 degrees); and when I believe they arrived in Bethlehem, its azimuth was almost 65 degrees west of straight south (specifically, about 242 degrees). And the meridian itself, at the southern horizon, has an azimuth of 180 degrees.<sup>12</sup>

This means that Jupiter's motion that night---from the time I believe that they left Jerusalem until they arrived in Bethlehem---was basically centered on the meridian. Consequently, its motion that night was mostly horizontal: *i.e.*, mostly east to west (left to right) rather than vertical (rising or setting) during the time frame which we are considering.

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<sup>12</sup> In the alternative, it can also be thought of as having an azimuth of 000/360 degrees.

So in other words, both in terms of Jupiter's Declination and also in terms of its position relative to the horizon that night, Jupiter was about as well positioned to serve as a timepiece for the Magi as any celestial object could have been. And in this respect it could confirm what their observations of the heavens as a whole would indicate in terms of the passage of time, as we saw earlier.

All in all then, Jupiter was in the best position not only to show the Magi the actual path they should take to Bethlehem, but it was also in the best position to tell them how much time had elapsed along each leg of their journey, and when they should anticipate the need to change course in order to take advantage of this guidance which the Star was giving them as they went from one intersection to the next.

## I. The Partnership Between Faith And Science

If anything illustrates the idea that it is pointless to bicker about whether one should rely on faith or science to ascertain what reality is, this is it. By faith alone, the Magi could have gotten to Jerusalem. But then, once they got there, without science they would not have known what to do next. They could not have known how to navigate their way along the winding and twisting roads through the hill country of Judea at night without a thorough knowledge of astronomy and mathematics.

In like manner, by science alone they could have performed the task which they undertook that night almost anywhere in the world and at any time; however, without faith, they would never have known that they should be in Jerusalem to do this, or when they should be there, or that there would even be any event taking place which would make it worth their while to make the journey to Jerusalem, and then from Jerusalem to Bethlehem, in the first place.

It is only by combining faith and science that they were able to put together the pieces of the puzzle properly, so that they could be in the right place at the right time, and with the right tools they would need to complete the task at hand. This brings to mind a few sayings. One of them is the old adage, "A place for everything, and everything in its place." That is to say, faith had its proper place, its proper role to play in showing the Magi that the King of the Jews had been born. Science, in turn, then had its own proper place: *i.e.*, in showing them how the task of getting from Jerusalem to Bethlehem through unfamiliar wilderness on one particular night could be accomplished.

This also brings to mind something which Jesus said about making each aspect of life operate in its proper place in the context of honoring God with worship on the one hand, and honoring Caesar with the dutiful payment of taxes on the other hand:

[17](#) And Jesus said to them, "Render to Caesar the things that are Caesar's, and to God the things that are God's." And they were amazed at Him. (Mark 12:17; NASB)<sup>13</sup>

In parallel to that, it would be fitting for us to give credit to faith for the types of things which

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<sup>13</sup> <http://biblehub.com/nasb/mark/12.htm>

faith can show us, and then also to give credit to science for the types of things which science can show us. Likewise coming in to play here is a well-known verse from the Old Testament:

1 To every *thing* there is a season, and a time to every purpose under the heaven: (Ecclesiastes 3:1; KJV)<sup>14</sup>

In other words, there is a time and a place for science, and a time and a place for faith. For there is a proper time and place for everything that is not evil. These two fields of ascertaining truth and gaining knowledge should never be set into a false conflict or rivalry between themselves. Neither science alone nor faith alone provided the Magi with all of the answers to their questions on this night, and neither science nor faith should be ignored by us when it is proper to use either of them, or both of them together; likewise, neither one of them should be used as a substitute for the other when one of them specifically is called for.

Rather, each should be fully appreciated for the things which each of these two fields can do to enrich our lives. God gave to the Magi the intelligence they would need to perceive and understand the workings of nature around them, which God Himself had created, and they then put that understanding of nature to use as a tool to help them in the exercise of their faith. In a modern, practical sense, one can see this same type of thing being carried out by the many religious charitable hospitals and missionary clinics whose skilled staff members apply the health sciences to the saving of lives and the relieving of suffering, based on the motivation of the faith of those who founded and operate such places.

Let us take our cue from that then, always remembering to use faith and science in concert with each other, and keeping in mind that they were never meant to be opposed to one another. Each of these two fields is a completely separate discipline from the other for ascertaining truth, and each should be allowed to operate fully and freely within its own proper realm so that we can gain the full benefit of each.

All that being said, here is another point to consider: As we have seen, an angel came and told Mary that she would be the mother of the Messiah.<sup>15</sup> Likewise, an angel came and told Joseph that he need not put Mary aside for supposed unfaithfulness, and that he could take her as his wife.<sup>16</sup> An angel also came to the Magi in a dream while they were in Bethlehem and told them not to go back to King Herod to report that they had found Jesus.<sup>17</sup> Following that, an angel came to Joseph in a dream and told him to rise up and flee into Egypt to avoid the soldiers whom Herod was sending to Bethlehem to murder Jesus.<sup>18</sup>

The thing is, in stark contrast to all that, nowhere in the telling of the tale of the Star of Bethlehem does the Apostle Matthew say anything about the Magi having acted on the basis of

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<sup>14</sup> <http://biblehub.com/kjv/ecclesiastes/3.htm>

<sup>15</sup> Luke 1:26-38: <https://biblehub.com/nasb/luke/1.htm>

<sup>16</sup> Matt. 1:18-21: <https://biblehub.com/nasb/matthew/1.htm>

<sup>17</sup> Matt. 2:12: <https://biblehub.com/nasb/matthew/2.htm>

<sup>18</sup> Matt. 2:13-15: <https://biblehub.com/nasb/matthew/2.htm>

any message from an angel in order to conclude that that King of the Jews had been born and that they should go to Jerusalem, and then to Bethlehem, in order to find Him and worship Him. And as we have seen, due to their study of the heavens, they would have had no need to have been visited by an angel---either in real life, or in a dream---in order to draw such conclusions.

So to that faith of theirs which showed them that they should make the journey to worship the newborn King of the Jews (and on that one particular night at all costs, if need be), they only needed to add science to that faith in order to complete the task at hand. This further helps illustrate the point which I just made above that as to faith and science, each can have its own separate, vital role to play in guiding us to what we must learn, and what we need to know.

In other words, it is perfectly OK with God for us to learn things from an angel (and likewise learn, I am sure, from Scripture, or by hearing His voice). But at the same time, it is equally OK with God, within the proper context, for us to learn things from the natural order instead (*i.e.*, from science, as we would call it today), just as the Magi did with respect to part of what they needed to know in order to find Jesus. Of course, we must always use science properly and remain flexible in our thinking. For we must account for the fact that although our conclusions might seem perfectly valid, it will be the case nonetheless from time to time that we did not originally know everything we would have to have known in order to draw proper conclusions, and we may find from time to time that we used the tools of science improperly, even if only inadvertently so.

So we must remain open-minded about the conclusions which we have drawn, and we must be prepared to make adjustments accordingly. And this is, after all, a fundamental concept of the scientific method.<sup>19</sup>

## J. The Legacy of al-Khwarizmi

Let us pause now for a few moments to consider another intriguing aspect of the Star of Bethlehem: Was the journey of the Magi from Jerusalem to Bethlehem possibly related to concepts in mathematics which formed the academic foundation of the algorithm and a systematic means of solving linear and quadratic equations many centuries later? We know that the Zoroastrian class of priests (of which the Magi class of priests was a part)<sup>20</sup> lasted until at least the 7<sup>th</sup> century A.D.<sup>21</sup> But the knowledge which the Magi had accumulated may not have ended with the final days of that class of priests. For it may have continued on in Baghdad in a place known as the House of Wisdom, which was founded in that city around 800 A.D.<sup>22</sup>

Of all the scholars of the House of Wisdom, one is of particular interest to us. His name was Abu Abdallah Muhammad ibn-Musa al-Khwarizmi (Father of Abdallah, Muhammad, the son of

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<sup>19</sup> <https://www.thoughtco.com/scientific-method-p2-373335>

<sup>20</sup> <https://authenticgathazoroastrianism.org/2018/01/18/magi-the-ancient-zoroastrian-hereditary-priesthood-and-haplogroups-i-m170-i-p215-and-haplogroup-t1a2/>

<sup>21</sup> [https://www.meta-religion.com/World\\_Religions/Zoroastrim/zoroastrism.htm#.VjspE0vA7Ro](https://www.meta-religion.com/World_Religions/Zoroastrim/zoroastrism.htm#.VjspE0vA7Ro)

<sup>22</sup> <https://www.1001inventions.com/feature/house-of-wisdom/>

Moses, from Khwarezm, or the town of al-Khwarizmi);<sup>23, 24</sup> or more simply, his name is frequently stated as just al-Khwarizmi. It is from his name (a Latinized version of his name, actually) that we get our word “algorithm”.<sup>25</sup>

An algorithm, for those who are not familiar with the term, is a systematic means of decision making. The basic concepts of the algorithm have been around for centuries, although these concepts were only just recently formalized into the form we see them in today, many centuries after al-Khwarizmi himself had passed away. But basically, the algorithm entails establishing a series of steps in a flowchart in which one will take either one certain path from a point of decision to go in one direction (if a particular question at hand is answered one way), or else one will take a different path if the question is answered in a different way. Either way, the flowchart will lead from one point of decision to the next in a sequential manner until one arrives at a final conclusion about what to do.<sup>26</sup>

Al-Khwarizmi lived from about 780 A.D. to about 850 A.D. He was a famous astronomer, mathematician, geographer, and cartographer. He is the first one to have published a systematic method for solving linear and quadratic equations. (For a time, he was also thought to be the one who invented algebra; but as it turns out, he was simply the one who was the most successful at popularizing algebra.<sup>27</sup>) He also wrote about the refinements which were taking place during his time in the mathematical formula which, centuries earlier, had first been developed by Rabbi Hillel II for determining the start of months on the Hebrew calendar.<sup>28</sup>

Several things about his background are worth noting here. First of all, his four main skills--in astronomy, mathematics, geography, and cartography--are the four principal skills which the Magi, centuries before him, would have used in the scenario which I envision about how they could have gone from Jerusalem to Bethlehem.<sup>29</sup> It is also worth noting that the systematic form of decision making which the Magi would have used in order to do so entails utilizing the basic concepts of the algorithm.

Two things come to mind here: 1.) Did al-Khwarizmi develop his logical system of solving problems in mathematics from the same base of knowledge which the Magi had used beforehand to go from Jerusalem to Bethlehem; and, 2.) had al-Khwarizmi also actually heard about the journey of the Magi on that night, perhaps from a tradition stemming from a lost writing or an oral tradition from one of the Magi who had visited Jesus, one who may have gone to Israel from (or through) Baghdad or Babylon, and then returned centuries beforehand?

