

Chapter Zero: "Prologue"

Throughout the following chapters, we are going to be working with the concept of "Quantum Mathematics". This overall form of mathematics is not complicated at all, in that Quantum Mathematics requires absolutely no algebra, or calculus, or anything above the most basic level of traditional mathematics. This is due to the fact that Quantum Mathematics only involves the familiar traditional mathematical "Functions" of "Addition", "Subtraction", "Multiplication" and "Division", which collectively comprise the 'Four Functions', along with the interrelations of the single-digit "Numbers" 0-9, which collectively comprise the "Base Set" of Numbers. (It should be noted at this point that instances of quotation marks and capitalization will be ubiquitous throughout these chapters, as can be seen in relation to this paragraph, and as will be explained towards the end of this chapter.)

Quantum Mathematics is my own form of mathematics, at least as far as I have written a book on it. In the grand scheme of things, what I have taken to referring to as *Quantum Mathematics* is really just a variation on basic condensive mathematics, which throughout history, has been referred to by a variety of terms such as *archetypal mathematics*, *theosophical mathematics*, *numerological mathematics* (or *numerology*), *digital root mathematics*, and most recently, *vortex based mathematics*. I first encountered the overall concept of digital root mathematics through Marko Rodin and his vortex based mathematics, which is the form of mathematics on which this book was initially based. Though as this book progressed, I realized that I was taking the general concept of condensive mathematics in a direction which is somewhat different than that which Marko and his people are taking it, and as such, I decided to rename the overall form of mathematics based on my own work. Furthermore, since my own work has proven to be fruitful when I consider the Numbers to behave as individual and unique "Quanta", the term *Quantum Mathematics* seemed both obvious and ideal.

With that said, we can move along to a very basic explanation of the overall form of condensive mathematics which we will be working with throughout these chapters. The main focus of Quantum Mathematics is on the single-digit Numbers 1-9, as all other Numbers are simply "Octaves" of one of those 'Base Numbers', which means that we will be using a digital form of compression which involves the condensation of all multiple-digit Numbers down to their single-digit form using basic Addition, as can be seen in the arbitrary examples which are shown below. (To clarify, the 'Base Numbers' are the single-digit Numbers 1, 2, 3, 4, 5, 6, 7, 8, and 9, with these nine Numbers comprising the 'Base Set' of Numbers.)

17 is an Octave of the 8, in that $1+7=8$

135 is an Octave of the 9, in that $1+3+5=9$

4984 is an Octave of the 7, in that $4+9+8+4=25$, and $2+5=7$

899986799899 is an Octave of the 1, in that $8+9+9+9+8+6+7+9+9+8+9+9=100$, and $1+0+0=1$

The method of condensation which is explained above can be used on any multiple-digit Number in existence to determine its archetypal (single-digit) value, which will be referred to as the *condensed value*, or the "*Quality*" of the Number.

Furthermore, "Decimal Numbers" are condensed in the same manner, as can be seen in the arbitrary example which is shown below.

.5847 is an Octave of the 6, in that $5+8+4+7=24$, and $2+4=6$

The decimal point is irrelevant in Quantum Mathematics, and is generally disregarded. For example, the Numbers 125, 12.5, 1.25, and .125 are all 'Octaves Of The 8', as all three of these Numbers condense to the 8, in that " $1+2+5=8$ ".

