## Is the Quran's Structure Based on Allah's name?

## Mathematics and Structure in the Quran

The Quran has a very distinct and highly integrated mathematical component, in some ways a system, some of which is well-known. For example, the symmetry of opposite word pairs noticed by many in their word counts: belief - 25 times, disbelief - 25 times; angels - 88 times, devils 88 times; worry - 13 times, reassurance - 13 times; this world - 115 times, the next world -115 times, and much more. There are also correspondences between word counts and their application in the real world, such as "day" mentioned 365 times and "month" mentioned 12 times. The expression "seven heavens" is mentioned 7 times and "creation of heavens" is also mentioned seven times, creating a correspondence. I have noticed a number of prime number references of note, such as the fact that 25 prophets (with a special "indivisible" relationship comparable to a prime) are named in the Quran and there are 25 prime numbers between 1 and 100 , the last being 97, the number of Surat Al-Qadr, signifying the night in which the Quran was initially "sent down," as the final revelation. The number 100 has celestial "value" symbolically in the Quran, as I have discussed in a blog post. The muqatta 'at (Quranic initials found at the beginning of select suras) are 30 sets of letters found in 29 suras, showing a perfect relationship to the lunar luminescence cycle, the phase-based cycle visible from earth on which the Islamic lunar calendar is based (as are most others) - the cycle being precisely 29.5 days, but since we can't count half-days on a calendar, one gets either 29 or 30 days. But to show the numerical basis for the entire Quran's structure, we need a more basic recently discovered sort of math to express its numbers: set theory. But before we even introduce that subject, we need to outline, as briefly as possible, the Quran's structure itself.

## Quranic Architecture in Brief

It's well-known that Quranic suras are arranged, with some exceptions, from the largest to the smallest, gradually descending in size, but no clear explanation has been given for this. It occurred to me these suras could fit into a spiral like the cutaway view of a chambered nautilus' shell. Inspired by Quran 9:36 mentioning 12 months "in the book of Allah," one could have 12 "months/chambers" in each turn of the spiral as a symbolic "year." The first sura would be AlFatiha, appropriately named "the Opening." With 114 suras this would total 9.5 "years," which if multiplied by 100 (giving it "celestial" value) equals 950 years, the exact time prophet Noah spent with his people per Quran 29:14. And Noah's ship/Ark has a direct correlation to the Quran as a Divine message sent via Jibreel, who also "sent down" to prophet Noah the design of the ark/ship. This design also has a celestial component in the form of the zodiac constellations which were used for timekeeping by Arabs since ancient times, when inscriptions in a previous form of writing called Safaitic were shown to translate names of astronomical phenomena such as planets and constellations. The ecliptic is a significant geometric plane on which these important astronomical objects - sun, moon, planets, and specifically the zodiac constellations are found. So I also assigned to the individual chambers both the Hijri month and zodiac constellation names to give them context, because this design is also a calendar, a sort of cosmic timepiece. The design is pictured below.


## Quranic Architecture Figure 1

That this is also a kind of sacred geometry as a logarithmic spiral that gives added meaning: a spiral has two centers, a fact anyone trying to draw one with a compass will discover. This also accounts for the fact that most of what were thought of as spiral galaxies are actually barred spirals, the two points at the center causing a barred effect, as can also be seen if one looks closely at the spiral architecture illustrated here. But here it is also the "overlap" caused by the "half circle" of six remaining suras after the nine full years. Notice how it's divided into 12 pie sections representing the months, each small "chamber" an individual sura/ month.

## The $\{2,\{3,4\}\}$ set

Set theory in itself can get quite complex but for our purposes we will simply use it as a way of unifying the various ways identical digits appear in different formats, forming a schema. For example, the name Al-Raheem appears in the Quran 34 times, and the adjective raheem appears in the Quran 81 times, which also can be written in exponent form as $3^{4}$. These two very different numbers can be said to relate to each other if one views these numbers as digits which are members of a $\{3,4\}$ set, one being 34 and the other being $3^{4}$. It's also useful in comparing word or letter counts, such as the number of letters in Allah's name, four as ال山ه Allah, compared to the number of unique letters of His name, as three letters ilaha, spelling the generic word for "any" god. These numbers relate to one another not by mathematics per se, but rather as a count of letters compared to each other as aspects of spelling a single word, and by including them together as a "set," we can then compare them with other counts of different things such as words, sentences, verses, suras, or the architectural graphic shown above. We can consider multiples of ten such as $\{30,40\}$ or 340 as also part of this same set, since the digits 3 and 4 appear in them. On the level of simple digits, where zero is merely a "placeholder," they show common patterns.