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<sup>23</sup> <https://www.thoughtco.com/al-khwarizmi-profile-1789065>

<sup>24</sup> <http://profkeithdevlin.org/2011/12/25/al-khwarizmi/>

<sup>25</sup> <https://www.thoughtco.com/al-khwarizmi-profile-1789065>

<sup>26</sup> <https://www.merriam-webster.com/dictionary/algorithm>

<sup>27</sup> [https://en.wikipedia.org/wiki/Muḥammad\\_ibn\\_Mūsā\\_al-Khwārizmī](https://en.wikipedia.org/wiki/Muḥammad_ibn_Mūsā_al-Khwārizmī)

<sup>28</sup> [https://en.wikipedia.org/wiki/Hebrew\\_calendar#Mishnaic\\_period](https://en.wikipedia.org/wiki/Hebrew_calendar#Mishnaic_period)

<sup>29</sup> <https://muslimheritage.com/contribution-of-al-khwarizmi-to-mathematics-and-geography/>

Alas, we will probably never know the answer to this. For in 1258 A.D., invading Mongol hordes overran Baghdad and destroyed the library of the House of Wisdom, which, starting in the middle of the ninth century A.D., had been the largest library in the world.<sup>30</sup> This was a tragedy similar to the destruction by fire of the great library in ancient Alexandria, Egypt.<sup>31</sup>

Notwithstanding all that, I can't help but notice the great similarity between how I think the Magi performed their seemingly impossible feat of following the Star from Jerusalem to Bethlehem on the one hand, and the writings and logic of al-Khwarizmi on the other hand. And I think it is worth considering (as a matter of casual speculation, at least) the possibility that there may be some connection there between the journey of the Magi and the eventual writings of al-Khwarizmi, a connection which is now lost in the sands of time. To that I would only add that it is interesting to note that the name of the place where al-Khwarizmi developed his writings was the House of Wisdom, and that the Magi are commonly known as the Wise Men.<sup>32</sup>

### III. The Star That "Stopped"

We have now covered three of the key questions of the mystery of the Star of Bethlehem: 1.) why did the Magi go at night; 2.) were the Magi in the east, or was the Star in the east; and, 3.) how could they possibly have followed a star from Jerusalem to Bethlehem? We shall therefore move on to the next question: What does the Bible mean when it says that the Star led them until it came and "stood over"---or, as certain translations put it, "stopped over", or "came to rest over"---the house where they found Jesus? Let us once more consider that exact passage of Scripture itself:

9 When they had heard the king, they departed; and, lo, the star, which they saw in the east, went before them, till it came and stood over where the young child was. (Matt 2:9; KJV)<sup>33</sup>

Let us now consider once again the Greek word which talks about the motion of the star: *proegen* (pro ee' jen);<sup>34</sup> from *proago* (pronunciation: <https://www.howtopronounce.com/proago>) meaning "to lead forth", "go before", or "precede".<sup>35</sup> And let us now also consider the Greek word which is translated, in various translations, as either "stood" (King James Version;<sup>36</sup> Douay-Rheims Bible;<sup>37</sup> New American Standard Bible<sup>38</sup>), or "stopped" (New International Version<sup>39</sup>), or "came to rest" (English Standard Version<sup>40</sup>). It is the Greek word *histemi*

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<sup>30</sup> <https://www.1001inventions.com/feature/house-of-wisdom/>

<sup>31</sup> <https://www.ancientpages.com/2020/12/03/what-really-happened-to-library-of-alexandria-remains-a-mystery/>

<sup>32</sup> [https://en.wikipedia.org/wiki/Biblical\\_Magi](https://en.wikipedia.org/wiki/Biblical_Magi)

<sup>33</sup> <http://biblehub.com/kjv/matthew/2.htm>

<sup>34</sup> <http://biblehub.com/lexicon/matthew/2-9.htm>

<sup>35</sup> <http://biblehub.com/greek/4254.htm>

<sup>36</sup> <http://biblehub.com/kjv/matthew/2.htm>

<sup>37</sup> <http://biblehub.com/drb/matthew/2.htm>

<sup>38</sup> <http://biblehub.com/nasb/matthew/2.htm>

<sup>39</sup> <http://biblehub.com/niv/matthew/2.htm>

<sup>40</sup> <http://biblehub.com/esv/matthew/2.htm>

(pronunciation: <https://www.youtube.com/watch?v=HEDegYVFqec>); it can be translated as each of these three things (stood, stopped, or came to rest), with an emphasis on the following point: something being anchored in place, and that this comes upon the cessation of motion.

According to Strong's Concordance, it can also be translated "establish" or "stand firm".<sup>41</sup> So on the whole, the Scripture is saying that the Star went before them until it became anchored in place upon the cessation of its movement over the place where the child was.

We have just looked at the King James Version of this verse. Let us now fully consider this verse in other translations:

9 After they had heard the king, they went on their way, and the star they had seen when it rose went ahead of them until it stopped over the place where the child was. (Matt 2:9; New International Version)<sup>42</sup>

9 After listening to the king, they went on their way. And behold, the star that they had seen when it rose went before them until it came to rest over the place where the child was. (Matt 2:9; English Standard Version)<sup>43</sup>

The key to understanding the meaning of this verse is found, I believe, in the Koine Greek word which is translated "until" ("till"). It is the word *heos* [heh' oce]. Generally speaking, it simply means "as far as".<sup>44</sup> And Thayer's Greek Lexicon has this to say about *heos*:

a particle marking a limit, and  
I. as a conjunction signifying ... where something is spoken of which  
*continued up to a certain time*: Matthew 2:9<sup>45</sup> (emphasis supplied)

Notice in particular the phrase in the quote above which says, "... *continued up to a certain time*" (emphasis supplied). In other words, the Star *continued* its motion of going before them as they made their way to Bethlehem, all the way *up to* a certain time. All of this suggests, then, that the Bible does not mean that the Star was simply stopped all night long against the background of stars (as it prepared to enter retrograde motion), but rather, to the contrary, that it did in fact have a certain continuous motion throughout that whole night up to one certain, specific point in time, a motion which the Magi themselves saw, a motion which *continually* led them the whole time that night up until it came to an end, as the Star then became established or fixed in place at the one specific point in time, which came only after they had already arrived.

Larson thinks that the reference to the Star coming to a stop pertains to one thing, and to

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<sup>41</sup> <http://biblehub.com/greek/2476.htm>

<sup>42</sup> <http://biblehub.com/niv/matthew/2.htm>

<sup>43</sup> <http://biblehub.com/esv/matthew/2.htm>

<sup>44</sup> <http://biblehub.com/greek/2193.htm>

<sup>45</sup> <http://biblehub.com/greek/2193.htm>

one thing only: the fact that Jupiter came to a stop on that one night (and supposedly, as he implies, on that one night only) as seen against the background of stars as it prepared to enter retrograde motion (though again, on that night it was actually right in the midst of being stopped for about a week). To the contrary, however, although I do believe that Larson's point does describe a certain part of what the Bible refers to when it talks about this event, I nonetheless also believe that this would be at most only a part of what the Bible means.

For as I say, the Bible only refers to the Star having "stood" at one particular moment in time. That is, when we consider the full meaning of the Greek words used in Matt. 2:9,<sup>46</sup> the Star *continued* to go in its motion before them, and it did so *until* it came to the place where the child was, and *only then* did it stop. By contrast, in terms of retrograde motion, Jupiter had been stopped all night long during their journey down from Jerusalem, not simply at the exact moment when they came to the house in Bethlehem where Jesus was.

Now, if we were to assume that retrograde motion is the only thing which the Scripture is referring to when it talks about the Star no longer moving, then from the time they reached the eastern edge of Bethlehem until the time that they came to the house where Jesus was, Jupiter would have appeared to be at a complete standstill against the background of stars as seen from the front of every single house which they passed in Bethlehem, and also, for that matter, in front of any house in the other villages they may have gone through previously that night, and even on several nights beforehand, in fact. So Jupiter's being at a stop against the background of stars all night long as it prepared to enter retrograde motion could not, just by itself, correspond to that one specific moment in time which the Bible mentions, *the moment when the Star finished* the motion which the Star had *continued* to have *all night long until* it stood over the place where Jesus was.

In other words, what the Scripture says is in fact consistent with the idea that this motion of the Star which the Magi followed is the normal nightly motion of a star which is caused by the earth's rotation on its axis---at least, up until the moment when they came to the house where Jesus was. But then, that being the case, just exactly what does the Scripture mean about the Star becoming established or fixed in place ("stood over", "stopped", or "came to rest") when the Magi came to where they found Jesus? For certainly that much, at least, is not part of the normal nightly motion of a star.

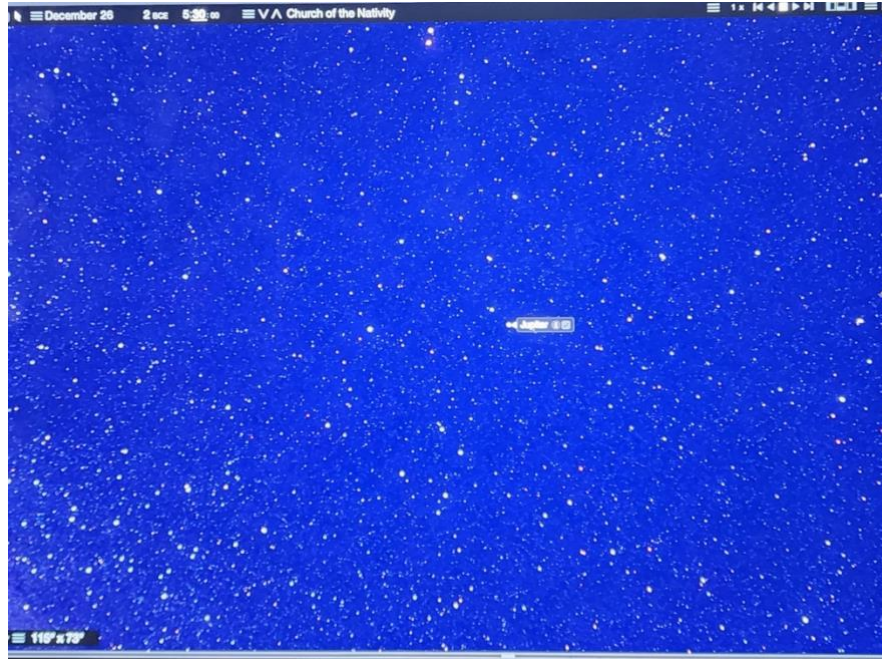
Here is what I think that part of Scripture means. Take a look at what happened to Jupiter at 15-minute intervals starting around 5:15 A.M. and going until 6:30 A.M., this latter time being, I believe, the approximate time that the Magi did arrive in Bethlehem:

