# GOLIATH AND THE EXODUS GIANTS: HOW TALL WERE THEY? 

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## I. INTRODUCTION

Daniel Hays, in his article "Reconsidering the Height of Goliath" in the December 2005 issue of the Journal, argued that the giant Goliath, who was killed by David, was only 6 feet 9 inches tall and not 9 feet 9 inches. The key passage on the height of Goliath is 1 Sam 17:4-7, which reads as follows:
4. Then a champion came out from the armies of the Philistines named Goliath, from Gath, whose height was six cubits and a span.
5. He had a bronze helmet on his head, and he was clothed with scale-armor, which weighed five thousand shekels of bronze.
6. He also had bronze greaves on his legs and a bronze javelin slung between his shoulders.
7. The shaft of his spear was like a weaver's beam, and the head of his spear weighed six hundred shekels of iron; his shield carrier also walked before him.
[NASB]
The nasb quoted above, like all other English translations of the OT, is based on the Masoretic Hebrew Text of 1 Samuel 17. However, Hays in his article argues that there is a textual error, made by a sloppy or exaggerating scribe, in the height of Goliath as given in the мт. He correctly notes that one Hebrew text [4QSama] from the DSS and most versions of the LXx give Goliath's height as 4 cubits and a span instead of 6 cubits and a span. ${ }^{1}$

According to Hays, this 4-cubits reading should be adopted; this means that Goliath was only 6 feet 9 inches and not 9 feet 9 inches tall. ${ }^{2}$ In other words, he assumes that the Lxx/Dss texts are correct and that they both contradict and should be used to correct the mt on the size of Goliath. As a result, Hays argues that Goliath was a very large man at 6 feet 9 inches, but not a real giant. However, there are good biblical, archaeological, and historical reasons for rejecting these assumptions.

This paper will argue that while the MT and the LXX/DSS appear to be in conflict with one another, they actually are not. This paper will also argue that both the 6 -cubits reading and the 4 -cubits reading of 1 Sam 17:4 give the same basic height for Goliath. In addition, this paper will argue that both

[^0]readings are saying that Goliath was about 8 feet tall, but not 9 feet 9 inches. This paper on the height of Goliath will also seek to answer the related question: How tall were the exodus giants? As will be seen, these two questions are directly tied to one another, since it is almost certain that Goliath was a descendant of the Anakim giants who lived in Canaan at the time of the exodus.

Before beginning this study on how tall Goliath and the exodus giants were, it is necessary to review five key assumptions made by Hays either explicitly or implicitly in his article. Below is a brief list of his assumptions:

- the DSS/LXX reading contradicts the mT
- the DSS/LXX's reading is correct; the MT's is a textual error
- both the DSs/Lxx and the mt used the same size cubit
- the size of this ancient common cubit was 18 inches
- Goliath was only 6 feet 9 inches tall

As will be seen, this paper rejects these five assumptions. However, there are two assumptions by Hays which are considered correct:

- King Saul was between 6 and $6^{1 / 2}$ feet tall
- David was 5 feet to 5 feet 3 inches tall


## II. HOW BIG WAS THE ANCIENT CUBIT?

Hays in his article assumes that the ancient cubit referred to in both the mт and the LXX/DSS texts was 18 inches. While many modern reference works, and even the nasb translation of the Bible in footnotes, do list the ancient biblical cubit as 18 inches, this can be very misleading, and I believe that these sources misled Hays.

In considering the size of the ancient cubit, there is another related measurement in the Bible that must be studied along with the cubit-the span. The ancient cubit was the distance from the elbow to the tip of the middle finger. The span was the distance between the tip of the little finger to the tip of the thumb, when the fingers were spread as far a part as possible. The ancients assumed that two spans made a cubit. Using 18 inches as the size of a cubit, this would mean that a span was 9 inches.

The problem is that this ancient system of measuring by cubits and spans was very inconsistent. It depended upon the size of the person doing the measuring. For example, I am just under 6 feet tall; my cubit is 19 inches, but my span is $83 / 4$ inches. It should be noted that two spans for me are $171 / 2$ inches, not 19 inches. For almost everyone, two spans are shorter than one cubit. It should also be noted that this ancient system varied greatly depending upon the size of the person doing the measuring. Let me illustrate this point by using a couple of modern examples.

When I was a boy, I once went with my grandfather to look at a horse that was for sale. He needed a horse to match the size of another horse he owned so that he could form a team. It is important that horses in a team be
the same size. When he went to see the horse that was for sale, he measured its height by placing one hand side by side over the other. The horse had been advertised as being a certain number of hands tall (I forget the exact number), and my grandfather found it over one hand short of what was advertised. Did this mean that the seller was dishonest? No, it only meant that the seller's hand was not as large as my grandfather's. My grandfather decided not to buy this horse. Earlier he had measured his own horse using his hands and knew that it was larger than the one that was for sale. While inaccurate and highly variable, this system worked well for my grandfather. The same was true for the ancients using cubits and spans. Incidentally, there is a standardized "hand" used by professional horse breeders today. I am no expert, but I believe that it is 4 inches.

Another good example is the modern 12 -inch foot. The overwhelming majority of people in the world have feet that are well under 12 inches long, the standardized English foot. I have used my own feet and seen other people use their feet to measure the approximate length of something when a tape measure was not available. However, my foot is only $10 \frac{1}{2}$ inches. Today the standardized foot for measuring is 12 inches, but it should not be assumed that this was always true in other historical periods in England. I remember reading somewhere that the 12 -inch foot was not officially adopted until the reign of the English King Henry VIII in the 16th century. Henry's 12-inch foot seems to have been used as the standard, and he was about 6 feet 4 inches tall.

Originally the equestrian hand and the English foot were both variable, but in time became standardized. The ancient cubit, too, was variable, and attempts were made by kings and other powerful people to standardize it. The problem is that even standardized royal cubits varied greatly in the ancient world. Standardized royal cubits in the ancient Near East were almost always based, at least in theory, upon the king's cubit, although there were some temple complexes in Mesopotamia, which appear to have had their own standardized cubit. For ancient Canaan it appears that $171 / 2$ inches was the royal cubit, at least this was the size of the cubit used to build a royal palace in pre-Israelite Megiddo. ${ }^{3}$

In Egypt the standardized royal cubit remained constant at 20.65 inches throughout its history. ${ }^{4}$ The Egyptian common cubit is sometimes given in references books as $171 / 2$ inches, but this is very misleading, since there was no standardized common cubit in ancient Egypt, or for that matter anywhere else. In Mesopotamia the standardized royal cubit varied. In Babylonia in southern Mesopotamia it was 19.8 inches. ${ }^{5}$ However, archaeological evidence from northern Mesopotamia, which was obtained from the royal Assyrian palace at Khorsabad [Dur-Sharrukin], indicates a cubit that was about

[^1]15.9 inches. ${ }^{6}$ The Khorsabad cubit is probably very close to what the common cubit of the average person would have been in the ancient Near East. The Khorsabad royal cubit may have even been based on the common cubit. If so, it was the only standardized common/royal cubit known to have been used in the ancient Near East.