At this point, that is really all that needs to be said about the condensive aspect of Quantum Mathematics. This condensation causes an Octavization, which causes the 'Base Numbers' to behave in a manner which is similar to that of the notes which comprise the musical scale. From left to right, the white keys on a piano progress through the notes of *A, B, C, D, E, F, and G* (assuming that we start on an *A* note). Though after the first *G* note, the keys do not progress to an *H* note, they instead progress to an *A* note which is one Octave higher than the previous *A* note. In this book, we will begin to see how Numbers display characteristics and behaviors which are similar to those of the notes which comprise the musical scale, as well as the frequencies which comprise the electromagnetic spectrum. This Octavization is an inherent characteristic of the Numbers, one which is shared by sound in the form of the musical scale of *A, B, C, D, E, F, G, ...*, as well as by Light in the form of the color spectrum of *Red, Orange, Yellow, Green, Blue, Indigo, Violet, ...*. Furthermore, I suspect that in the fullness of time, we will find that aspects of this Octavization characteristic are also displayed by the sub-atomic particles of which our Universe is comprised. (While we will encounter the concept of Octavization a few times throughout these chapters, the specifics of the overall concept of multiple Octaves will not be covered in this book. This book will instead focus on the behaviors and interrelations of the constituent members of one complete Octave of Numbers (or Quanta). Also, while this book contains nine Standard Model of Physics themed chapters, the actual Standard Model itself will not be a part of this book, outside of the brief appearance which it makes in "Chapter Nine: Epilogue". This book will focus solely on the characteristics and behaviors which are displayed by the 'Base Numbers', which we will begin to see share various connections to the characteristics and behaviors which are displayed by the constituent members of the Standard Model of Physics.)

(The "*****" which is seen above represents a section break. These section breaks will be ubiquitous throughout this book, as the majority of these chapters will be broken up into sections.)

Next, we will familiarize ourselves with the various "Familial Relationships" which exist between the individual 'Base Numbers'. The most immediate of these 'Familial Relationships' are the "Sibling" and "Cousin" Relationships which are maintained between various pairs of 'Base Numbers', while the more distant of these Relationships are maintained between fellow "Family Group" members and fellow "Core Group" members, all of which is briefly explained below (and will be elaborated on throughout the upcoming chapters).

The most immediate of the 'Familial Relationships' which are maintained between the 'Base Numbers' is that which is maintained between the five unique pairs of 'Sibling Numbers', these being the 0 and

the 9, the 1 and the 8, the 2 and the 7, the 3 and the 6, and the 4 and the 5. These five pairs of Numbers are all considered to be Siblings of one another due in part to the fact that they each Add to a non-condensed sum of 9, in that " $0+9=9$ ", " $1+8=9$ ", " $2+7=9$ ", " $3+6=9$ ", and " $4+5=9$ ".

While the next most immediate of the 'Familial Relationships' which are maintained between the 'Base Numbers' is that which is maintained between the five unique pairs of 'Cousin Numbers', these being the 0 and the 9, the 1 and the 8, the 2 and the 5, the 3 and the 6, and the 4 and the 7. These five pairs of Numbers are all considered to be Cousins of one another due in part to the fact that they each Multiply to a non-condensed product which condenses to the 1, as will be explained in "Interlude Two (Hundred and Seventy-Three): 'Quantum Mathematics and the Modern Gregorian Calendar' ". Though it should be noted at this point that the '1/8 Cousins' are unique, in that these two Numbers are each their own 'Self-Cousin', which means that the 1 is its own 'Self-Cousin', as is also the case in relation to the 8. Therefore, while the 1 and the 8 will occasionally be treated as though they are Cousins of one another, they are each technically considered to be their own 'Self-Cousin'.

Three of the pairs of Numbers which maintain a 'Sibling Relationship' between one another also maintain a 'Cousin Relationship' between one another, these being 0/9, 1/8, and 3/6, which means that each of these pairs of Numbers are (uniquely) Related as Sibling/Cousins. The 3 and the 6 will collectively be referred to as the '3/6 Sibling/Cousins', as they are both Siblings and Cousins of one another, while the 1 and the 8 will collectively be referred to as the '*1/8 Sibling/Self-Cousins*', which is due to the fact that in addition to being Siblings of one another, these two Numbers are each 'Self-Cousins', as was explained a moment ago.