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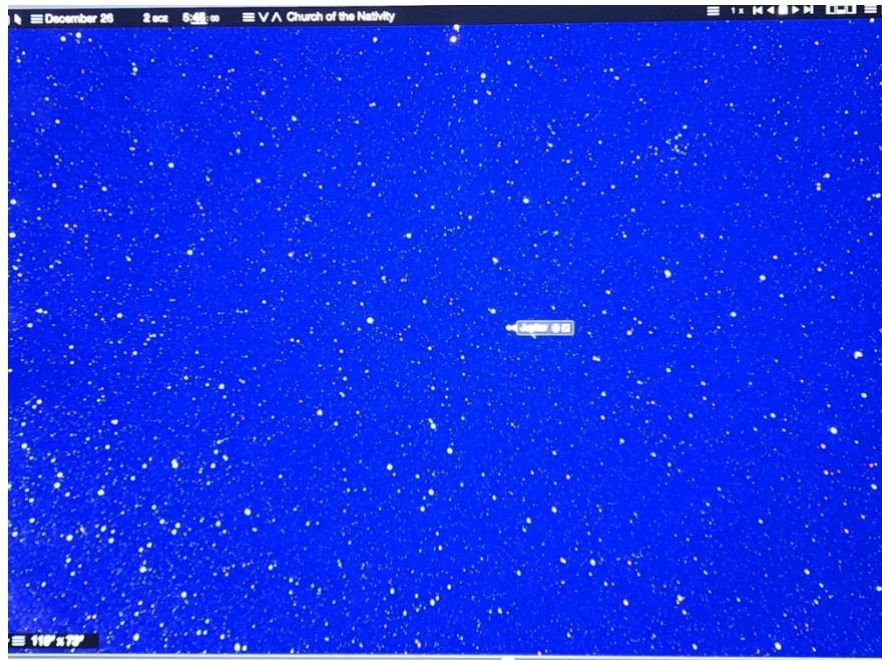
<sup>46</sup> <http://biblehub.com/niv/matthew/2.htm>



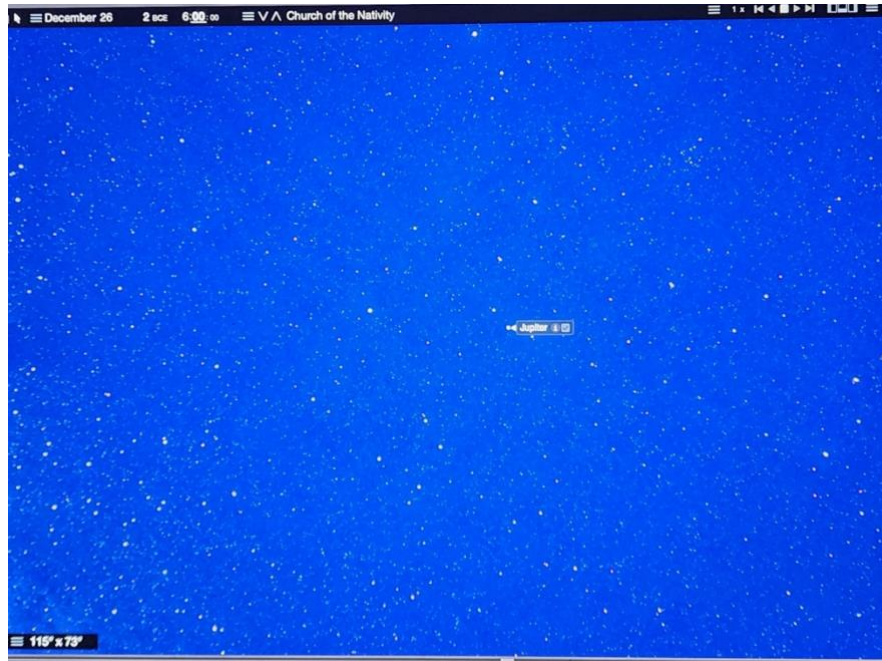
Jupiter as seen from Bethlehem at 5:15 A.M. local time on December 26, 2 B.C.  
Images provided courtesy of Starry Night Education. Photograph by the author.



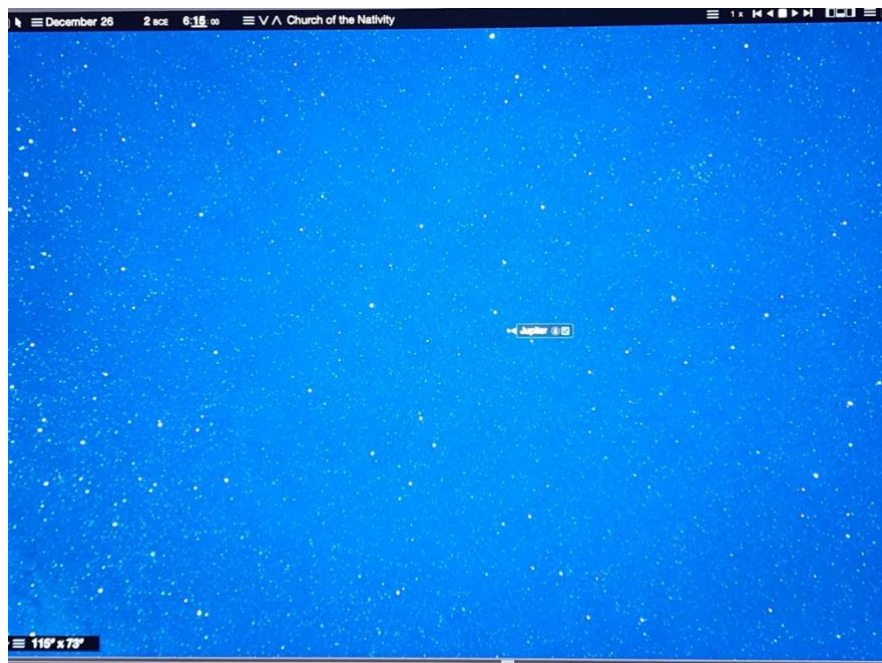
Jupiter as seen from Bethlehem at 5:30 A.M. local time on December 26, 2 B.C.  
Images provided courtesy of Starry Night Education. Photograph by the author.



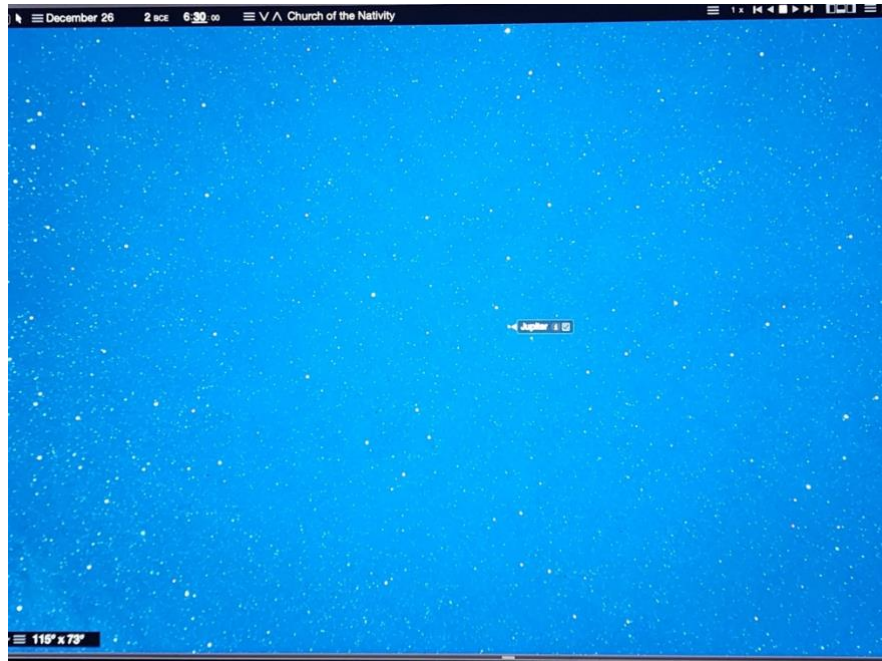
Jupiter as seen from Bethlehem at 5:45 A.M. local time on December 26, 2 B.C.  
Images provided courtesy of Starry Night Education. Photograph by the author.



Jupiter as seen from Bethlehem at 6:00 A.M. local time on December 26, 2 B.C.  
Images provided courtesy of Starry Night Education. Photograph by the author.



Jupiter as seen from Bethlehem at 6:15 A.M. local time on December 26, 2 B.C.  
Images provided courtesy of Starry Night Education. Photograph by the author.



Jupiter as seen from Bethlehem at 6:30 A.M. local time on December 26, 2 B.C.  
Images provided courtesy of Starry Night Education. Photograph by the author.

As you can see, morning twilight comes heavily into play, making Jupiter virtually disappear from the sky. And in fact, it would have disappeared completely in the glow of morning twilight just a few minutes later, around 6:38 A.M. or so. So then, it is fair to say that if my estimate as to when the Magi left Jerusalem and my calculations about how long it would have taken the Magi to reach Bethlehem were correct (or if my estimate and calculations are off by only a little), and if Jupiter was then located above the house where Jesus was when the Magi reached Bethlehem, then it may have been the case that Jupiter disappeared completely right before their eyes at that point in time, and so it would not have had a chance to move any further that night and go past its position over that house. In other words, at that point, while it would have been perched over the house, it would have stopped.

Look at it this way: All night long, while the Magi were on a journey along the roads leading from Jerusalem down to Bethlehem, Jupiter itself was likewise on a journey, a journey through the heavens lasting all night long, moving slowly, gradually across the sky from east to west. On and on it went, leading the Magi ever further along the way---first to the southeast, then to the south, then to the southwest, and then to the west---until they reached their destination. Then, when morning twilight overcame the light of Jupiter itself, its journey through the sky came to an end as Jupiter could no longer be seen moving, and so it “stood over” the place where Jesus was.

That is to say, it “stopped” as it “came to rest” over the place where Jesus was at that one point in time, for it then disappeared from view entirely as it entered its final position for the night, and in essence became established or anchored in place over the house where Jesus was. And so I do believe that the disappearance of Jupiter in the early morning twilight (which is when its routine motion through the sky would have come to an end) is at least the principal reason as to why the Bible says that the Star “stood over”, “stopped over”, or “came to rest over” the house where Jesus was.

Nonetheless, allow me to give credit where credit is due. The fact that Jupiter was exactly in the middle of the time when it would have had no apparent motion against the background of stars could not have been lost on the Magi; rather, as you may recall, that is in fact one of the main astronomical reasons (in addition to all the other reasons) which I stated as to why I think the Magi deliberately chose to make the perilous journey to present their gifts to Jesus on that one, specific night instead of at any other time. What we need to keep in mind then is the fact that when the Magi arrived at the house where Jesus was, the Star had stopped moving in two completely different respects: its motion within the celestial realm against the background of stars (as it prepared to enter retrograde motion), and its motion across the sky as seen from Earth that night.

This Platonic convergence of that which was true on Earth (Jupiter's motion stopping as it disappeared in the glow of Earth's atmosphere) also being true in heaven (Jupiter's motion stopping as it prepared to enter retrograde motion against the heavenly background of stars) could not have been lost on these men of learning. For here we have yet another example of something on Earth echoing back to heaven the things which we see in the heavens above. And in fact, this came just at the precise moment when the Star would no longer be needed anyway, for now they had found the one whom it had represented all along.

As it turns out, here we also face a paradox: For under the Platonic view of things, the real way that the star stopped would be considered the heavenly way (*i.e.*, the halt against the background of stars); yet it is the earthly way in which the Star stopped (*i.e.*, the Star coming to rest in the glow of morning twilight) that is most consistent with the account in Scripture of the Star continually moving all night long until it came to a halt at one specific point in time that night/morning over one particular house.

All in all then, by considering Scripture from the standpoint of astronomy, we have now developed a plausible explanation concerning yet another one of the great mysteries of the Star of Bethlehem. Let us now move on to the next question: Why does the Bible say that the Magi rejoiced “with exceeding great joy” (King James Version; Douay-Rheims Bible) when they saw the Star in Bethlehem?