Ancient kings liked to be thought of as big men, and frequently, as their artwork shows, exaggerated their height. The 20.65 inch royal cubit used in Egypt would suggest that the pharaoh was about 6 feet 5 inches tall. To my knowledge, not one single mummy of an Egyptian pharaoh has ever been found that was even close to being this tall. Even though the king's cubit was clearly exaggerated, Egyptian royal officials always used this standardized royal cubit.

However, it should not be assumed that the average person used exaggerated royal cubits in everyday life, especially for measuring everyday things like the size of a horse or the size of a dead man, that is, Goliath lying on the ground. In other words, royal cubits and common cubits varied greatly in size, and the average person would have used his own cubit and not the royal cubit for making everyday measurements.

With the possible exception of the Khorsabad cubit, common cubits were never standardized, varied greatly from person to person, and were by their very nature always considerably smaller than the royal cubit. Modern scholarly speculations on the size of the common cubit, which are generally based upon archaeological evidence from large non-royal buildings, can also be very misleading. Only important people built temples, private palaces, and other large buildings in the ancient world, and it is highly likely that they too, like kings, exaggerated the size of their cubit. It should be noted that it was common, even in non-royal Egyptian tombs, for important people in artwork to exaggerate their size in relation to other people.

It is highly unlikely that the Israelites had developed their own official standardized royal cubit during the early period of the reign of Saul when David killed Goliath. Unless it is specifically stated in the Bible that some sort of "royal" cubit is being used, it should generally be assumed that the common cubit is being employed. Actually, the ancient Israelites may have never developed their own standardized royal cubit.

The ancient Jewish palace at Ramat Rahel, which was built by King Hezekiah and which dates to the late 8th century BC, was, according to its excavator, laid out in royal Egyptian cubits. ${ }^{7}$ It should not, however, be assumed that the royal Egyptian cubit was the standardized royal cubit always used in ancient Israel. Hezekiah was a lover of all things Egyptian. He even placed Egyptian symbols-winged sun disks and four-winged scarab beetles-on his own royal l'melekh seals. ${ }^{8}$

There is one passage of Scripture which appears to give an ancient "royal" Jewish cubit of some sort, although as was indicated above this royal

[^2]cubit may have been borrowed and not native. This passage is Ezek 40:5, and the key portion of this verse reads as follows: "and in the man's hand was a measuring rod of six cubits, each of which was a cubit and a handbreadth" [nASB]. This verse suggests a royal cubit that was a handbreadth larger than the common cubit. The prophet Ezekiel was a captive Jew living in the Babylonian Empire at the time that he wrote this passage of Scripture. If it is assumed that Ezekiel was thinking in terms of the Babylonian royal cubit of 19.8 inches, then subtracting a handbreadth of $31 / 2-4$ inches gives a common cubit of about 16 inches. Even if it assumed that Ezekiel was using the royal Egyptian cubit, his common cubit would still have only been about $163 / 4$ inches. However, it is likely that Ezekiel was simply adding a handbreadth to the everyday common cubit of the average person in Israel.

Since the common cubit varied with the person doing the measuring, in considering the height of Goliath, it is first necessary to ask the question: How tall was the person doing the measuring? It was probably David who measured Goliath. It should be remembered that David cut off Goliath's head and carried it away, and measuring him after this would have been problematic. However, the arguments given below would have held true for any average Israelite of that period. But for the sake of argument, assume that David did the measuring. David was a teenage boy, and as 1 Samuel 17 indicates, he certainly was considerably smaller than King Saul.

It is very likely that David was about the size of an average Jewish male at that time. In his article, Hays correctly notes that the average Jewish male was between 5 feet and 5 feet 3 inches tall at that time. ${ }^{9}$ However, David, being a teenager, might not have yet attained his full height. In addition, Hays himself cites ${ }^{10}$ Victor Matthews's Manners and Customs in the Bible, which gives the average male Semite's height during the earlier patriarchal period as only 5 feet. ${ }^{11}$ Hence it is very possible that teenage David was less than 5 feet 3 inches tall, and he may have been only 5 feet tall or less. But for the sake of argument, let us assume that David was 5 feet 3 inches tall.

If it is assumed that David measured Goliath, then the question arises: How big was David's cubit? One thing is for certain: his "common" cubit would not have been 18 inches. An 18 -inch cubit would suggest someone who was about 5 feet 8 inches tall, not 5 feet 3 inches. My unscientific, but I believe fairly accurate, study of students and a few other individuals who are about 5 feet 3 inches tall suggests a cubit of slightly more than $16 \frac{1}{2}$ inches. For those who are 5 feet tall, their cubit would be about 16 inches. Assuming a $16 \frac{1}{2}$ inch cubit for a David who was 5 feet 3 inches would indicate that, according to the 6 -cubit мт, Goliath was about 8 feet 11 inches tall. Incidentally, David may have measured Goliath with his helmet on, and this may have increased his height. The Philistines are known for the plumed helmets they wore.

There is, however, another factor that must be considered when trying to calculate Goliath's height in modern feet and inches. Was Goliath first

[^3]measured in spans, and were the spans then converted into cubits? It seems very likely that this was the case, and yet two spans are always shorter than one cubit. It should be noted that both the mт and the Lxx/DSs texts mention a span when giving Goliath's height.

If it is assumed that the measurement of Goliath's height was first made in spans, and then converted into cubits, then his size shrinks further. My unscientific study indicates that people who are 5 feet 3 inches tall have spans that are slightly under 8 inches. But for the sake of argument, let us assume 8 inches. This would shrink Goliath to about 8 feet 8 inches. This is very close to the 8 feet 7 inches the Khorsabad cubit would yield for Goliath's height.

At this point it should be noted that it is likely that Goliath was several inches shorter than this, since the span of most people who are 5 feet 3 inches tall is slightly less than 8 inches. And in addition, if teenage David, a Semite, was not 5 feet 3 inches tall, say 5 feet even, then his span would have been even less than 8 inches. Again it should be remembered that 5 feet to 5 feet 3 inches was the range in the height of the average Semite male at the time of David.

My own unscientific study of the span of people who are about 5 feet tall indicates a span closer to $71 / 2$ inches. If it is assumed that David's span was $71 / 2$ inches, then Goliath would have been about 8 feet 2 inches tall. This places Goliath well within the range of modern giants. According to Guinness World Records, the tallest man ever was Robert Wadlow who was slightly over 8 feet 11 inches tall. ${ }^{12}$ Wadlow died in 1940, and currently the tallest living man is Xi Shun of Inner Mongolia in China who is 7 feet 9 inches tall. ${ }^{13}$

As was stated above, Hays's argument on the height of Goliath is based on an assumed cubit of 18 inches. However, if it is assumed, as was almost certainly the case, that Goliath was measured in true common cubits, then Hays, using the Lxx/DSs's 4 -cubits reading, has a major problem: he would have to shrink Goliath considerably from 6 feet 9 inches.

Assuming the $171 / 2$ inch cubit found at Megiddo, then at 4 cubits and a span, Goliath would have been slightly under 6 feet 7 inches tall. But if it is assumed that Goliath was measured in 8 inch spans or 16 inch cubits, Goliath would shrink to 72 inches, in other words to exactly 6 feet tall. If the span used to measure Goliath is assumed to have been $71 / 2$ inches, Goliath shrinks even further to 5 feet 8 inches. This is a very short giant!