While the pairing of the 0 and the 9 is unique, in that the 0 and the 9 are actually two different aspects of the same Number, similar to how heads and tails are two different aspects of the same coin. This means that the "9/0 Unity" can operate as either the 0 or the 9, or both, as the situation requires. This unique, independent, and "Dominant" '9/0 Unity' is its own Sibling, as well as its own Cousin, and as such, will be referred to as the '*9/0 Self-Sibling/Cousin*', while the individual aspects of the '9/0 Unity' will be referred to as the '*Self-Sibling/Cousin 9*' and the '*Self-Sibling/Cousin 0*'. There are an "Infinite" variety of unique '9/0 Unities', all of which comprise one grand "Fractal" which will be referred to as the "Sacred Whole", and it is from the individual '9/0 Unities' which the various instances of 'Sibling Numbers' are yielded, as will be explained in "Quantum Mathematics and the Standard Model of Physics Part One: 'The Birth of Siblings' ". The '9/0 Unity' is central to the overall theory of Quantum Mathematics, and the overall concept of the 0 and the 9 being the same Number bears import in relation to a variety of fields such as mathematics, physics, religion, philosophy, etc. . (The importance of the '9/0 Unity' will be elaborated on throughout the upcoming chapters.)

Next, having familiarized ourselves with the "Direct Relationships" which are maintained between the 'Base Numbers' (these being the Sibling and Cousin Relationships, along with their variations), we can move on to an examination of the 'Indirect Relationships' which are maintained between the 'Base Numbers', starting with the three unique 'Family Group Relationships' which are maintained between groups of three 'Base Numbers', all of which are explained below.

The first of the three Family Groups is comprised of the 1, which in this case is acting as its own 'Self-Cousin', along with the members of the '4/7 Cousins'. These three Numbers comprise the '1,4,7 Family Group', which is the more Dominant of the two interrelated Family Groups, as will be explained in a

moment. The '1,4,7 Family Group' is most often seen by itself, though it is also frequently seen together with the next, and more "Passive" Family Group, as is explained below.

The second of the three Family Groups is comprised of the 8, which in this case is acting as its own 'Self-Cousin', along with the members of the '2/5 Cousins'. These three Numbers comprise the '2,5,8 Family Group', which is the more Passive of the two interrelated Family Groups. (The two interrelated Family Groups, these being the 1,4,7 and 2,5,8 Family Groups, maintain an opposition between one another, in that together they comprise one of the two Core Groups, as will be explained in a moment.) While the '2,5,8 Family Group' is sometimes seen by itself, it is more frequently seen along with the more Dominant '1,4,7 Family Group', as will be seen throughout the upcoming chapters. (The '1,4,7 Family Group' maintains a Dominance over the '2,5,8 Family Group' due to the fact that the '1,4,7 Family Group' is the first, or the "Alpha", of the Family Groups. The overall characteristic of 'Alpha Dominance' occurs in a variety of forms, as will be seen throughout the upcoming chapters.)

While the third of the three Family Groups is comprised of the 'Self-Sibling/Cousin 9' (which is also the 'Self-Sibling/Cousin 0'), along with the members of the '3/6 Sibling/Cousins'. These three Numbers comprise the '3,6,9 Family Group', which displays a unique form of Dominance over, and independence from, the other two Family Groups. (The unique form of Dominance which the '3,6,9 Family Group' maintains over the 1,4,7 and 2,5,8 Family Groups will be seen a few times as we work our way through these chapters, and will be explained as we progress.)

The three groups of three Numbers which are described above collectively involve all nine of the 'Base Numbers', which means that the three Family Groups together comprise a complete instance of the nine-member 'Base Set'. While as was mentioned a moment ago, the the 1,4,7 and 2,5,8 Family Groups maintain an opposition between one another, one which does not involve the '3,6,9 Family Group'. (The '3,6,9 Family Group' is in opposition to itself, as will be explained in upcoming Standard Model of Physics themed chapters.) The opposition which is maintained between the 1,4,7 and 2,5,8 Family Groups is due in part to the fact that these two Family Groups comprise the '1,2,4,8,7,5 Core Group', which will be an integral part of several upcoming chapters, and will be explained more thoroughly in a moment.