Two Quranic ayat/verses have unusual mentions of the numbers 2, 3, and 4. The first is 4:3, which mentions marrying women or girls followed by the numbers "two and three and four," widely interpreted to mean a man can marry up to four wives, but this expression is a very unusual one that stands out by mentioning all three numbers using the conjunction "and." Later the number one is mentioned in case one doubts his ability to be fair to 2,3 , or 4 wives, "then only one." There is another Quranic reference involving this set, $35: 1$, which mentions angels' wings as being " 2 and 3 and 4 ," just as with the wives in $4: 3$, despite these being entirely different things, even in entirely different realms, angels (35:1) being in the celestial realm and wives (4:3) being in the earthly realm. This juxtaposition between the two realms is a common theme in the Quran, mentioned earlier in reference to this world and the next world (or realms) as
both having 115 mentions, which incidentally prime-factors at $5 \times 23,23$ relating to human DNA ( 23 chromosome pairs) and 5 symbolizing "hands" relating to "deeds," which is all we take with us to the next world/life. If we add the digits of $4: 3+35: 1=4+3+35+1=\mathbf{4 3}$, we find ourselves with a straight $\{3,4\}$ set!

We can also find the " 2 " making these examples $\{2,3,4\}$ sets, to correlate this structural feature to the two Quranic ayat mentioned above. In Allah's name, the addition of a lam gives us a pair of lams in the center of His name, which makes it a $\{2,3,4\}$ set. The same can be said of the Basmalah, where we find 3 names of Allah in a 4-word aya/verse, forming a pair in the names Al-Rahman, Al-Raheem, thus a $\{2,3,4\}$ set. In Al-Fatiha, the first 4 ayat consist of 8 names of Allah ( 3 of which are repeated) and thus represent the timeless "celestial" realm, and the last 3 ayat represent the earthly dunya realm and contain only pronouns for Allah. The first and last ayat form a pair of ayat, as the first verse mentions 3 names of Allah, two of which form a pair, the Almighty All-Merciful; and the last mentions a corresponding 3 paths to take in this world, only one of which lead to Allah's acceptance, the other two being a pair of violations: one violating the Almighty's laws thus earning wrath, and the other violating the call to receive the All-Merciful's mercy and guidance, thus becoming lost.

The order of digits is irrelevant to the set, so 43 , a prime number, is a member as well as 34 ; we can reverse the digits. The 2 appears as a structural artifact of the $\{3,4\}$ set as shown in the two lams of Allah's name or the paired names Al-Rahman, Al-Raheem in the Basmalah, or the paired suras 113 and 114 in a set containing 4 suras, 3 of which are at the end and one of which (the $4^{\text {th }}$ ) is at the beginning. You could say I'm using the symbols and nomenclature of set theory to show these correspondences rather than employing its mathematics. After all, this is an analysis of a text. Yet more sophisticated math may unlock other features, so intricate are these elements.

Another example of the $\{3,4\}$ set is in reference to the Tawheed Statement, whose basic statement is La ilaha illa Allah, translated "there is no god but Allah." Variations on this statement are found in 40 Quranic references, 30 of which state "there is no (true) deity except He," using the pronoun at the end. The remaining ten have various formulations whose common center is ilaha illa or "deity except." These numbers are found in two suras: 7:142 in reference to the 30 increased to 40 nights Moses spent receiving the Torah on Mt. Sinai, and 46:15, in reference to the life cycle: 30 months gestation and 40 years at peak maturity. Note $30+40=70$.

The $\{3,4\}$ set in Quranic Architecture can be found by referring to the illustration above, which is divided into four quadrants, each of which contains three sections corresponding to months as they progress through the "years." These form pie sections, useful in analyzing the data of where specific words or other elements are found in the Quran. The remaining half-year contains six "months/surahs" in the dunya lower half of the chart. These final six surahs relate to the paired names in the Basmalah each having six letters (total 12, a year), symbolic of the Final Plan's completion. There is actually only one letter different for each name plus a change in placement of the mīm. Since the last two suras are a final pair, this also adds a " 2 " to this set, making the entire Quranic architecture also a $\{2,3,4\}$ set, likely in many more ways and examples than what have been mentioned here.