## III. SCRIPTURAL CONTEXT AND THE HEIGHT OF GOLIATH

When dealing with any textual or interpretive problem in the Bible, it is always necessary to place that problem in its scriptural context. When this is done with the height of Goliath, there are four major contextual problems, which arise against the theory that Goliath was only 6 feet 9 inches tall.

[^4]First, 1 Sam 9:2 states that King Saul was head and shoulders taller than all of the other Israelites. Hays himself therefore rightly concludes that King Saul was between 6 and $61 / 2$ feet tall. ${ }^{14}$ For the sake of argument, let us assume that King Saul was 6 feet 3 inches. Even assuming an 18 -inch cubit, Saul was only about 6 inches shorter than Goliath's 6 feet 9 inch height. But if it assumed that Goliath was measured in $17 \frac{1}{2}$ inch Megiddo cubits, Goliath would have only been about 6 feet 7 inches tall, only 4 inches taller than King Saul at 6 feet 3 inches.

However, as was noted above, if an 8-inch span [or the Khorsabad cubit] was used to measure Goliath, then Goliath would have been only 6 feet even and would have been shorter than Saul! Things become even worse when a small $7 \frac{1}{2}$ inch span is used, since Goliath then would only be 5 feet 8 inches tall, 7 inches shorter than Saul. However, 1 Samuel 17 clearly considers Goliath as much taller than Saul. King Saul in 1 Samuel 17 is clearly portrayed as a coward, but shrinking Goliath to 6 feet even, or even worse to 5 feet 8 inches, makes Saul into a world-class coward!

The second major biblical problem is $1 \mathrm{Chr} 11: 23$, which states the following about Abshai, the cousin of David:

> He killed an Egyptian, a man of great stature five cubits tall. Now in the Egyptian's hand was a spear like a weaver's beam, but [Abshai] went up to him with a club and snatched the spear from the Egyptian's hand and killed him with his own spear. [NASB]

In other words, assuming an 18-inch cubit, Abshai killed a giant who was 7 feet 6 inches tall, and yet David only killed a giant who was 6 feet 9 inches tall. Incidentally, there is no Lxx textual problem with the 5-cubits height given in 1 Chronicles 11 for this tall Egyptian. It is strange that 1 Samuel 17 makes so much of David having killed Goliath at 6 feet 9 inches when Abshai killed a giant who was 7 feet 6 inches tall!

The third major biblical problem is the implied height of King Og of Bashan, who the book of Deuteronomy says was a member of a people called the Rephaim. The Rephaim were a people encountered by the Israelites at the time of the exodus. In the Lxx, the name Rephaim is always translated into Greek as "gigantes," that is, "giants." As will be seen below, there are strong historical and biblical connections between the exodus giants and Goliath. Deuteronomy 3:11 states:
> (For only Og, king of Bashan was left of the remnant of the Rephaim. Behold, his bedstead was an iron bedstead; it is in Rabbah of the sons of Ammon. Its length was nine cubits and its width four cubits by ordinary cubit.) [NASB]

While the above passage does not give Og's height, it is clear that he was very tall. Assuming an 18 -inch cubit, Og's bed was $131 / 2$ feet long and 6 feet wide. There is no textual problem for the size of Og's bed. Incidentally, this passage from Deuteronomy also tells the reader that there was an "ordinary cubit." In other words, there were different sized cubits used by the ancient

[^5]Israelites. Moses, being familiar with the royal Egyptian cubit, seems to have wanted his readers to know that common cubits, not royal cubits, were being used. In royal Egyptian cubits, Og's bed would have been $151 / 2$ feet long!

If an "ordinary cubit" of 16 inches is assumed, Og's bed would have been exactly 12 feet long and 5 feet 4 inches wide. This would be an appropriately sized bed for a man who was over 8 feet tall, but not for a man who was only 6 feet 9 inches tall or less.

While some Bible critics would question this story of Og's iron bed based upon the assumption that iron was not yet in use this early, Allan Millard has as an excellent article on Og's iron bed in Bible Review, and he deals very well with the evidence for the early use of iron in the Late Bronze Age in the ancient Near East. ${ }^{15}$

And, the fourth major biblical problem is the weight of Goliath's armor. It should be noted that the weight given for Goliath's scale armor in 1 Sam 17:5 excluded his helmet, sword, spear, javelin, and greaves. His scale body armor alone weighed, as Hays himself correctly notes, from 125-135 lbs. The weight of all of Goliath's armor and weapons must have been well over 160 lbs., and this suggests that he was not only tall, but also a very large man.

The weight of the armor and weapons that Goliath was carrying was about three times as heavy as that of a fully armored Greek hoplite soldier of the classical period. Hays tries to deal with this issue by arguing that Goliath, while not exceptionally tall, was large and powerfully built. Hays also argues that Goliath, because he was so strong, wore armor thicker than other soldiers, and that this explains the great weight of his scale armor. In other words, Hays argues that the weight of Goliath's armor just shows that he was strong rather than giving evidence of his great height. ${ }^{16}$

However, no ancient soldier would have carried more weight in his armor into battle than was necessary for protection. Scale armor, which the biblical text says Goliath wore, was designed to be flexible, and adding extra weight would have detracted from flexibility. The Sea Peoples/Philistines, who invaded Egypt in the early 12th century bc, are pictured in Egyptian art wearing scale armor, which was almost certainly exactly like Goliath's, and they are also depicted as being agile in battle. Roman soldiers later also wore a version of scale armor for its flexibility.

Hays, in trying to defuse the issue of the weight of Goliath's armor and spear, makes a historical error in his discussion on Goliath's spear. Based upon an article by the famous archaeologist Yagael Yadin, Hays incorrectly assumes that Goliath threw his huge spear in battle. ${ }^{17}$ Spears in the ancient world were used for thrusting and only javelins were thrown, as 1 Chr 11:20 clearly shows. It should be noted that Goliath carried both a spear and a javelin (1 Sam 17:6-7). Goliath was prepared to engage the enemy at a distance by throwing his javelin, at mid-range by thrusting with his spear, and at close range by cutting with his sword. Goliath's huge spear with its

[^6]15 lb . point would have been used to punch holes in a line of foot soldiers. Goliath even seems to have used both hands to swing his huge spear, since he had another man carrying a shield in front of him.

The DSS/LXx's reading of 4 cubits and a span for the height of Goliath does not match well with any of the portions of Scripture studied above. On the other hand, the mт's reading of 6 cubits and a span does match very well.

As was noted above, Hays understandably assumes that the 4 -cubit reading of the DSS/LXX is in conflict with the 6 -cubit reading of the mT. This assumed conflict between the mт's 6 -cubits reading and the Lxx/Dss's 4 -cubits reading will be resolved in the last section of this paper. However, before considering this issue, there are two other related features, which must be studied. First, what does the Bible have to say about Goliath's ancestors the Anakim giants who are mentioned in the exodus story and in other biblical texts? And second, what do Egyptian texts have to say about the Anakim giants and their height? As will be seen, their height is given in an ancient Egyptian text.