#### IV. “They Rejoiced With Exceeding Great Joy”

##### A. Heaven And Earth Confirm The Story

###### 1. They Made It In Time

As we have seen, the story of the Star of Bethlehem in the Gospel of Matthew is certainly filled with some unusual statements, so it is indeed good that we have been able to breathe life into some of these passages in the above pages. But one mystery which remains unsolved arises from the verse which says that when the Magi saw the Star upon arriving in Bethlehem, they rejoiced “with exceeding great joy”. (Matt 2:10; KJV)<sup>47</sup> As noted near the beginning of this book, it is puzzling as to why that would be.

Let us review this: First, when they came to the palace in Jerusalem, they told King Herod that they had seen His Star. (Matt 2:2)<sup>48</sup> And then of course, they saw the Star as they followed it all night long on their way down to Bethlehem. (Matt 2:9)<sup>49</sup> Yet the Bible says nothing about them rejoicing at all with respect to these times when they beheld the Star. So what would be so special then, about seeing the Star in Bethlehem?

I think the complete answer to this puzzle may be a combination of things. First of all, let us keep in mind that as they travelled from Jerusalem to Bethlehem, the fact that they not only had not found the newborn king at the palace in Jerusalem---along with the fact that no one in Jerusalem had even heard about this supposed birth of a king---is something which must have weighed heavily on their hearts, and this may easily have caused them to start harboring grave doubts as to whether they were correct about any king of the Jews having been born at all, let alone as to whether they could possibly find him and worship him in time. For surely, they probably reasoned, he would be found in the palace in Jerusalem, and that the whole nation of Israel would certainly know of his birth.

They therefore probably became horrified when they found out that no one in Jerusalem even knew anything about this. What a devastating blow to them that must have been! And now, to make things worse, they are told that to find him (if he even exists at all), they must travel not to a great walled, heavily fortified city, where one might expect to find a palace and a king, but rather they were told that they should go to a tiny, mud-hut, dirt-floor village which had no walls or any garrison of soldiers because no one important lived there.

Surely at that point, they must have weighed the grave dangers of going down there at night through unfamiliar territory against the possibility that when they would arrive in Bethlehem (if they could make it there safely at all), people in Bethlehem would think they were absolutely crazy for believing that they could possibly find a king in that town, of all places! The Magi probably figured that this would be especially true if they got there and no child at all could be found who would even come close to matching the description of the one whom they were seeking.

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<sup>47</sup> <http://biblehub.com/kjv/matthew/2.htm>

<sup>48</sup> <http://biblehub.com/kjv/matthew/2.htm>

<sup>49</sup> <http://biblehub.com/kjv/matthew/2.htm>

That being the case, thoughts probably rang through their minds telling them not to make the perilous journey at night, with it being so uncertain as to whether they would even make it to Bethlehem at all, let alone in time. The safer thing to do, the seemingly wiser thing for these “wise men” to do, would be to settle for second best: by waiting until morning to make the journey down to Bethlehem.

But that would not do for these Magi. For they were men of great faith. *Great* faith. And so they decided to act upon their faith rather than act upon their fears. For the confluence of events in the heavens pointing to the conclusion that this one night alone was the special night to visit this newborn king was simply overwhelming.

Then, as they actually approached Bethlehem, mingled in with their feelings of near panic that the Star might disappear just moments before they arrived (along with their hopes simultaneously, as they drew closer and closer, that perhaps they really might actually make it just in time after all) they may have experienced intensifying apprehension over the fact that once they got there, they would then come to that moment of truth, as I said, which they had dreaded all night long as to whether they would make absolute fools of themselves in the eyes of the villagers.

Here I think it is critical to consider what they did once they reached the outskirts of Bethlehem. Where would they have gone first? With that in mind, consider this: any time that you yourself travel away from home, where is the first place you go when you enter the town where you will be staying? Usually, it is the place where you are going to stay for the night. In the tiny village of Bethlehem, there would be only one inn, the very same one where Mary and Joseph could find no place to stay when Jesus had been born six months earlier.

So I think we can assume, as I had mentioned earlier, that they would have wanted to go to the inn first, where presumably they could quickly ask all the persons who were there if anyone knew where the child matching the description of the one they were seeking might be found. After all, other than the village synagogue, this would be the most likely gathering place for the villagers, and for the exchange of news, rumors, and gossip; and since this was a Friday morning when they arrived, and not the Sabbath, one would not expect to find many people at the synagogue (if anyone at all).

Now, as they made their way through town, was it perhaps the case that the glow of morning twilight happened to remove Jupiter from the sky just as they were passing by one particular house, one which happened to be the house where Jesus was? That is a possibility, of course. Yet even so, how could the Magi even know that that was the house where the newborn king was at that point? Again, as a reminder, they apparently would have had no reason ahead of time to think that the Star would stop over the one house where the newborn king was.

So here they come into Bethlehem shortly before sunrise that morning. A few people may have been up and about just before sunrise. But this was December, and it would have been cold outside. So most of the people probably would have still been indoors, and many of them may still been wrapped in slumber.

Or for the moment, at least. For as they made their way through town, the sight of this caravan of strange-looking men with their servants and guards coming along the road probably soon had every dog in the village barking its head off, and many a chicken was probably cackling away, too, not to mention any goats that may have chimed in as well. If all the noise and commotion of their arrival hadn't awakened the innkeeper by the time they got to the inn, the Magi themselves certainly would have awakened him. And then came the moment of truth.

As the perplexed innkeeper wondered at the strange sight of these men, and what they could possibly want in the village of Bethlehem, one of the Magi had to summon the courage to speak up and tell the innkeeper (or someone, at least) that they were looking for the newborn King of the Jews right there in this tiny, dirt-floor village. And would the innkeeper possibly know where they could find him?

At that point, the jaw of the innkeeper (or whomever they spoke to) must have dropped. For of course, six months beforehand, the strangest thing had happened: One night, a group of shepherds had come running excitedly into the village, telling everyone that a group of angels had appeared to them, saying that the Savior had been born that night in Bethlehem, and that they would find Him lying in a manger. (Luke 2:17-18)<sup>50</sup>

That description matched only one child, of course. And yes, when the Magi asked, the innkeeper did of course know who He was and where He was. And in that moment, he pointed, I believe, to the house where Jesus lived with Mary and Joseph, where the Star---for the next few moments, at least---shone above the house until it disappeared in the morning twilight, and thereby finally came to rest.

The moment the Magi found out from the innkeeper that he knew the very child of whom they were speaking, and the precise location where He could be found while the Star was still presumably visible, the intense fears which must have been pent up to that point would have been dispelled in an instant by this knowledge and replaced by an intense sense of relief instead. For this meant that their goal had in fact been accomplished, and that they would not be humiliated in the eyes of the villagers, or in the eyes of their friends and families when they returned home.

In other words, it might be the case that the main reason (or at least, one of the main reasons) that they rejoiced with exceeding great joy when they saw the Star in Bethlehem is simply the very fact itself that they did actually see the Star at all when they arrived there, and that it had not quite yet disappeared from view, and furthermore, that heaven itself seemed to signal that they had therefore completed their journey and had fulfilled their quest, so the presence of the Star in the heavens was no longer even needed.

And just barely, by the looks of things! They had come hundreds of miles. One or more of them may have come over a thousand miles. The journey may have taken months (for some of

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<sup>50</sup> <http://biblehub.com/kjv/luke/2.htm>

them, at least), and may have been planned for well over a year. The trip was expensive, even without including the cost of the gifts they brought. The entire journey was dangerous, even without considering the specific dangers of the final leg of their journey that night. It entailed enduring hardship the entire time they were travelling, even without considering their need to stay up all night long in order to travel to Bethlehem, surrounded by the cold, winter air. It meant enduring the thought of not knowing, the entire time they were travelling, whether they would be successful in their quest in the end, or whether they were simply off on a fool's errand. Under these circumstances then, their discovery in Bethlehem that they were not wrong about whether the King of the Jews had been born---and their realization that they had successfully found Him in time, even when all of Jerusalem itself was oblivious to the fact that He had even been born---would probably cause virtually anyone to rejoice with exceeding great joy.

## B. The Feast Of The Epiphany

### 1. The Four Epiphany Moments

But even that, I think, does not necessarily explain it all, when it comes to why the Magi rejoiced with exceeding great joy. Let us consider now what event this visit of the Magi is on the Christian calendar. It is commonly referred to as the Feast of the Epiphany. Most Christians have at least heard of this feast, although in many places, and in certain denominations, it is either a minor feast, or it is not celebrated at all. But oddly enough, even many Christians who have heard of this feast do not know what the word "epiphany" means.

First of all, the word epiphany is a word which is used not only in the Bible (and in fact, it isn't even found specifically in the Gospel of Matthew at all); rather, it is also a word with ordinary usage in the English language, though it is used only rarely.

The word epiphany comes from the Koine Greek word *epiphaneia*<sup>51</sup> (pronunciation: <https://swisscows.com/video/watch?culture=en&query=pronounce%20epiphaneia&id=EBF79FDBA001357971D4EBF79FDBA001357971D4>).<sup>52</sup> Strictly speaking, it means "manifestation" or "striking appearance". In practical terms, it also refers to the emotional reaction which a person develops when a person finally, after much study and contemplation, finds the last piece to a puzzle and comes to a striking realization about the true nature of the puzzle.<sup>53</sup> In essence then, the Feast of the Epiphany means the "Feast of the 'Oh, *now* I get it!' moment."

I myself have had several epiphany moments while researching the Star of Bethlehem and coming to the conclusions which I have stated in here, such as when I finally realized---after many, many years of puzzlement---that the Magi could have followed the Star from Jerusalem to Bethlehem by travelling in a semicircle. For it was in that very moment that it suddenly struck me that this method would have been the very tool which they would have needed in order to do so.

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<sup>51</sup> <http://theepiscopalcommunity.org/epiphany/>

<sup>52</sup> <https://www.blueletterbible.org/lang/lexicon/lexicon.cfm?Strong=G2015>

<sup>53</sup> <https://www.merriam-webster.com/dictionary/epiphany>

That was a true epiphany moment for me. And what you yourself have read so far may have likewise produced such moments for you as well. Allow me now to share with you, though, another epiphany moment which I once had, just to illustrate the point even further. It occurred when I was a teenager. I was out on a golf course by myself when I noticed what looked like a silvery disc hovering above the horizon. It didn't appear to move. It wasn't making any sound. It didn't appear to change its height above the horizon. It simply sat there motionless, soundless, just slightly above the horizon.

Having been as active in astronomy as I was at the time, I was in a fairly good position to take a good guess as to what almost anything in the sky might be, but this object totally puzzled me. Then I noticed that slowly but surely, it appeared to be getting slightly larger and larger all around. It still did not appear to move. It still made not a sound. And it still stayed the exact same height above the horizon.

Now I was really puzzled. And this was even starting to get a little scary. I was transfixed by this sight, and I was determined to bring my game to a halt until I could figure out just exactly what this was. Then, after a couple of minutes or so, the object appeared to go from being a perfectly round disc into being a slightly oblong shape. The oblong shape then became more and more oblong as the object continued growing to the left side (from my perspective). It still was making no sound. It still stayed the same height above the horizon. And other than the fact that it appeared to be growing to the left (from my perspective), it still did not appear to move at all.