While the '3,6,9 Family Group' can act as an opposing Core Group (opposite the '1,2,4,8,7,5 Core Group'), which means that the '3,6,9 Family Group' can also be considered to be the '3,6,9 Core Group'.

The 1,2,4,8,7,5 and 3,6,9 Core Groups are "Connected" in part via the 7 and the 3. The teachings of the late philosopher George Gurdjieff involve the Law of Seven and the interrelated Law of Three (both of which are considered to be cosmic laws), while Quantum Mathematics involves the 'Connection Between The 7 And The 3,6,9 Family Group', which will be seen and explained as we work our way through these chapters. (To clarify, the 'Connection Between The 7 And The 3,6,9 Family Group' is simply an extension of the Connection which is maintained between the 3 and the 7, as will be explained in "Interlude Two (Hundred and Seventy-Three): Quantum Mathematics and the Modern Gregorian Calendar".)

Also, before we move on to the next section of this chapter, it should be noted that each of the sets and groups which are described above Adds to a non-condensed sum which condenses to a member of the '3,6,9 Family Group', as is shown below. (The condensed values of the sums which are shown below are all highlighted in a Family Group color code, as will be explained in a moment.)

$$\text{'Base Set': } 1+2+3+4+5+6+7+8+9=45(9)$$

$$\text{Core Group: } 3+6+9=18(9)$$

$$\text{Core Group: } 1+2+4+5+7+8=27(9)$$

$$\text{Family Group: } 3+6+9=18(9)$$

$$\text{Family Group: } 1+4+7=12(3)$$

$$\text{Family Group: } 2+5+8=15(6)$$

Above, we can see that the 'Base Set', the two Core Groups, and the '3,6,9 Family Group' all Add to non-condensed sums which condense to the 9, while the 1,4,7 and 2,5,8 Family Groups Add to non-condensed sums which condense to the 3 and the 6, respectively.

The '1,2,4,8,7,5 Core Group' which was mentioned in the previous section is the concept which initially drew me to Quantum Mathematics, specifically how the '1,2,4,8,7,5 Core Group' can be yielded as a series of condensed values via a simple "Doubling Pattern". This particular 'Doubling Pattern' begins with an initial 1, which is then repeatedly Doubled via an Infinite series of 'X2 Multiplication Functions', as is shown below.

$$\begin{aligned} & 1(1) \\ 1X2= & 2(2) \\ 2X2= & 4(4) \\ 4X2= & 8(8) \\ 8X2= & 16(7) \\ 16X2= & 32(5) \\ 32X2= & 64(1) \\ 64X2= & 128(2) \\ 128X2= & 256(4) \\ 256X2= & 512(8) \\ 512X2= & 1024(7) \\ 1024X2= & 2048(5) \end{aligned}$$

Above, the condensed values of the single and multiple digit products are shown in parentheses after the non-condensed values of the products, as will be the case throughout these chapters (in this particular example, the condensed values are all highlighted arbitrarily in red). It is these red condensed values which form the '1,2,4,8,7,5 Core Group' pattern, which repeats to Infinity (4096(1), 8192(2), 16,384(4), etc.).

While the '1,2,4,8,7,5 Core Group' can also be yielded by a simple "Halving Pattern", with this particular 'Halving Pattern' involving an initial 1 which is repeatedly Halved via an Infinite series of '/2 Division Functions', as is shown below.

$$\begin{array}{r}
1(1) \\
1/2 = .5(5) \\
.5/2 = .25(7) \\
.25/2 = .125(8) \\
.125/2 = .0625(4) \\
.0625/2 = .03125(2) \\
.03125/2 = .015625(1) \\
.015625/2 = .0078125(5) \\
.0078125/2 = .00390625(7) \\
.00390625/2 = .001953125(8) \\
.001953125/2 = .0009765625(4) \\
.0009765625/2 = .00048828125(2) \\
.00048828125/2 = .000244140625(1)
\end{array}$$

Above, we can see that the condensed values of the 'Decimal Number' quotients form a 1,5,7,8,4,2,... pattern, with this pattern involving a "Mirrored" '1,2,4,8,7,5 Core Group' which repeats to Infinity (.0001220703125(5), .00006103515625(7), .000030517578125(8), etc.).