## IV. THE ANAKIM GIANTS IN THE BIBLE

In the OT, the exodus giants whom the Israelites encountered in Canaan are called by several different names: the Rephaim, the Emim, the Zamsummin, the Anakim, and the Nephilim. It is necessary first to take a brief look at these five names, and second to look for the places where these peoples were located. The names Rephaim, Emim, Zamsummin, and Anakim are actually different names for the same basic people. This can clearly be seen from several biblical texts. In the following passages of Scripture, I have emphasized these five key names. Genesis 14:5 states,

In the fourteenth year, Chedorlaomer and the kings that were with him defeated the Rephaim in Ashteroth-karnaim and the Zuzim in Ham and the Emim in Shaveh-kiriathim. [NASB]

Even though the Hebrew word Rephaim should almost certainly be translated as "giants" as is done in the Lxx, for the sake of argument it will be assumed here that the NASB is correct in rendering Rephaim as a proper noun, in other words as the name of a people. It should be noted that the nasb inconsistently renders this same Hebrew word, but preceded by the Hebrew definite article, as "the giants" in $1 \mathrm{Chr} 20: 4,6,8$. While it is not apparent from Gen 14:5, the Rephaim and Emim were the same people, who were living in two different areas to the east of the Jordan River and Dead Sea. Both the Rephaim and the Emim are also to be identified with the Anakim. This can be seen in Deut 2:10-11, which states:

The Emim lived there [in Moab] formerly, a people as great, numerous, and tall as the Anakim. Like the Anakim, they are regarded as Rephaim, but the Moabites call them Emim. [nasb]

Deuteronomy 2:20 even gives one more name to the Rephaim who lived east of the Jordan River and Dead Sea. It reads as follows:

> It [the land of the Ammonites] is also regarded as the land of the Rephaim, for Rephaim formerly lived in it, but the Ammonites call them Zamsummin. [NASB]

In the passages cited above, the Emim, Zamsummin, and Rephaim are all said to have once lived east of the Jordan River and Dead Sea. There are a variety of biblical texts that also place the Anakim and some Rephaim to the west of the Jordan River and Dead Sea.

If it is assumed that the word "Rephaim" is a proper noun and the name of an ancient people, then "Rephaim" was a general name used for the Emim, Zamsummin, and Anakim. Anakim was a tribal name for the Rephaim who lived west of the Jordan River and Dead Sea, and Emim and Zamsummin were tribal names for the Rephaim who lived east of the Jordan River and Dead Sea in Moab and Ammon. Those Rephaim living east of the Jordan River and Dead Sea, but not in Moab or Ammon, were simply called Rephaim. However, as was noted above, the name "Rephaim" should almost certainly be translated as "giants," as is always done in the Lxx. As was seen above in Deut 3:11, the Israelites eliminated the Rephaim/giants, except for King Og, who lived east of the Jordan River and Dead Sea.

The location of the Anakim to the west of the Jordan River and Dead Sea can be seen in the classic biblical passage dealing with the exodus story where ten of the twelve spies give their bad report on the land of Canaan to Moses and the Israelites. Numbers 13:22 reports that the spies saw Anakim living in the city of Hebron, which is located only about 25 miles south of Bethlehem. As will be seen below, there is a connection between the area of Bethlehem, David's hometown, and the Anakim/Rephaim giants. Numbers 13:33 has these ten spies telling Moses and the Israelites that in the city of Hebron:

There also we saw the Nephilim (the sons of Anak are part of the Nephilim); and we became like grasshoppers in our own sight, and so we were in their sight. [NASB]

In the above passage, the Anakim ["sons of Anak"] are also called Nephilim. The Hebrew word Nephilim is rendered as "giants" in the Lxx and in some English translations and is left un-translated and considered to be a proper noun in other English translations, as is the case above in the nasb. While the meaning of the Hebrew word Nephilim in Num 13:33 and in Gen $6: 4$ is greatly debated by biblical scholars, it does appear that in Num 13:33 these ten Israelite spies were using it as a synonym for Rephaim, that is, giants. The possible meaning of the Hebrew word Nephilim as used in Gen 6:4 is beyond the scope of the present paper.

Before the conquest of Canaan by Joshua, the Anakim—spelled Enakim in the Lxx-were widely scattered in the area west of the Jordan River and Dead Sea. Joshua 11:21-22 not only places them in this area, but also specifically states that Anakim giants even remained after the conquest in several Canaanite cities, including the city of Gath, Goliath's hometown.

[^7]and from all the hill country of Israel. Joshua utterly destroyed them with their cities. There were no Anakim left in the land of the sons of Israel, only in Gaza, in Gath and in Ashdod some remained. [nasb]

Even though it is implied, though not specifically stated in the Bible, it is clear that the Anakim/Rephaim giants earlier lived near Bethlehem in the hill country of Judah. First Chronicles 14:8-12, 16 states that David twice defeated the Philistines in the "Valley of the Rephaim," which was located very near to Bethlehem. Incidentally, it appears likely that David's ancestors earlier had helped Joshua drive the Anakim giants from the Valley of the Rephaim during the period of the conquest.

These passages from 1 Chronicles suggest that, after the Philistines invaded and conquered the Rephaim/Anakim giants in Gath in ca. 1200 bc, the Anakim merged with the Philistines and in time came to be considered as Philistines. This can be seen in 1 Chronicles 20 where several battles are mentioned between David's army and the "Philistines." But in 1 Chr 20:6-8 a six-fingered "giant/Repha" is mentioned as a citizen of Philistine Gath, Goliath's hometown.

The city of Gath was located only about 35 miles from Bethlehem, and only about 20 miles from Hebron. It seems very likely that the two Philistine attacks, which were defeated by David in the Valley of the Rephaim, were attempts by a mixture of Anakim and Philistine peoples to reclaim land lost earlier to the Israelites during the conquest under Joshua. In other words, Goliath the "Philistine" was almost certainly a descendent of the Anakim giants mentioned in the exodus and conquest stories.

Recent archaeological work at the site of the ancient city of Gath [Tell es Safi] has found evidence of a mixture of Philistine culture with a native "Canaanite" culture. ${ }^{18}$ Archaeologists Aren Maier and Carl Ehrlich report discovering huge amounts of a pottery type dubbed "Ashdod Ware," which was named after the ancient Philistine city of Ashdod, the site where it was first discovered.

Ashdod Ware is considered to be a mixture of Philistine and Canaanite pottery styles. ${ }^{19}$ Considerably more Ashdod Ware has been found at Gath than at Ashdod, and as a result Maier and Ehrich have proposed renaming it "Gittite Ware." In other words, the Philistines did not exterminate, but rather merged with the conquered native people of Gath, and the archaeological record matches what the Bible has to say about Gath. Maeir and Ehrlich, writing of Gath in their article in Biblical Archaeology Review, state: "This archaeologically based reconstruction of the history of the site is in accord with what the Bible (and extra-Biblical sources) tells us about Gath." ${ }^{20}$ Incidentally, Gath was huge for an ancient site, about 100 acres, and was as large as the ancient Philistine city of Ekron. ${ }^{21}$

[^8]All of the above evidence clearly indicates that the "Philistine" Goliath of Gath was a descendent of the Anakim giants mentioned in the exodus and conquest stories found in the OT. As will be seen below, this connection will allow the use of Egyptian epigraphical evidence to help determine his height and the height of his relatives the exodus giants.