Then it became even more oblong in shape, until finally I could see what it was: It was a blimp. When I had first seen it, it was coming straight toward me. That is why it had looked like a disc. Then, as it turned to the right (my left), it started to take on an oblong shape, until finally it was discernable as a blimp. At that moment, it finally became manifest as to what it was. I finally got it. I felt a great sense of relief at having solved this intriguing puzzle. And that was an epiphany moment for me.

I believe that the Magi might have had as many as four epiphany experiences all rolled into one when they came to Bethlehem. Each of these possible epiphany moments is highly speculative, I know (especially the first three). But allow me to share my thoughts with you on this, and judge for yourself whether these points are too speculative or not to merit consideration.

a. The "Striking Appearance" Epiphany Of Mother And Child: On Earth As It Is In Heaven

Now, the validity of the first of these possible epiphany moments will depend upon whether their rejoicing when they saw the Star pertains to only one thing: their seeing it physically---that is to say, with their eyes---outside of the house where Jesus was, or whether instead their rejoicing over their seeing the Star was also based on their seeing the Star in the sense of comprehending it as well. Consider these two verses:

10 When they saw the star, they rejoiced with exceeding great joy. 11 And when they were come into the house, they saw the young child with Mary his mother, and fell down, and worshipped him: and when they had opened their treasures, they presented unto him gifts; gold, and frankincense, and myrrh. (Matt.

2:10-11; KJV)<sup>54</sup>

In considering those two verses, here is an important thing to keep in mind: The Greek word which is translated “saw” in verses 10 and 11 (in each of those verses), which is a form of the word *horao* (pronunciation: <https://www.youtube.com/watch?v=x9upRGn3vsw>),<sup>55</sup> is much like the English word “saw”, for it can refer either to seeing in the physical sense (with one’s eyes), or else seeing with the mind’s eye (*i.e.*, understanding something). For instance, in English we might say, “I see your point,” when we tell someone that we understand what the person is saying. The Greek word operates in the same manner.

We should further keep in mind what word is used when the Bible says that King Herod had asked the Magi as to when this Star had appeared. (Matt. 2:7)<sup>56</sup> The Greek word which is translated “appeared” is the word *phainomenou*, a form of the Greek word from which we get the English words “phenomenon”<sup>57</sup> and “phenomenal”.<sup>58</sup> This Greek word does not just mean “appear”, but it also means “to cause to appear”, or in other words, “to bring to light”;<sup>59</sup> it can also mean “I become clear” or “show myself as”, or “became evident”.<sup>60</sup>

In other words, when King Herod took the Magi aside in Jerusalem and asked them about the appearance of the Star, he wasn’t simply asking them about when they saw the Star physically, with their eyes; rather, he wanted to know when it was that in their minds’ eyes, they had come to see (*i.e.*, when they believed that it became evident) that this Star had become phenomenal, so to speak, and had become manifest as being the Star of the newborn king.

With all that in mind, let us now take a look at the Star as they themselves saw it when they arrived in Bethlehem, for we may find yet another reason as to why they rejoiced with exceeding great joy. What I am referring to is something which they would have seen not with their physical eyes, but which instead these men, as Magi, could have seen in the heavens with the mind’s eye, as had been the case when they were at King Herod’s palace, when they could “see” the virgin rise in the eastern sky with the newborn king at her bosom. In the same way, they could have equally been able to behold this next point within their own minds just as if it were fully dark, even though, at the time when they arrived in Bethlehem, the stars were fully washed out of the sky with the glow of daylight.

To illustrate this point, allow me to show you first once again how Jupiter would have looked to their physical eyes when they arrived in Bethlehem:

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<sup>54</sup> <http://biblehub.com/kjv/matthew/2.htm>

<sup>55</sup> <http://biblehub.com/greek/3708.htm>

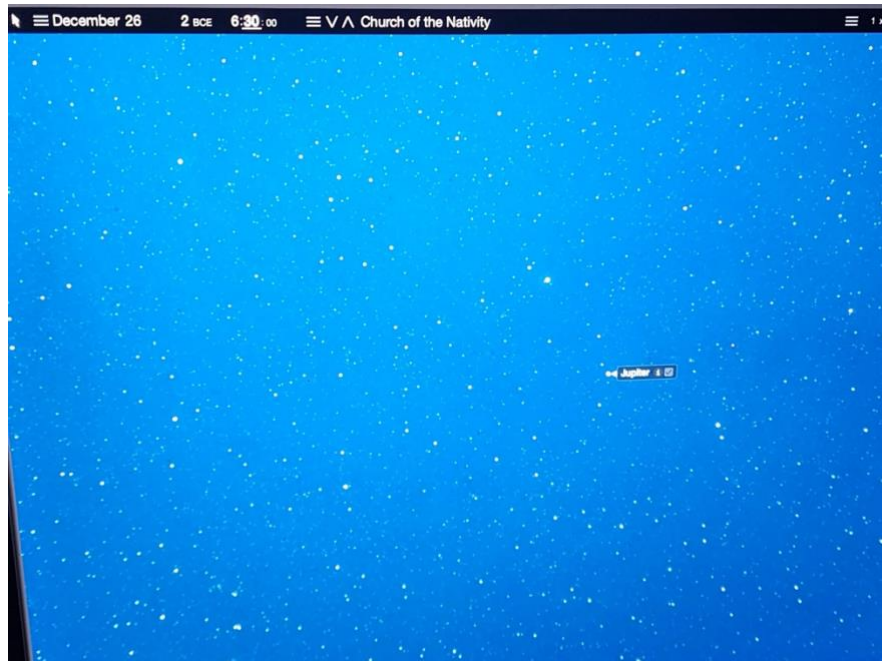
<sup>56</sup> <http://biblehub.com/greek/3708.htm>

<sup>57</sup> <https://www.merriam-webster.com/dictionary/phenomenon>

<sup>58</sup> <https://www.vocabulary.com/dictionary/phenomenal>

<sup>59</sup> <http://biblehub.com/lexicon/matthew/2-7.htm>

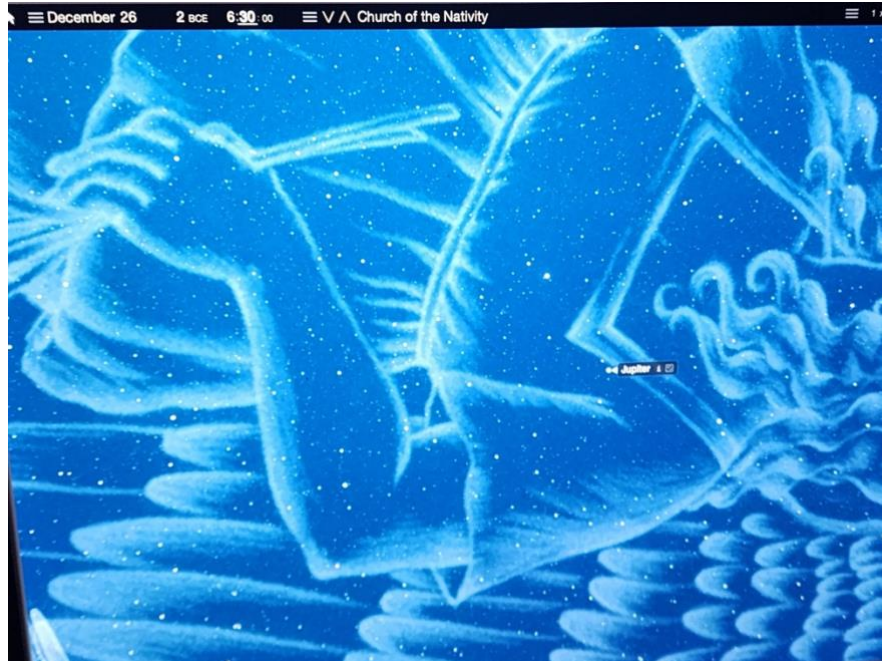
<sup>60</sup> <http://biblehub.com/greek/5316.htm>



Jupiter as seen from Bethlehem at 6:30 A.M. local time on December 26, 2 B.C.  
Images provided courtesy of Starry Night Education. Photograph by the author.

Do you see anything there which might have caused them to rejoice with exceeding great joy? Well, in terms of physical sight, I know that I don't see anything special there, and I'm sure you probably don't, either. But then, as I said, in this particular illustration we are looking at Jupiter as we and the Magi could perceive it with just our physical eyes.

Now, however, allow me to show you how it would have looked to the Magi with the mind's eye. To do that, I will add in the illustrations of the constellations, just to make it easier for you to behold this the same way their minds' eyes would have:



Jupiter and Virgo as seen from Bethlehem at 6:30 A.M. local time on December 26, 2 B.C.  
Images provided courtesy of Starry Night Education. Photograph by the author.

Here is how I think this may have gone: They looked up into the sky; and as they did, in their minds' eyes, they saw the virgin mother lying on her back, her infant child at her bosom. And when the door to the house was opened (by Joseph, presumably) right about sunrise, they may have seen the virgin mother lying on her back, her infant child at her bosom.

In other words, what they could see in the heavens was duplicated by what they saw on Earth. This sight of the heavens themselves duplicating what they were seeing on Earth could easily have overwhelmed them with joy, causing them to shout, laugh, perhaps even make them jump for joy. For now, as they could see the Star physically with their eyes (which just by itself would be enough to cause them to rejoice in the first place), they could also “see” the Star in the sense that they could comprehend the Star. For they could perceive the “striking appearance” (to borrow from the definition of the word epiphany itself) of how the sight of the mother and child on Earth so precisely matched that of the mother and child in the heavens; for the image of the virgin lying on her back with her child at her bosom in the heavens confirmed to them that the virgin whom they now found on Earth lying on her back with her child at her bosom was truly the mother of the one whom they had been seeking. So what was true in heaven was also manifestly true on Earth, and now they became unable to contain their joy.

## b. The Celestial Overlap Epiphany

There is something else which the Magi may have envisioned as they approached the house where Jesus was that may have caused them to rejoice, and this has two parts. For first of all, the position of Virgo which we have just seen while they were in Bethlehem, is an image which overlapped closely with the image of Virgo during Purim in 3752 (9 B.C.) as the moon was leaving the area of the womb and entering into the birth canal, around the time when it would be lined up with the heading of 267 (toward Jerusalem, as seen from Babylon), an event which I think they had quite probably witnessed themselves. They may have taken this as being a sign that they had now found the virgin who had given birth to the promised One, the One whose birth had been imaged in the heavens at Purim seven years earlier:



The moon at 02:34 UTC (5:34 A.M.) on March 8, 9 B.C., showing an azimuth of 266 degrees 43.799 minutes (266.73 degrees) as seen from Babylon (Al Hillah, Iraq).

Images provided courtesy of Starry Night Education. Photograph by the author.