Before we move on to the next section, it should be noted that the term *Mirrored* refers to an important concept which will be seen in a variety of forms throughout these chapters, and will be explained more thoroughly as we progress. Though for now, we can consider the overall concept of Mirroring to involve a general opposition (or in this case, a reversal).

Throughout these chapters, we will be working with a variety of patterns (and sub-patterns, and sub-sub-patterns), most of which will be indicated with colored highlighting. For the most part, we will be using the colors of green, red, and blue (in that order), and the three main color codes which we will be working with are explained below.

First, when we are highlighting arbitrary patterns (those which do not involve any instances of 'Familial Relationships'), we will use the colors of green and red, with these two opposing colors being similar to opposing designations of *A* and *B*, respectively. While if we need to indicate a third designation which is in opposition to (or independent of) the designations of *A* and *B*, we will use the color blue, which would be considered to be a designation of *C*. (While the colors purple, brown, and yellow will make a few appearances as well, as the designations of *D*, *E*, and *F*, respectively.)

Though many of the patterns which we will be working with will not be arbitrary, they will instead involve the Family Group membership of the individual Numbers which are involved in the pattern. As was explained earlier, there are three Family Groups, which, in order, are the '1,4,7 Family Group', the '2,5,8 Family Group', and the '3,6,9 Family Group'. Therefore, when we are using highlighting to indicate a pattern which involves the Family Group membership of its constituent Numbers, the color code will involve the colors of green in relation to all of the individual '1,4,7 Family Group' members,

red in relation to all of the individual '2,5,8 Family Group' members, and blue in relation to all of the individual '3,6,9 Family Group' members.

For example, if we were to indicate the Family Group membership of the nine individual Numbers which comprise the 'Base Set', it would look like what is shown below. (The color code which is used in relation to the simple diagram which is shown below will be referred to as *Family Group highlighting*.)

123456789

While we will also find ourselves working with patterns which involve the orientation of their individual constituent Numbers within their respective Family Groups. In those cases, we will use a variation on the color code which is explained above, in order to indicate the orientation of the individual Numbers within their Family Group (specifically, whether the individual Numbers are the first, second or third digit of their respective Family Groups). This unique color code will use the same three colors as were seen in relation to the previous example, in the same order (this being green, then red, then blue), as can be seen in the example which is shown below.

123456789

Above, we can see that the first member of each of the three Family Groups is highlighted in green, the second member of each of the three Family Groups is highlighted in red, and third member of each of the three Family Groups is highlighted in blue. (The previous color code has already been identified by name as *Family Group highlighting*, though the color code which is described above will be identified by name in an upcoming Standard Model of Physics themed chapter.)

The two non-arbitrary "Trinity" color codes which are explained above will be used throughout many of the upcoming chapters. While we will also occasionally work with other forms of highlighting, all of which will be explained as we progress.

Throughout these chapters, we will be working with the unique though interrelated concepts of the Quality and the "Quantity" of a Number. (As was mentioned earlier, the term *Quality* refers to the condensed value of a Number.) These two concepts will be explained more thoroughly in upcoming chapters, though for now, we can establish that the values of the single and multiple digit Numbers themselves, as well as their Qualities, will be represented digitally (for example, 1, 2, 3, etc.), while Quantities of Numbers, as well as other things, will all be spelled out with letters (for example, one, two, three, etc.).

Then there will be the terms *middle* and *center*, which will refer to the same general concept of centrality, although the term *middle* will always refer to the vertical middle (that which is oriented between top and bottom), while the term *center* will always refer to the horizontal center (that which is oriented between left and right). The corresponding terms *middle* and *center* will mostly be used in reference to patterns, charts, or diagrams, though they will also be used in upcoming chapters (in their capitalized forms) to describe two specific forms of "Charge".