## V. THE ANAKIM GIANTS IN EGYPTIAN TEXTS

The ancient Egyptians clearly knew of the Anakim giants and were afraid of them. The Anakim are mentioned four times in Egyptian Execration Texts from the Middle Kingdom Period (ca. 1850 bc). Egyptian Execration Texts are generally found on broken pottery figurines. The Egyptians would make a clay model of a feared enemy with his arms bound behind his back. On this clay model, sometimes just a jar, the Egyptians would write the names of feared enemy leaders and their people groups. This clay model or jar was then baked into pottery. The Egyptians would then smash this pottery model or jar into pieces. Pity the poor Egyptologist who must put these smashed pieces back together!

This ancient Egyptian practice is much like what is done in modern voodoo where a figurine is made of an enemy and then tormented. It is almost certain that this voodoo-like magical cursing of an enemy was a common practice throughout the history of ancient Egypt, but it appears that imperishable pottery was only used in the Middle Kingdom Period. Nevertheless, these Execration Texts are tremendously valuable because they clearly show the peoples who were the feared enemies of the Egyptians in the Middle Kingdom Period. As was stated above, one enemy feared by the Egyptians was the Anakim.

There are several Egyptian Execration Texts that mention the Anakim. John A. Wilson translates three of these references to the Anakim in James Pritchard's The Ancient Near East: An Anthology of Texts and Picture. I have emphasized key names in all of Wilson's translations given below.

The Ruler of Iy'anaq, Erum, and all the retainers who are with him; the Ruler of Iy'anaq, Abi-yamimu and all the retainers who are with him; the Ruler of Iy'anaq 'Akirum and the retainers who are with him, . . . . ${ }^{22}$

As Wilson suggests in a footnote, these Iy'aneq people are almost certainly to be identified with the Anakim mentioned in the OT. ${ }^{23}$ The -im ending on Anakim is the Hebrew masculine plural. When this is removed, the similarity of Anak to Iy'anaq is obvious. Iy'anaq should also be compared to the Lxx's "Enak" spelling for Anak.

Another Egyptian Execration Text mentions the Anakim and clearly places them in the general area of Canaan. Since this text gives the names of peoples living close to the Anakim, most of this text, but not all, is quoted below. Wilson translates this text as follows:

[^9]. . . the Ruler of Shutu, Ayyabum and all the retainers who are with him; the Ruler of Shutu, Kushar, and all the retainers who are with him; the Ruler of Shutu, Zabulanu, and all of the retainers who are with him; the Ruler of Asqanu, Khalu-kim, and all of the retainers who are with him; the Ruler of Jerusalem, Yaqar-'Ammu and all of the retainers who are with him; the ruler of Jerusalem, Setj-'Anu, and all of the retainers who are with him; ....
All the rulers of Iysipi and all the retainers who are with them;
all the Asiatics $\qquad$ of Byblos, of Ullaza, of Iy'anaq, of Shutu, of Iymu'aru, of Qehermu, of Iyamut, of Rehob, Yarimuta, of Inhia, of Aqhi, of 'Arqata of Yarimuta, of Isinu, of Asqanu, of Demitiu, of Mut-ilu, of Jerusalem of Akhmut, of Ianhenu, and Iysipi;
their strongmen, their swift runners, their allies, their associates, and the Mentu in Asia. ${ }^{24}$

Again, the Iy'anaq mentioned here are almost certainly the Anakim. This long list of cursed enemies ends with the phrase: "the Mentu in Asia." Wilson writes in a footnote that this phrase was used in ancient Egyptian hieroglyphics as "an old designation for Egypt's immediate neighbors to the northeast." ${ }^{25}$

In footnotes to his translation, Wilson makes two interesting identifications of the peoples mentioned in this long list: Shutu = Moab and Asqanu = Ashkelon. ${ }^{26}$ There are other execration texts, which Wilson refers to in a footnote, but does not fully translate, which mention: "the Ruler of Shechem," "the Ruler of Pella," "the Ruler of Aphek," "the Ruler of Hazor," "the Ruler of Acre," "the Ruler of Shemu'anu," and "the Ruler of Beth-Shemesh." ${ }^{27}$ Incidentally, it is likely that the "Iymu'aru" mentioned above were the Amorites with whom the Israelites clashed during the exodus and conquest. All of these various peoples once lived on both the eastern and western sides of the Jordan Rift. The references to Jerusalem, Ashkelon, Byblos, Shutu, and other sites suggest the possibility that at least some of the Anakim lived both on the eastern and western sides of the Dead Sea and Jordan River. The OT clearly places the Rephaim/Anakim on both sides of the Jordan Rift.

If Shutu was Moab as Wilson suggests, then the rulers named Ayyabum and Zabulanu become very interesting because Ayyabum is almost certainly the name Job, and Zabulanu is almost certainly the name Zebulon. While the Zebulon mentioned here is certainly not Zebulon the son of Jacob, it is possible that Ayyabum is Job of the book of Job. It should be noted that the book of Job places Job, a Semitic herder, in the general area just to the east of Moab. One other interesting name given by Wilson is Shemu'anu [a place], which is almost certainly the name Simeon. ${ }^{28}$

Incidentally, if Shutu was the Egyptian name for area of Moab in the Middle Kingdom Period, then Shutu [an area] may have some sort of a

[^10]connection, or be some sort of an earlier version of the name Shasu, which, as will be seen below, was used by the Egyptians in the New Kingdom Period as a name for various tribal Semitic peoples who lived north of Egypt; some of whom lived in the area of Moab.

A new, detailed study of all of the personal names, peoples, and places in Canaan, which are mentioned in the Egyptian Execration Texts, could prove to be highly significant for biblical studies. However, such a study is beyond the scope of the present paper. Suffice it to say, Egyptian Execration Texts from the Middle Kingdom Period certainly knew of the Anakim and clearly placed them in the land of Canaan.

While the Execration Texts quoted above do not mention the height of the Anakim, there is another Egyptian text that does. However, before looking at this text, it is necessary first to look briefly at the name of another ancient people who were sometimes the enemies of the Egyptian people. New Kingdom pharaohs frequently mention a people called the Shasu. The Shasu may have been the people called the Shuhites in the OT. However, the Egyptians clearly used the name Shasu in a much broader sense than the OT does the name Shuhite. Nevertheless, the book of Job does seem to indicate that the Shuhites were Semite herders who lived in the same general area where the Egyptians placed some Shasu peoples, who were also Semite herders.

The term Shasu seems to have been used by the Egyptians for a variety of Semitic ethnic tribes. For example, Siegfried Herrmann in his book Israel in Egypt provides a translation of an ancient Model Letter used to train Egyptian governmental scribes.