The second part entails the fourth celestial event that pointed to that night itself as the one night when they should go to pay homage to the newborn king, as I had mentioned earlier. In order to consider this part, let us go back to look once more at Jacob's prophecy over his sons as he lay on his deathbed. Concerning his son Judah, to whose tribe King David, King Solomon, and Jesus belonged, he said,

**9** You are a lion's cub, Judah;  
you return from the prey, my son. Like a lion he crouches and lies down, like a lioness—who dares to rouse him? (Gen. 49:9; NIV)<sup>61</sup>

Here we have a peculiar blending of references to Judah in both the male and female sexes:

<sup>61</sup> <https://biblehub.com/niv/genesis/49.htm>

as a son, and as a lioness. And significantly, the word for “cub” can also be translated “whelp”, as is the case in the Douay-Rheims Bible.<sup>62</sup>

A whelp is a newborn animal (such as the newborn of a dog, for instance), and as such it is one that is nursing.<sup>63, 64</sup> With that in mind, let us now also look once again at Jupiter and Venus at the time when Jesus was probably born:



Jupiter and Venus at their apparent closest approach on June 17, 2 B.C.  
Images provided courtesy of Starry Night Education. Photograph by the author.

Here we see Leo (a lioness, actually, according to the prophecy) and her newborn child (Jupiter) together in the portion of the lion which would correspond to the location of the teats of a lioness.

Putting together the image from the night in June when Jesus was probably born with this verse from Genesis, plus the image from the night in December when the Magi probably showed up in Bethlehem, we first find the newborn king nursing at the breast of His mother (in Leo) at His birth in June, and then nursing again at the breast of His mother (in Virgo) upon the Magi's arrival in Bethlehem in December. And since this was the one night when Jupiter was right in the very midst of its stoppage as it prepared to enter retrograde motion, I believe the Magi would have taken this to mean that this was the one night which would truly parallel the imagery in Leo from the night when He was born, and this was therefore the one night above all others when they should come to worship Him.

<sup>62</sup> <https://biblehub.com/drb/genesis/49.htm>

<sup>63</sup> <https://www.revivalanimal.com/pet-health/my-first-litter-dog-whelping/learning-center>

<sup>64</sup> <https://www.britannica.com/dictionary/whelp>

### c. The Heavenly Confirmation Epiphany

If, as I suspect, it was indeed the case that the Magi had arrived at King Herod's palace at the time that they did principally because they believed that they were there not only on the proper day, but also at the precise, proper hour to worship Jesus, then we can imagine, as I said, just how devastated they must have felt when they realized that nobody at the palace that night even had any idea of what they were talking about. For they would have quickly concluded that the journey down to Bethlehem, being as long as it was, could not possibly bring them there at what they then considered to be the exact, proper moment to worship the newborn king; and so they would then have to settle for second best just by making it down there that same night at all.

If such was the case, they must have been nearly kicking themselves with anger and disgust, for they probably would have concluded that they had made a terrible mistake, and that this was all their own fault. And in fact, their feeling of guilt may have added to their resolve to face the dangers of going down to Bethlehem at night, for they may have been eager to do something praiseworthy just to try to make up for what they perceived to be their own poor, foolish performance thus far that night.

But, "Not so," the heavens themselves seemed to say to them in Bethlehem with respect to their possible mistaken perception that they had blown it. For when they looked up and beheld, in the mind's eye, the virgin mother lying on her back with her infant child at her bosom, and when the door opened to the house where Jesus was and they perhaps found the virgin mother lying on her back with her infant child at her bosom, they may have concluded that heaven itself was telling them: a.) they were not guilty of making a foolish mistake after all; and, b.) heaven itself had ordained that *this* particular moment, not eight hours earlier, was in fact the proper time for them to come to worship the newborn King of the Jews. This would be further confirmed if in fact the Star did disappear from view ("stood/stopped/came to rest over") just as they arrived at the house where the child was. For as I said, heaven itself would seem to be saying to them that at that moment, the Star---this king planet---was no longer needed; for they had now finally found the one true king Himself whom this Star had simply represented all along.

Adding to all of this would be the fact that at that moment, as I said, heaven displayed the virgin in the same position in the sky as she had been in during Purim seven and a half years earlier, when the full moon had gone from the womb into the birth canal as the virgin appeared above the horizon out in the direction of Israel. And so God Himself, they may have thereby concluded, had deliberately knocked them off from their own prearranged schedule, and that God had helped them by deliberately arranging for them to come at the true exact, proper moment to worship the newborn King of the Jews instead of at the moment which they themselves had been planning on.

They must have been ecstatic. For heaven itself was revealing a secret: namely, the fact that God Himself had taken an interest in their lives all along and had intervened to assist them in secret, a secret which they now understood. This too may have added to the epiphany aspect of the moment.

#### d. The Hanukkah Epiphany

If, as I suspect, one or more of the Magi were members of Bene Israel, it surely could not have been lost on them that, as I said earlier, they were coming to Bethlehem on the fourth (or fifth) night of Hanukkah to worship the one true God Manifest, the One of whom Antiochus Epiphanes was but a distorted, demonic imitation. And in fact, if any of these Magi were children of Israel at all, then even if they were not members of Bene Israel specifically, and who perhaps may not have celebrated Hanukkah in their home lands (though they probably would have at least known about this feast), they certainly would have been able to appreciate the significance of the fact that this night of their journey was right in the middle of that feast, particularly since the Jews in Jerusalem--in the palace of Herod, and elsewhere throughout the city---would have been celebrating the feast when the Magi arrived in Jerusalem.

Another thing which is pertinent, I think, is that just as the candles of the menorah are a light which shines in midst of the darkness, so also the light of the Star continued to shine for them and to guide them in their journey throughout that whole night, through the otherwise impenetrable darkness of the Judean wilderness. The Star was a light which could not be extinguished, shining faithfully throughout their entire journey in the midst of that dark, moonless night, guiding them steadily, faithfully, through totally unfamiliar territory filled with great danger.

So the light of the Star truly was like unto the candles of Hanukkah, and like unto Messiah Himself. And its light would not fail until the light of the coming sun itself was so overpowering that it chased out all of the darkness and all of the night's shadows. The light of dawn, it would seem, became the very breath which blew out the candle of the Star's light.

Then, when sunrise itself occurred, the light of the new day was finally come. And even the sun itself was now coming back from its long journey to the south, to herald the promise of a new cycle of life and of planting, and of harvesting before too much longer, as well; for at sunrise on December 26<sup>th</sup>, the sun could be finally seen for the first time that season to have moved north from its position at the winter solstice.

Here truly then was God made manifest the proper way, right before their eyes, as they beheld His Son rather than the tyrant Antiochus IV Epiphanes, whom their ancestors had beheld. This was, no doubt, a true epiphany as well. And taken together, the various epiphany aspects of this night which may have been present would surely put Antiochus Epiphanes, the phony "God Manifest", to utter shame. And what a reason for rejoicing that would be!

#### C. The Origin Of The Name Of The Christian Holiday

During my religious instruction when I was a child, I heard it said that this feast is named the Feast of the Epiphany because the Magi saw God manifested in Jesus. Yet, there were many other occasions during Jesus' earthly ministry which also could have been called the Feast of the

Epiphany, such as (most obviously) the aforementioned Transfiguration,<sup>65</sup> because He manifested the essence of God then and on other occasions as well, such as when He turned water into wine,<sup>66</sup> or when He healed people or raised them from the dead.<sup>67</sup> So for many years I wondered, *Why is this feast the specific one which is called the Feast of the Epiphany?* For certainly, various other events throughout His life could be thought of as manifesting His divinity, and I could think of no particularly good reason as to why this one event, above all the others, should be specifically chosen to be called by a name marking His manifestation. And to this day, no one else seems to have come up with a particularly good answer to that question, either.<sup>68</sup>

With that in mind, I can't help but notice the overlap between the name of this feast on the Christian calendar---i.e., the Feast of the Epiphany---and the name of the tyrant (Antiochus IV Epiphanes) whose overthrow led to the feast which the Jewish people were then in the midst of celebrating when the Magi arrived: Hanukkah, the Festival of Lights.<sup>69</sup> In fact, interestingly enough, one of the historical names in Christian culture for the Feast of the Epiphany was "The Feast of Lights",<sup>70</sup> which is the same as one of the accepted Jewish names for Hanukkah.<sup>71</sup> And so I likewise can't help but wonder if perhaps the name of the Christian holiday, the Feast of the Epiphany, derives first of all from the fact that the Magi arrived during the midst of the feast known in Jewish culture as the Festival of Lights,<sup>72</sup> the feast which marks the overthrow of Epiphanes (Antiochus IV Epiphanes), the phony "God manifest".

Furthermore, another reason (perhaps by itself, or in addition to what was just stated) may lie in the fact that the overthrow of Epiphanes no doubt would have had a very special meaning to any Magi who may have been descended from the original members of Bene Israel, who had fled from the tyrant Epiphanes. And so I can't help but wonder if perhaps the knowledge of why this feast is called the Feast of the Epiphany may have simply been lost to our cultural memory in the pages of antiquity.

#### D. A Non-epiphany Reason As To Why They May Have Celebrated

There is one other reason as to why the Magi may have celebrated the way they did. It wouldn't pertain to astronomy or prophecy or spiritual beliefs, or to any type of epiphany. It would pertain instead to biology. Remember, we have reviewed reasons as to why the Magi may have showed up at King Herod's palace around 10:15 or 10:30 P.M. earlier that evening, and we considered that they were probably astonished when they found out that the newborn king wasn't there. This suggests that they planned to present their gifts and worship Him, and then presumably, after that, they would retire for the night in the usual way. But the fact that the newborn king wasn't

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<sup>65</sup> Matt. 17: 1-7, <https://biblehub.com/nasb/matthew/17.htm>

<sup>66</sup> John 2:1-11; <https://biblehub.com/nasb/john/2.htm>

<sup>67</sup> Mark 5:21-43, <https://biblehub.com/nasb/mark/5.htm>; John 11:1-46, <https://biblehub.com/nasb/john/11.htm>

<sup>68</sup> <https://www.learnreligions.com/epiphany-of-our-lord-jesus-christ-542471>

<sup>69</sup> <https://www.britannica.com/story/hanukkah-the-festival-of-lights>

<sup>70</sup> <https://www.goarch.org/-/the-feast-of-epiphany-the-feast-of-lights>

<sup>71</sup> <https://www.myjewishlearning.com/article/why-is-hanukkah-called-the-festival-of-lights/>

<sup>72</sup> <https://www.britannica.com/story/hanukkah-the-festival-of-lights>

at the palace meant they would have to find their way down to Bethlehem if they were to worship Him on that very night itself, and this apparently took them by surprise.

Now, if they had already anticipated the need to ride down to Bethlehem that night, they could have planned accordingly. They could have stayed in bed most of the day and gotten rest, and then have gotten up in the evening to go down to Bethlehem. But since they had had no reason to anticipate that they would have to go down to Bethlehem, they had probably spent the entire day prior to coming to the palace in the usual way. But as it turns out, they did in fact have to make that difficult ride all night long. And the strain on their minds and bodies as they journeyed through the cold night air must have been considerable.

So the relief of tension when they arrived in Bethlehem and found out that they had in fact successfully accomplished their mission could very well have been greatly exaggerated from what it might have been otherwise. In other words, when they arrived in Bethlehem and found out that they had successfully accomplished the goal of their entire lengthy, dangerous journey from their homes hundreds of miles away, and from Jerusalem through very dangerous, unfamiliar territory in the dark (and had accomplished this goal only just barely in time, apparently) they may have simply gotten into a state of giddiness which was greatly heightened by the extreme mental and physical exhaustion which they felt at that moment.