As was mentioned in a previous section, this book will contain a variety of capitalized words. This capitalization will be used in relation to terms which pertain to Quantum Mathematics, such as *Siblings*, *Cousins*, *Familial*, *Core Group*, *Mirroring*, *Numbers*, "Nothing", *Infinity*, etc. . Most of these terms will have alternate meanings outside of the Quantum Mathematical lexicon, and when they are used for that purpose, they will not be capitalized. (For example, in the sentence "Each of the Numbers possesses a specific Quality, while also displaying a variety of other qualities, such as Charge and Family Group membership.", the capitalized term *Quality* refers to the condensed value of the Numbers, while the non-capitalized term *qualities* refers to general characteristics of the Numbers.) This capitalization may be a bit distracting at first, though I have found that it is necessary in order to maintain clarity, as the semantics of the Quantum Mathematical lexicon tend to get a bit tricky at times. Also, it should be noted that when descriptors are referenced as terms, they will be italicized, as will also be the case in relation to any other instances where words are used as words, as can be seen throughout this paragraph.

While this book will also contain a generous amount of quotation marks, which will again be due to the semantics of the Quantum Mathematical lexicon. First, there will be the instances of single quotation marks (such as 'these'), which will indicate specific Quantum Mathematical terminology. For example, the general term *Siblings* will not be shown within quotation marks, while the specific term '*2/7 Siblings*' will be shown within single quotation marks, and general term *Number* will not be shown within quotation marks, while specific terms '*Base Number*' and '*Decimal Number*' will both be shown within single quotation marks (while general terms such as *Related Number* and *Mirrored Number* will not be shown within quotation marks). Then, there will be the instances of double quotation marks (such as "these"), which will be used in order to introduce new terminology, as is the case in relation to the term '*Base Set*', which was shown within double quotation marks the first time it was used, and has since been shown within single quotation marks. While specific Functions of any kind will also be shown within double quotation marks when they are included within the text (for example, Functions such as "5X25", "A+B", or even "X5" would all be shown within double quotation marks). Also, it should be noted that double quotation marks will also be used in relation to chapter titles when they are mentioned within the text.

Finally, there are the nine Standard Model of Physics themed chapters which are distributed throughout this book. These nine chapters comprise their own sub-book, one which begins to explore the apparent connection between the overall concept of Quantum Mathematics and the overall theory of Quantum Mechanics. Those whose interest lies strictly with the connection between Quantum Mathematics and Quantum Mechanics can feel free to skip over the twenty-one chapters and interludes which do not involve the Standard Model of Physics, and read only the nine Standard Model of Physics themed chapters. Though it should be noted that many of the concepts which will be encountered within the nine Standard Model of Physics themed chapters are elaborated on within the twenty-one other chapters and interludes, which means that reading those other chapters and interludes, either before of after the nine Standard Model of Physics themed chapters, will allow for a more thorough

understanding of the overall concepts which are explained within the Standard Model of Physics themed chapters. (Also, it should be noted that the connection between Quantum Mathematics and Quantum Mechanics may not become apparent until "Quantum Mathematics and the Standard Model of Physics Part Five: 'Color and Reactive Charge' ", which involves an examination of two of the overall forms of Charge which are possessed by the 'Base Numbers'.)

It should also be mentioned that while this book can be considered to be two books in one, it is actually only half of a book, in that there is still much more to be said about the overall concept of Quantum Mathematics. Though with this first book containing over five hundred pages, any additional Quantum Mathematical concepts will have to be explored in a second book, which at this point, has yet to be written.

That completes this basic introduction to the overall concept of Quantum Mathematics. The following twenty-nine chapters and interludes will involve concepts such as Mirroring, "Negative Numbers", and three independent overall forms of Charge (along with three independent overall forms of "Anti-Charge"), with these concepts leading us to a comparison between the single-digit Numbers and the Standard Model of Physics, as will be explained briefly in "Chapter Nine: Epilogue".