Another communication to my [lord], to wit: We have finished letting the Shasu tribes of Edom pass the Fortress [of] Mer-ne-ptah Hotep-hir-Maat-life, prosperity, health!-which is [in] TKW, to the pools of Per-Atum [of] Mer-[ne]-ptah Hotep-hir-Maat, which are [in] Twk, to keep them alive and to keep their cattle alive, through the great Ka of Pharaoh. ${ }^{29}$

Herrmann dates this Model Letter to ca. 1192 bc. Although there are some modern scholars who deny that these "Shasu tribes of Edom" were the Edomites of the OT, they almost certainly were. Edomites are specifically mentioned in Num 20:14-21 as being present in the land of Edom at the time of the Exodus, and the land of ancient Edom is clearly pictured in Numbers 20 as including or bordering on parts of northeastern Sinai. There are also a number of OT texts that depict the Edomites as herders.

This Model Letter, which has Edomites entering Egypt with their herds from the Sinai, fits very well with what the OT has to say not only about the Edomites but also about the Israelites. In this Model Letter "the Shasu tribes of Edom" are mentioned as being allowed to enter Egypt in order "to keep them and their cattle alive." They are sent with the pharaoh's permission to a pool of water near the city of Per-Atum. Herrmann correctly identifies Per-Atum with the ancient city of Pithom mentioned in Exod $1: 11 .{ }^{30} \mathrm{He}$ also

[^11]states that the modern site of Tell el-Mashuta is the site of the ancient city of Pithom and that Tkw/Tjeku was the general area surrounding Per-Atum/ Pithom. He goes on to equate $\mathrm{Tkw} / \mathrm{Tjeku}$ with the land of Goshen, where Genesis 46 states that the pharaoh settled the Israelites. ${ }^{31}$

The Shasu tribes of Edom in this Model Letter are strikingly similar to the ancient Israelites, who earlier in the time of Joseph were allowed by the pharaoh enter Egypt in order to keep them and their herds alive during a time of famine. It should also be noted that the Israelites, like the Shasu of Edom, were settled in the area of the cities of Pithom and Raamses (Genesis 46). The striking similarity of this ancient Model Letter to biblical texts presents major problems for the theories of modern minimalist scholars who deny the historical accuracy of the Joseph and exodus stories. By any means, the Shasu of Edom are almost certainly the Edomites of the Bible.

There are also good reasons for assuming that the ancient Egyptians at times also called the Israelites "Shasu." The German scholar Siegfried Herrmann cites a reference to the "Shasu of Yahweh" which was found on a column base in the Temple of Amun at Soleb in what is today the Sudan. ${ }^{32}$ According to Herrmann, this reference to the Shasu of Yahweh dates to ca. 1400 bC during the reign of Pharaoh Amenhotep III. ${ }^{33}$ There is another reference to the Shasu of Yahweh that was found in an inscription at Amarah near Cairo which dates to the reign of Pharaoh Seti I in ca. 1300 bc. ${ }^{34}$ Donald Redford maintains that these references to the Shasu of Yahweh indicate that the worship of Yahweh began in ancient Edom, long before there were true Israelites. Redford, writing on the Shasu of Yahweh mentioned in the Soleb Inscription, states:

For half a century it has been generally admitted that we have here the tetragrammaton, the name of the Israelite god "Yahweh"; and if this be the case, as it undoubtedly is, the passage constitutes a most precious indication of the whereabouts during the late 15 th century BC of an enclave revering this god. ${ }^{35}$

Redford then strangely states:
it would be wrong to jump to the conclusion that "Israel" as known from the period of the Judges or the early monarchy was already in existence. ${ }^{36}$

He goes on to write:
The only reasonable conclusion is that one major component of the later amalgam that constituted Israel, and the one with whom the worship of Yahweh originated, must be looked for among the Shasu of Edom already at the end of the fifteenth century. ${ }^{37}$

[^12]In other words, Redford is here arguing that the Shasu of Yahweh came from the area of Edom and became a part of the people later called Israelites, but he insists that there were no true Israelites in the 15th century bc when the Soleb Inscription was made. As will be seen in an upcoming article written by my colleague, the Egyptologist Charles Aling, and myself, the Amarah Inscription lists both the Shasu of Yahweh and the Shasu of Edom, and this fact clearly indicates that the Shasu of Yahweh and the Shasu Edomites were not the same people. In spite of Redford's very strange reluctance to call the Shasu of Yahweh true Israelites, they almost certainly were. Incidentally, the hieroglyphs of the Soleb Inscription translate as "the land of the Shasu of Yahweh." This also strongly indicates that the Shasu of Yahweh had their own defined area of settlement, and that it was not in the same area where the Shasu of Edom lived.

What is even stranger is the fact that American biblical scholars have for so long largely ignored these references to the Shasu of Yahweh. Incidentally, since Redford wrote his book, the name "Israel" with a people determinative hieroglyph has apparently been found on a column base dating to the reign of Pharaoh Amenhotep II in ca. 1425 BC. ${ }^{38}$ This newly published inscription destroys Redford's arguments against calling the Shasu of Yahweh true Israelites.

Herrmann was a supporter of the late date theory of the exodus in the mid-13th century bc and consequently like Redford he did not identify these "Shasu of Yahweh" as true Israelites. However, it seems almost certain that they were. If the Shasu of Yahweh were true Israelites (as is almost certain), then both Edomites and Israelites, or to accommodate Redford, "protoIsraelites," were at times grouped under the general Egyptian term of Shasu. This is a fact which must be kept in mind, but almost never is when looking for references to the Israelites in Egyptian texts.

There are also Egyptian texts that suggest that the Egyptians classified all Apiru, Amorites, Amalekites, Moabites, Ammonites, Kenites, Edomites, and Midianites as Shasu. ${ }^{39}$ As was noted above, the Israelites, and also probably nomadic Arameans, should be added to this list of the Shasu.

It appears that the term Shasu was used by the Egyptians to mean nomadic Semites with herds who lived on both sides of the Dead Sea and Jordan River. For the most part the Shasu do seem in Egyptian texts to be located in the area east of the Dead Sea and Jordan River and also in the northern Sinai. But there are also texts, as will be seen below that seem to place the Shasu west of the Jordan River and Dead Sea.

Many modern translators render Shasu into English by the term of "Bedouin," thus indicating that they were all nomadic herders. ${ }^{40}$ However, a careful examination of the references made to the Shasu in Egyptian texts seems to indicate that at least some of them at times lived in cities. It is for this reason that some scholars refer to them as "semi-nomadic." It should also be noted that the Soleb Inscription indicates that the Shasu of Yahweh

[^13]had their own "land." In other words, they were not completely nomadic, as for example were the highly nomadic ancient peoples of the Asian steppe who at times ranged for hundreds of miles.

To summarize, it appears that the ancient Egyptians used the name Shasu for a variety of Semitic peoples, most of whom, but certainly not all, were nomadic herders who seem to have lived mainly in the areas of the modern nations of Israel and Jordan. It is also apparent that the ancient Egyptians generally did not bother to distinguish between the various Shasu Semitic tribal groups who lived in these areas. However, there are indications in Egyptian texts that Shasu sometimes fought Shasu. It should be noted that during the period of the Judges the Israelites fought against the Ammonites, Moabites, Midianites, and Ammorites; all of whom were classified by the Egyptians as Shasu.

The OT has the Rephaim/giant King Og living with the Moabites and also has some Rephaim in the land of the Ammonites. If the Egyptians also classified the Moabites and Ammonites as Shasu, as they almost certainly did, then it should come as no surprise that the Egyptians would have classified the Anakim as Shasu, since some of them lived among the Moabites and Ammonites. All of this to argue that it is very likely that the Anakim of the Middle Kingdom Period came to be included among the Shasu during the New Kingdom Period, about five centuries later.