#### V. Where Was The House Where Jesus And Mary Were Located?

No one today can know for a fact where the house was where Jesus and Mary were located when the Magi arrived in Bethlehem. But that does not mean that we cannot at least take an educated guess as to where that house may have been. As I mentioned before, however, let us move cautiously as we conduct our investigations, and most especially on this point, for we have very little data. For we could easily read too much into what little information that we do have, and end up drawing unwarranted conclusions.

Now, as we saw previously, the Magi would have entered Bethlehem from the east. Jupiter would have been ahead and to their left as they headed west into town, and it is possible, as I said, that it did fade from view over one house specifically before they even could have arrived at the inn. If that were the case, then just as an initial matter of our inquiry, the entire area of Bethlehem south of the road which comes in from the east could easily be a potential location of the house, simply on that basis alone. And depending on how large an area archeologists might think that would be, that could potentially constitute quite a large area to consider if one would try to locate the house itself. And I concede that the house may have been anywhere in that area.

Not only that, but if they did make it to the inn before Jupiter faded from view, the innkeeper actually may have directed them to any part of Bethlehem at all, even north of the inn, away from where Jupiter appeared to be from the inn itself. For upon arriving at such a house, when they turned to go into it, they may have been facing to the southwest at that point; if so, Jupiter could have been directly above the house. So technically speaking, we actually have to consider the entire area which the town of Bethlehem would have occupied 2,000 years ago as being at least a potential spot where the house was, and not just the part south of the road they were on.

That being said though, let us now consider two popular myths about where the house may have been. The first myth is that the place where Jesus was would have been the inn itself. Many point out, however, that even though Jesus was apparently born in a stable and then placed in a manger at the inn, the Bible does say that when the Magi arrived, they went into the house where He was and found Him there. As we noticed before, however, a house is not a stable. And so this leads us to the second myth: the idea that the inn *could not possibly* have been the place where Jesus was, and that He *must have been* somewhere else instead.

What this second myth overlooks, however, is the fact that it is highly probable that the inn at Bethlehem would have been run in the same way that some small motels in the United States are run even today: Owners of small motels today do not live away from the motel and then commute to work each day; but rather, the owners of a small, private motel and their families live in a residence which is attached to the motel. So where you find such a motel, you also in essence find a house, so to speak.

This may have had implications for the Holy Family (Jesus, Mary, and Joseph). Remember that on the night when Jesus was born, they were without proper lodging. But when the shepherds came running into the village excitedly, telling everyone about the angels they had seen, and what they had heard, the Holy Family might have been transformed in an instant from being a family which was being forced to sleep in a stable into being honored house guests of the innkeeper, if not in his actual family living quarters themselves, then perhaps as permanent residents in the first guest room which became available.

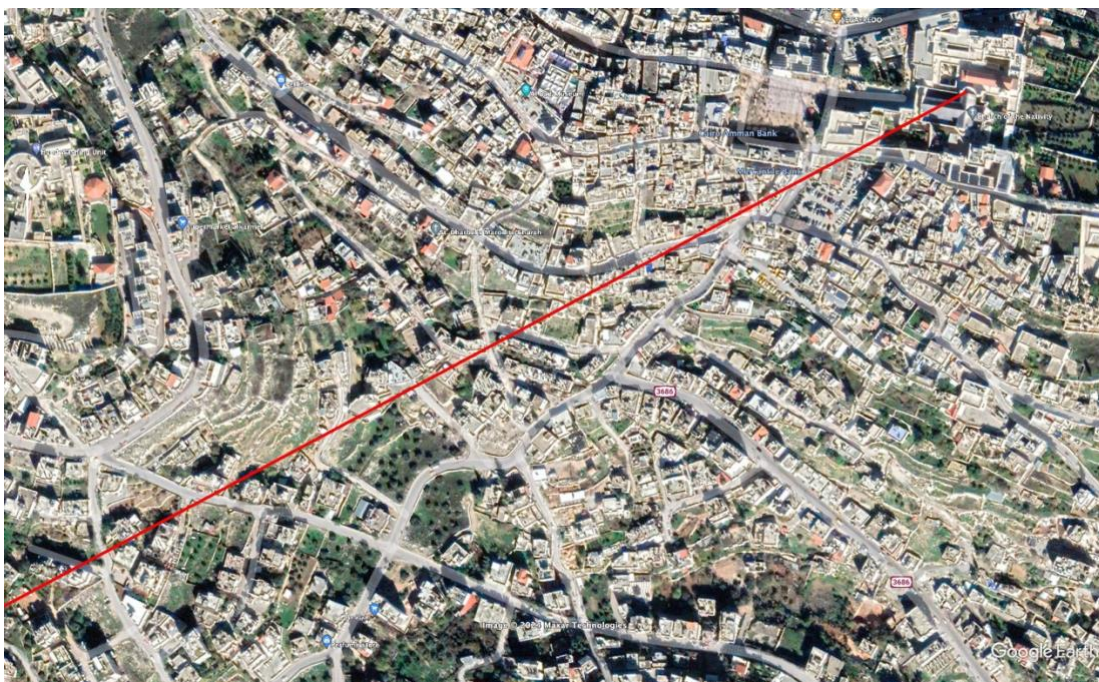
So in considering where the house may have been where Jesus was, let us first consider the inn itself, and its potential function as a house. For if Jupiter completely faded from view as they were at the doorway of the inn, it may have done so (as seen from their perspective) as it was poised above the roof of the inn, marking the living quarters of the inn as the house where Jesus was. At the same time, nonetheless, we must also not lose sight of the fact that the Holy Family may indeed have been in completely separate house.

Now, all that being said, here I will play a hunch. I start with the fact that the present-day Church of the Nativity, which occupies the site of the old inn, is built on the north slope of a ridge, near the bottom of the slope. There may have been houses built on the top of the ridge 2,000 years ago, and if there were, the Star could have been perched directly above one of them when the Magi arrived. For when Jupiter disappeared in the early morning twilight that day, it had an altitude of about 51 degrees above the true horizon. Consequently, its position in the sky at that altitude and azimuth (an azimuth of 242 to 243) would fit perfectly with the description in Scripture of it being over the house (as seen from the entrance to the inn) if the house were on the western portion of the ridge at the top of this hill.

As we consider this possibility, we should keep in mind that the present-day Church of the Nativity is built up one level above the actual grotto where Jesus is believed to have been born. So even though the terrain rises just slightly above the level of the church, the steepness of this rise in elevation probably would have been even more pronounced 2,000 years ago, when the view from

the front of the inn probably would have been from at least a slightly lower level. Another thing to consider, however, is the possibility that if the house where Jesus was located sat on the edge of this ridge 2,000 years ago, then over the past two millennia, erosion could have taken away the soil on which the house actually stood, and part of the land around it, and the house and the soil all around it may have slid down the ridge a long time ago.

Now, since I believe that the passage about the Star no longer moving does pertain at least principally to its disappearance from view due to early morning twilight, I would suggest that the most likely places to consider as possible sites for the house would correspond roughly to a line leading from where the entrance to the inn itself would have been to the top of the ridge at a compass heading of roughly 242 (*i.e.*, to the west-southwest), which is the azimuth which Jupiter had from 6:36 to 6:40 A.M., and which itself is the time frame within which it probably disappeared from view in the glow of morning twilight (most likely at 6:38 A.M.). And this area---starting with the Church of the Nativity, and then moving up to the top of the hill from there---would be the area with the best chance of having been the site of the house where the Magi worshipped Jesus. This illustration demonstrates my point:



The red line shows the line of sight (at a heading of 242 degrees) from the probable location of the entrance to the stable where Jesus was born (now at the north entrance of the Church of the Nativity) in Bethlehem toward the azimuth of Jupiter (the Star) in the west-southwest from 6:36 to 6:40 A.M., as the glow of morning twilight would have eliminated the sight of Jupiter from the sky.

Image from Google Earth Pro: <https://google-earth-pro.en.softonic.com/mac> Photograph by the author.

Of course, I do realize that this part in particular is very highly speculative, for the house where Jesus was, as I said before, could have been literally anywhere in ancient Bethlehem. But if we keep things in perspective, and do not state with certainty as being true something which we cannot possibly know to be a true fact or not, I think it does no harm to at least ponder the various possibilities and consider whether these things are so or not.

## A. The Hidden Sign Of Messiah

As I mentioned at the before, I believe that the movement of the planet Jupiter was not the only thing of relevance to the Bible's account of the life of Jesus that was taking place in the heavens on the night that the Magi came to Bethlehem. There was something else going on as to which even the Magi were not aware. Nor could they possibly have been aware of the meaning of this sign in the heavens, although their eyes probably had beheld the sign itself prior to their arrival at the inn without their even realizing the meaning of what they were seeing.

This sign pertains to something which would have been present in the skies over Bethlehem for about the last three hours of the journey of the Magi that night. But it is its position at the time that they would have reached Bethlehem and gone into the house where Jesus was that would be most significant.

I have placed a discussion of this sign in the Appendix. Therein find THE SOUTHERN CROSS ON THE NIGHT THE MAGI VISITED JESUS.

## VI. The Courage And Faith Of The Magi

Before going further, let us pause for a moment to reflect on what it took in terms of personal character for the Magi to make this journey. I have already touched on this point in part, but I think that the courage and faith of the Magi was so extraordinary that it merits its own section, so that we may dwell on it and come to appreciate it fully.

Picture yourself with them in Jerusalem on the night they went to see Jesus. There, inside the city walls, and inside the palace itself, what did they have, and what did they need? They had warmth, they had light, they had the company and fellowship of people who meant them no harm, and good food as well, if they wanted any. They had peace, safety, security, and a comfortable place to spend the night. They had need of nothing.

Outside the walls, what did they have waiting for them? They were in territory they had probably never been in before. The darkness outside the walls was absolute. There were no street lights ... certainly no cars with headlights, either. There were no stores with lights streaming from the windows, no brightly lit parking lots along the way, no street signs to guide them, and no motels. Not even any moonlight. And the night air would be cold.

They knew the desolate land would be filled with bandits, and there would be no way for them to summon help. Granted, they would have brought their own army with them to guard their lives and their treasures. But it would probably be a small army. For they probably would have traveled their entire journey to Jerusalem in the company of one of the trade caravans which banded together for safety; so they would have had no need of a large force of their own just to get to Jerusalem.

And what if they made a wrong turn while out there in the darkness? What if their skills at astronomy and mathematics were to fail them? Or what if it were to get cloudy all of a sudden, and

their view of the heavens would be blocked? What then? If they made a wrong turn, would they then be able to find their way back to Jerusalem? If they could not do so, then being the relatively small company that they probably were, it would be an extreme risk to bed down for the remainder of the night outside of the city walls, especially since bandits from far off might have seen their torches while they were still moving, and would be eager to move in on them and pounce on the unlucky travelers once most of them were in slumber.

Their plight brings to mind a personal experience which I myself once endured, one which momentarily paralleled---in just a very minor way, compared to their own experience---the type of thing which they were facing. I was going through my instruction in night flying as part of the process of getting my pilot's license. I already had well over 100 takeoffs and landings in my log book when I took off from Tucson with my instructor one night, but this was the first time I had ever flown at night. We headed northwest over the desert to Pinal Airpark, a tiny airport which I had never flown into before. Now, in case you have never heard of Pinal Airpark, that's alright; for it is so far out in the middle of nowhere that even the tarantulas and rattlesnakes have probably never heard of it, either.