It should be noted at this point that the Philistines/Sea Peoples did not begin their conquest of Canaan until after the reign of Ramses II; it was during the reign of his son Merneptah that they began their invasion of coastal Canaan. As was seen above, it is nearly certain that the Anakim in time came to be seen as Philistines. But, before the coming of the Philistines, it appears nearly certain that the Egyptians grouped the Anakim with the Shasu.

As the following Egyptian text from the reign of Ramses II shows, there were giant Shasu people living in Canaan west of the Jordan River and Dead Sea in the 13th century BC. It is almost certain that these giant Shasu are to be identified with the Anakim giants whom the Israelite spies encountered in southern Canaan at the time of the exodus.

These Shasu giants are mentioned in an ancient Egyptian text titled The Craft of the Scribe, which is found in Papyrus Anastasi I and which dates to ca. 1250 bc. The Craft of the Scribe was used for centuries later as a "Model Letter" for training royal Egyptian scribes. ${ }^{41}$ As the full text of this ancient work makes clear, the setting is a mountain pass in Canaan during a hypothetical Egyptian military campaign.

The face of the pass is dangerous with Shasu, hidden under the bushes. Some of them are 4 or 5 cubits, nose to foot, with wild faces. ${ }^{42}$

James P. Allen, who translated The Craft of the Scribe in the three-volume set The Context of Scripture, states in a footnote that " 4 and 5 cubits" means

[^14]that these Shasu ranged from " 6 feet 8 inches to 8 feet 6 " inches tall. ${ }^{43}$ Allen correctly assumes that the cubit mentioned in this text is the Egyptian royal cubit. However, he seems to have underestimated its size slightly. The actual size of the Egyptian cubit was 20.65 inches. ${ }^{44}$ Four Egyptian cubits at 20.65 inches equal 82.6 inches or slightly over 6 feet 10 inches. Five Egyptian cubits equal 103.2 inches or about 8 feet 7 inches.

A cursory reading of the above quotation would seem to suggest that some of these Shasu giants were even taller than 8 feet 7 inches, since the measurement given is from "nose to foot" and not from the top of the head to the bottom of the foot. However, I consulted my colleague, the Egyptologist Charles Aling, and according to him this phrase in hieroglyphic means total height.

This Egyptian text presents a major problem for Hays's argument for a 6 feet 9 inch Goliath, since it has giants that are as tall as 8 feet 7 inches! The shortest members of this group are said to be over 6 feet 10 inches tall.

Before leaving the Egyptian evidence on the Anakim giants and their height, it must be noted that the OT agrees remarkably well with the ancient Egyptian evidence on them. The OT has Anakim/Rephaim giants living near the Jordan River and Dead Sea during the lifetime of Abraham inca. 2100 bc. Egyptian Execration Texts dating to ca. 1850 bc also mention the Anakim living somewhere in the areas of Moab, Ammon, and southern Canaan. Assuming the early date for the exodus and conquest, the OT has Anakim/ Rephaim giants living in Bashan, Moab, Ammon and Canaan in ca. 14501350 bc, and it also has David killing the giant Goliath in Judah in ca. 1025 bc. In between these two biblical dates, the ancient Egyptian text The Craft of the Scribe has Shasu/Anakim giants living in southern Canaan in ca. 1250 вс.

## VI. 4 CUBITS OR 6 CUBITS: HOW TALL WAS GOLIATH?

In earlier discussions above, it was suggested that the Lxx/DSs's reading of 4 cubits and a span for the height of Goliath is actually not in conflict with the mT's reading of 6 cubits and a span. Not all supposed textual conflicts are real; some are only apparent.

The Lxx was a translation of the Hebrew OT into Greek. According to Jewish tradition, the Lxx was made at the request of Pharaoh Ptolemy II of Egypt (285-247 BC). The Ptolemies, descendants of a general of Alexander the Great, were Greeks and were Greek-speaking, as were also almost all of the citizens of Egypt's capital city of Alexandria. Jews made up about one quarter of the population of Alexandria, and in time they forgot their Hebrew and became Greek speaking.

While it is likely that the Torah, the first five books of Moses, was translated for Pharaoh Ptolemy II during his lifetime, it is probable that most of the rest of the Lxx OT was translated later. Almost all modern scholars believe that the rest of the Hebrew OT was translated into Greek by a variety

[^15]of scholars and not by the same 72 Jewish scholars who did the original Lxx Torah translation. When it was fully translated, the Lxx rather quickly became the Bible used by Greek-speaking Jews in Alexandria. From Alexandria its use spread to all of the other Greek-speaking Jews in the eastern Mediterranean area. Generally, but not always, when the OT is quoted in the Greek NT, it is the Lxx translation that is used.

The key feature to keep in mind is that the Lxx was a translation made in Alexandria, Egypt, and according to tradition, it was made for the pharaoh. An ancient Jewish scholar translating 1 Samuel 17 into Greek in Alexandria would have faced a major translation problem, namely how to deal with the great difference in size between the Egyptian royal cubit and the Hebrew common cubit.

The ancient Egyptian royal cubit was the standard adopted for use in Egypt by the Ptolemies. Six royal Egyptian cubits and a span would make Goliath 11 feet 1 inch tall. This is an impossible height for Goliath, and it appears that some unknown Hebrew scholar recognized this and decided to translate the 6 common cubits of the Hebrew text of 1 Samuel 17 into royal Egyptian cubits.

In making this conversion from Jewish common cubits to Egyptian royal cubits, this ancient Hebrew translator had to choose between 4 or 5 royal Egyptian cubits. At 5 Egyptian royal cubits and a span Goliath would have been about 9 feet 5 inches tall. The Jewish translator of 1 Samuel 17 seems to have considered this also as still too tall. He appears to have opted for 4 cubits. At 4 cubits and a span in Egyptian royal cubits, Goliath would have been slightly over 7 feet 8 inches tall. This is close to the 8 feet 2 inches obtained above by assuming that Goliath was measured using a $71 / 2$ inch span for David. Incidentally, apparently another Lxx translator of 1 Samuel 17 opted for 5 cubits, since the Greek Codex Venetus has 5 cubits and a span. ${ }^{45}$

It should also be noted that by selecting 4 cubits and a span, the Lxx translator placed Goliath in the middle of the height range of the Shasu giants mentioned in the Model Letter from the reign of Ramses II, which is quoted above. These Shasu/Anakim giants are said in this letter to have been 4 and 5 royal Egyptian cubits tall. It is even possible that the Lxx translator(s) of 1 Samuel 17 knew of this Model Letter or had heard of the size of these giants from the Egyptians, and wanted to fit Goliath in between 4 and 5 cubits.

## VII. CONCLUSION

The 6 cubits and a span given for the height of Goliath in the Hebrew мт is the original reading; it is not a textual error. The 4 cubits and a span reading found in the Lxx is almost certainly a translation of the mt's common cubits into royal Egyptian cubits. It should also be noted that there are even some ancient versions of the Lxx, which have 6 cubits and a span for the height of Goliath, and as was seen above, one has 5 cubits. It should also be noted that one of the most important Lxx texts, which has the 4 -cubits

[^16]reading, is "Alexandrinus," and it unquestionably came originally from the city of Alexandria, a city where the educated Greeks would have known and used the royal Egyptian cubit.

The 6 -cubits reading found in some other Lxx texts of 1 Samuel 17 might even suggest that some other non-Alexandrian Jew did his own Greek translation from the Hebrew and did not translate Hebrew common cubits into royal Egyptian cubits. Hays explains the 6 -cubit reading in some texts of the LXX as a later correction made to conform with some sort of an early proto-mt. ${ }^{46}$

This leaves the problem of the DSs Hebrew text [4QSama] of 1 Samuel 17, which also gives 4 cubits and a span for Goliath's height. This dss [4QSama] reading can be explained either as an attempt to correct the Hebrew text using the Lxx or as a Hebrew copy of 1 Samuel, which was made for or by a Jew from Alexandria, who wanted Hebrew common cubits converted into Egyptian royal cubits, a standard with which he was more familiar.

The question now arises, how tall was Goliath? It is nearly certain that he was not 9 feet tall. But, it is likely that he was over 8 feet tall, and he may have been as tall as 8 feet 7 inches. However, it should be recalled, as was stated above, that David may have measured Goliath with his helmet still on, and this would shrink Goliath's height some. Nevertheless, it would be safe to say that Goliath was over 8 feet tall. As the weight of his armor and weapons clearly indicates, he was not only tall, but he was also huge in weight. Since classical hoplite warriors seem to have weighed from about 135-150 lbs. and since Goliath was carrying armor that weighed about 3 times as much as a hoplite, it is likely that Goliath, without his armor and weapons, weighed over 400 lbs .

As for the exodus giants, it is clear that they, too, were very large men who ranged in height from 6 feet 10 inches tall to well over 8 feet tall. Goliath fits very well with these exodus giants, who were almost certainly his ancestors. By the standards of ancient Jewish men, who were 5 feet to 5 foot 3 inches tall, Goliath and the exodus Anakim would have certainly been seen as giants.

In conclusion, the historical, archaeological, and biblical evidence supports the mт's reading of 6 cubits for the height of Goliath. It also should not be assumed that the Lxx's 4 -cubits reading in 1 Sam 17:4 is in conflict with the mT's 6 cubits reading. The 4 -cubits reading in the LXX and DSS is almost certainly a translation of the Hebrew common cubit into Egyptian royal cubits. Modern English translators of the Bible, therefore, should retain the 6-cubits reading of the мт and should not adopt the LXX/DSS's reading of 4-cubits as given for the height of Goliath in 1 Sam 17:4.

I would also recommend that English translations of the Bible like the NASB not state in footnotes that the ancient Hebrew common cubit was 18 inches. If translators need approximate sizes for the two basic types of cubits used in the ancient Near East, then I would suggest 20 inches for the royal cubit and 16 inches for the common cubit.

[^17]
[^0]:    * Clyde Billington is associate professor of history Northwestern College, 3003 Suelling Ave. N., St. Paul, MN 55113-1598.
    ${ }^{1}$ J. D. Hays, "Reconsidering the Height of Goliath," JETS 48 (2005) 702.
    ${ }^{2}$ Ibid. 701.

[^1]:    ${ }^{3}$ M. C. Tenney, The Zondervan Pictorial Encyclopedia of the Bible ( 6 vols.; Grand Rapids: Zondervan, 1976) 5.914.
    ${ }^{4}$ Ibid.
    ${ }^{5}$ Ibid.

[^2]:    ${ }^{6}$ Ibid.
    ${ }^{7}$ G. Barkay, "Royal Palace, Royal Portrait: The Tantalizing Possibilities of Ramat Rahel," BARev 32/5 (2006) 38-39.
    ${ }^{8}$ Ibid. 41.

[^3]:    ${ }^{9}$ Hays, "Goliath" 708-10.
    ${ }^{10}$ Ibid. 710.
    ${ }^{11}$ V. Matthews, Manners and Customs in the Bible (Peabody, MA: Hendrickson, 1991) 3.

[^4]:    ${ }^{12}$ L. Barrett et al., Guinness World Records: The World's Biggest Everything (New York: Time, 2006) 10.
    ${ }^{13}$ Ibid. 9-11.

[^5]:    ${ }^{14}$ Hays, "Goliath" 711.

[^6]:    ${ }^{15}$ A. Millard, "King Og's Iron Bed," BibRev (April 1990) 16.
    ${ }^{16}$ Hays, "Goliath" 709.
    ${ }^{17}$ Ibid. 708-9.

[^7]:    Then Joshua came at that time and cut off the Anakim from the hill country, from Hebron, from Debir, from Anab and from all of the hill country of Judah

[^8]:    ${ }^{18}$ A. M. Maeir and C. S. Ehrlich, "Excavating Philistine Gath," BARev 27/6 (2001) 27.
    ${ }^{19}$ Ibid. 29.
    ${ }^{20}$ Ibid. 27.
    ${ }^{21}$ Ibid. 22-24.

[^9]:    ${ }^{22}$ J. B. Pritchard, ed., ANET 225.
    ${ }^{23}$ Ibid. 328 n. 2.

[^10]:    ${ }^{24}$ Ibid. 225-26.
    ${ }^{25}$ Ibid. 328, n. 14.
    ${ }^{26}$ Ibid. 225, nn. 3, 6.
    ${ }^{27}$ Ibid. 329, n. 9.
    ${ }^{28}$ Ibid. 329, n. 9.

[^11]:    ${ }^{29}$ S. Herrmann, Israel in Egypt (SBT 2/27; Naperville, IL: Alex R. Allenson, 1973) 25.
    ${ }^{30}$ Ibid. 26.

[^12]:    ${ }^{31}$ Ibid. 26-27. See also S. Herrmann, "Der Alttestamentliche Gottesname," EvT 26 (1966) 281-93.
    ${ }^{32}$ Herrmann, Israel, 285.
    ${ }^{33}$ Ibid. 31.
    ${ }^{34}$ D. B. Redford, Egypt, Canaan, and Israel in Ancient Times (Princeton: Princeton University Press, 1992) 272-73.
    ${ }^{35}$ Ibid. 272.
    ${ }^{36}$ Ibid. 273.
    ${ }^{37}$ Ibid.

[^13]:    ${ }^{38}$ M. Gorg, "Israel in Hieroglyphics," BN 106 (2001).
    ${ }^{39}$ K. R. Cooper, "The Shasu of Palestine in the Egyptian Texts," Artifax 21/4 (2006) 22-25.
    ${ }^{40}$ Pritchard, ANET 259.

[^14]:    ${ }^{41}$ W. W. Hallo, ed., The Context of Scripture (3 vols.; Leiden: Brill, 2003) 3.9.
    ${ }^{42}$ Ibid. 3.13.

[^15]:    ${ }^{43}$ Ibid. 3.15, n. 50.
    ${ }^{44}$ Tenney, ZIPB 5.914.

[^16]:    ${ }^{45}$ Hays, "Goliath" 705-6.

[^17]:    ${ }^{46}$ Ibid. 705.