I made nine landings at this airpark that night. And at one point in the pattern there came a time, each time around (while turning downwind to base), when the nose of my plane was pointing down toward the desert, and you could see absolutely nothing through the windows: not one single light, or anything else; for there were no lights nearby. And the angle of the plane at that moment prevented one from seeing off into the distance. So there was nothing but pitch blackness all across the entire windshield to greet your eyes.

Since the plane was descending, I could feel the tug of gravity pulling me forward in my seat against my seatbelt and shoulder harness, and I could not help but get the distinct impression, for about ten seconds each time around, that I was falling like a brick into a bottomless pit. It certainly didn't help matters that it was raining at the time---the first time I had ever flown through rain, by the way---and that we had a crosswind of about 35 MPH coming in at a 90-degree angle to a wet, relatively narrow runway. (Pilots take note: In case you're wondering what kind of madness this was, my CFI<sup>73</sup> insisted that this was the best type of weather to receive training in, because then I would be ready for just about anything once I was on my own.)

Fortunately, during that time, I looked at my instrument panel each time and I could see my altitude, my speed, and my rate of descent. So while the back of my mind was screaming at me, "You're falling!", the instruments were nonetheless able to reassure the more cerebral aspects of my consciousness that all was well. Of course, it didn't hurt matters any that my instructor was in the seat beside me, and that he seemed perfectly calm.

During those moments, in order to take advantage of the reassurance which the instrument panel could give me, I had to place complete faith in the laws of physics. I had to bet my life on them, in fact; and I did. While I was going through this, I found myself saying to myself, "I can only be in trouble if these instruments, for some inexplicable reason, have all failed simultaneously, or if the

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<sup>73</sup> Certified Flight Instructor

laws of physics have changed in the past minute or so.” Recognizing that there was virtually no chance that such could be the case either way, I was able to keep myself steady enough to continue in the pattern toward my landing each time; and each time, the laws of physics held true, of course, and I completed that exercise safely.

In like manner, the Magi knew their math, and they knew their astronomy. But now they were in utterly unfamiliar territory, totally on their own, and perhaps trying something new, at least in some respects. And the price to be paid for making a mistake could be their own lives. For the bandits of the desert wilderness of Judea 2,000 years ago would have been as unforgiving to them at that time, of course, as the Arizona desert would have been to me if I had missed the runway.

They knew what they were doing, however, these Wise Men. They knew they were doing an act which would seem to the casual observer to be so foolish as to leave one wondering as to how it is that anyone known as “Wise Men” could ever attempt such a foolhardy thing. Yet their faith held them firm. They would not waiver. They made a plan, and they stuck to it, all the way through. And then, as their reward, they made it to their destination just in time, safe and sound. No wonder they rejoiced with exceeding great joy.

I think we can all learn from that. And I think we definitely should in fact learn from that. For we tend to think of the story of the Magi as being just a charming, heart-warming Christmas story, almost like a children’s fairy tale. But in practice, in real life, it was anything but that. It was instead the exact opposite: It was a spine-tingling, hair-raising ordeal, a matter of life and death, one requiring the boldness of a prophet and the heart of a lion, all stemming from their faith in, and their love for, the one, true God. These are inspiring, character-building traits which we should properly hope to take from the Magi for ourselves.

## **PART FOUR**

### **EVIDENCE OF THE TRUTH OF THE STORY OF THE STAR OF BETHLEHEM FROM WHAT WAS NOT SAID IN THE GOSPEL OF MATTHEW**

All that being said, let us now compare the story of the Star of Bethlehem as it was written (in the second chapter of the Gospel of Matthew) with the way we would expect it to be told if, on the one hand, the life of Jesus were a myth-

--as if Jesus Himself were just a composite character drawn from stories and legends about several different rabbis, prophets, and elders---as opposed to the way, on the other hand, that we would expect the story of the Star of Bethlehem to be told if in fact Jesus was an actual, historical figure, and that these things which are mentioned in the Gospel of Matthew are actual events which did in fact take place.

First of all, picture this: You are a person 2,000 years ago who wants to develop a tale about a fictional character named Jesus in order to present to those around you a series of teachings on God and how to live a godly life. If, on the one hand, you were completely unaware of the celestial events which we have looked at in this book, you could not have included them in your story. But if you were aware of these events in the heavens taking place, and if you did decide to tell of them in

your tale, what would you have done? Would you have told of them the way Matthew did?

Consider this: In telling the story of the Star of Bethlehem the way the Apostle Matthew did, Matthew went out on a limb. First of all, the celestial events themselves could no longer be seen in the heavens when he wrote his Gospel, so he had nothing to show to skeptics and doubters as evidence in support of what he said. He had no computer screens with fascinating displays of the heavens, etc., and there were no planetariums to develop Christmas shows about this. In fact, for reasons which I shall develop in a moment, we can conclude that apparently, he didn't see (or at least, he didn't notice) these events as they were taking place (that is, if Matthew had even been born and was old enough to have remembered them). Instead, he apparently was simply told about them by Jesus or Mary (Joseph apparently having died before Matthew would have met Jesus).

Second, although believing in what he said is not dependent upon a belief in astrology (which, as I have said, runs contrary to the Bible, and was punishable by death in ancient Israel),<sup>74</sup> and although the Magi themselves did not necessarily have to be astrologers in order to follow these signs in the heavens, it is nonetheless the case that Matthew's story of the Star of Bethlehem does at least touch upon the basic framework of astrology (*i.e.*, astronomy, the study of the heavens generally), even if it does not actually embrace astrology itself. And so Matthew could have easily opened himself up to criticism in his Jewish culture just by telling this tale at all.

Third, he tells of an event which must have seemed to be just as impossible back in his day as it does to us today: namely, that some people followed a star from Jerusalem to Bethlehem, which lies to the south-southwest of the Old City portion of Jerusalem. For everybody knows that stars, generally speaking, travel from east to west. In fact, this would be even more obvious to people living back then than it would to us today because of the desert climate and the lack of city lights, which today wash out the light of so many of the stars.

The ancient people, from the most well-educated to the most illiterate, grew up watching the heavens under absolutely ideal conditions. And so they would have known even better than most people do today that the idea that someone could follow a star from Jerusalem to Bethlehem would seem like sheer madness, not to even mention the fact that supposedly, somehow, they apparently first headed east, as the Star was rising, in order to follow the Star to the south. And then, on top of all that, the Star then supposedly stood over the house where Jesus was, something which would have seemed as improbable back then as it would to people today.

By contrast, if anyone knew anything at all about this series of events in the heavens, and decided anyway to make up a fictional tale about these things supposedly leading a group of Magi from Jerusalem to Bethlehem, such a person would have either wanted to leave out the part about the Magi following a Star to Bethlehem (if the person knew no more details than Matthew seems to have known) just to avoid skepticism and criticism, or else one would have wanted to research the matter in order to include as many of the details which I have mentioned here as one possibly could in order to show people how this really could have worked, and thereby enhance the credibility of the story.

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<sup>74</sup> Deuteronomy 17:2-5: <https://biblehub.com/nasb/deuteronomy/17.htm>

That is to say, if this were a made-up story, one would not have given only the sketchy, incomplete details which we find in the Gospel of Matthew, thereby placing one's personal credibility---and the plausibility of the whole story of the supposedly fictional character---in doubt. So if one only knew a few sketchy details about these celestial events, and nothing more than that (as was the case with Matthew himself, apparently), then surely one would not have included any of them at all in a story which one was simply making up out of thin air unless one could, through thorough research, also add at least some of these important details which I have shared with you in this book in order to make the whole story seem plausible instead of highly implausible, which is how the story strikes most people just on the face of things to this very day.

Instead, however, Matthew did tell his tale the way he did. As I say, he went out on a limb in several ways by writing the story of the Star of Bethlehem. Now, why would he have done that?

Well, consider this: The fact that he did tell the story the way in which he told it is not only inconsistent with the idea that he was just making up the story about the life of Jesus (for the reasons I have just stated above), but rather, it is instead entirely consistent with what one would expect of someone who had heard the few details which he did write about in this story, someone who believed them to be true, and who quite deliberately went out on a limb to include them in his Gospel simply because of the plain and simple fact that he did believe that these things are true and that therefore they ought to be told, just for that reason alone; it is furthermore consistent with what we would expect of someone who believed that he could just rely on God to support him in this, even though the tale might leave many people shaking their heads in disbelief.

So just exactly how much could we expect Matthew to have known, if in fact these things were true, and he had heard about them? Well, first of all, how would he have even heard about them in the first place? Jesus would have been too young at the time that the Magi appeared to have given to Matthew His own, first-hand account of these events. And as I said, most scholars believe that when Jesus entered into His earthly ministry, His earthly father, Joseph, was already dead. So that would leave Mary, Jesus' mother, as the sole original source of what Matthew heard, although he may have heard of these things from Jesus as an indirect source, because Jesus would have learned them from His mother, Mary, and from Joseph.

And what would Mary and Joseph have known about what was going on? Neither of them would have spoken the native language of any of the Magi, so they would have understood nothing that they overheard while the Magi rejoiced upon finding Jesus. They would have understood only the things which the Magi or their interpreters would have told them in Aramaic, the native language of Mary and Joseph. And since probably neither Mary nor Joseph would have been well-versed in the technical details of astronomy, they probably would not have understood much even then.

Furthermore, Scripture implies that the Magi didn't stay in Bethlehem very long. So there probably was not very much time to teach Mary and Joseph, from start to finish, the entire story of the Star of Bethlehem in detail; and so the whole thing must have been bewildering to them.

Consequently, the fact that Matthew did say what he said in telling us this story about the Star of Bethlehem, while leaving out almost all of the details which anyone probably would have

felt necessary to include in the tale if one were simply making up this story, suggests that the account by Matthew is an account written not by someone who just made the whole thing up, but rather that it was written by someone who did in fact hear this tale from someone who was an original source, someone who was a highly-reliable eyewitness and earwitness to what took place on the morning that the Magi arrived in Bethlehem (*i.e.*, Mary, the mother of Jesus).

Thus, ironically enough, that which is *not* said in the Gospel of Matthew about the Star of Bethlehem---*i.e.*, the nearly total lack of important details on point---turns out to be just as important as what is actually said in the Gospel of Matthew; for it is this lack of detail which tells us that the Apostle Matthew wasn't simply making this up and concocting a story to fit around these facts, and that instead he went out on a limb to tell us all this tale just based on the very few bits and pieces of a true-life story that he had really heard, simply because he believed what he had heard from Mary and/or Jesus to be true, even if he would be subject to derision and possibly even place himself in danger for saying the things that he did say in telling the story.

On that note, we can also see here a parallel thing pertaining to the celestial signs which are not mentioned in Chapter Five of the Book of Daniel, as is discussed in the Appendix. Specifically, in the Appendix, I again refer you to the section therein on the Book of Daniel, and specifically to the portion entitled The Signs In The Heavens Which May Relate To The Handwriting On The Wall.

*This completes Volume 3 of The Star of Bethlehem Decoded. All four volumes plus the Appendix can be found at [StarOfBethlehemDecoded.com](http://StarOfBethlehemDecoded.com).*