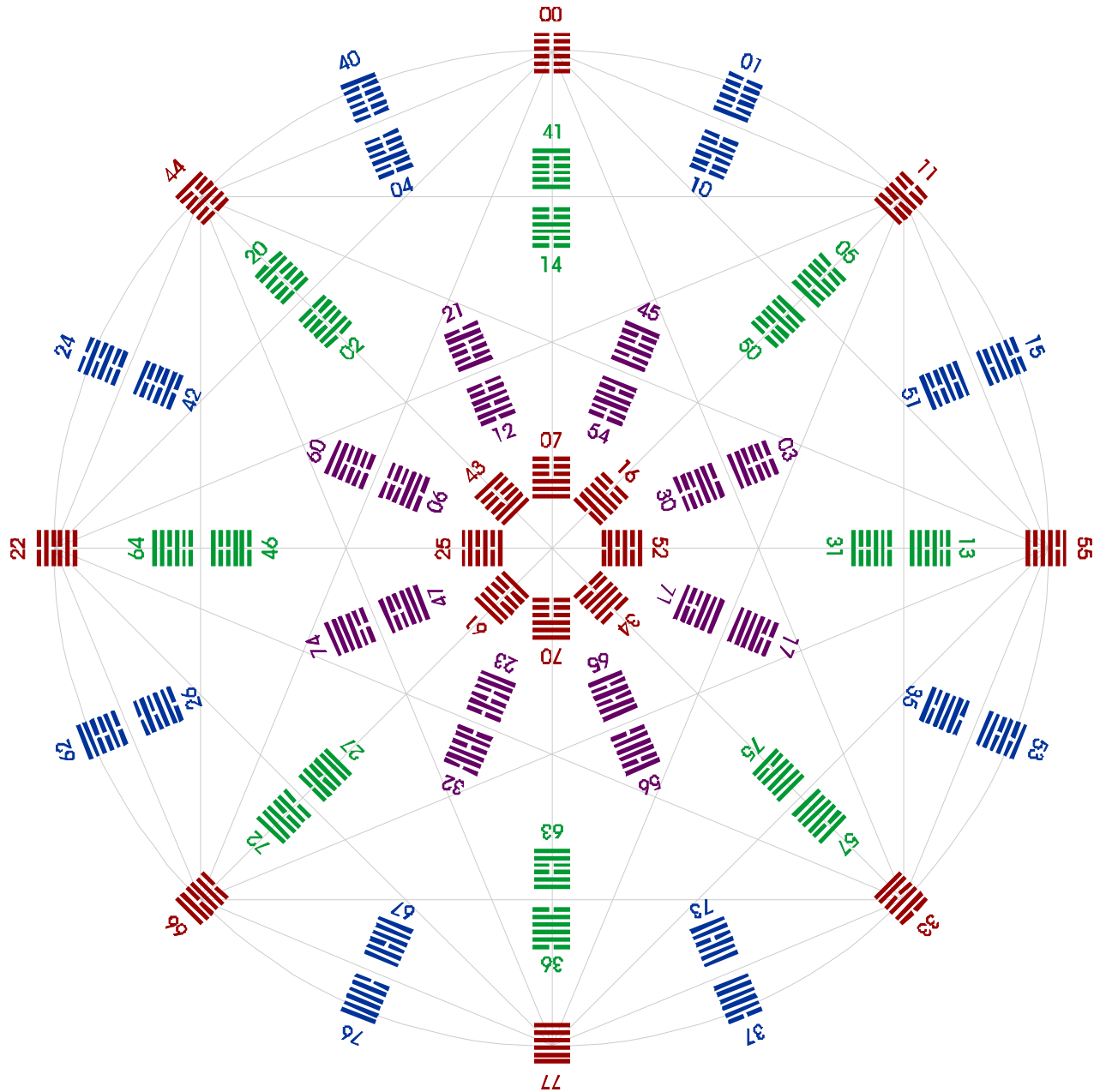


# Great I Ching Circle.



*“If certain inner connections become evident, they begin to impress themselves on our consciousness and to guide it.”*

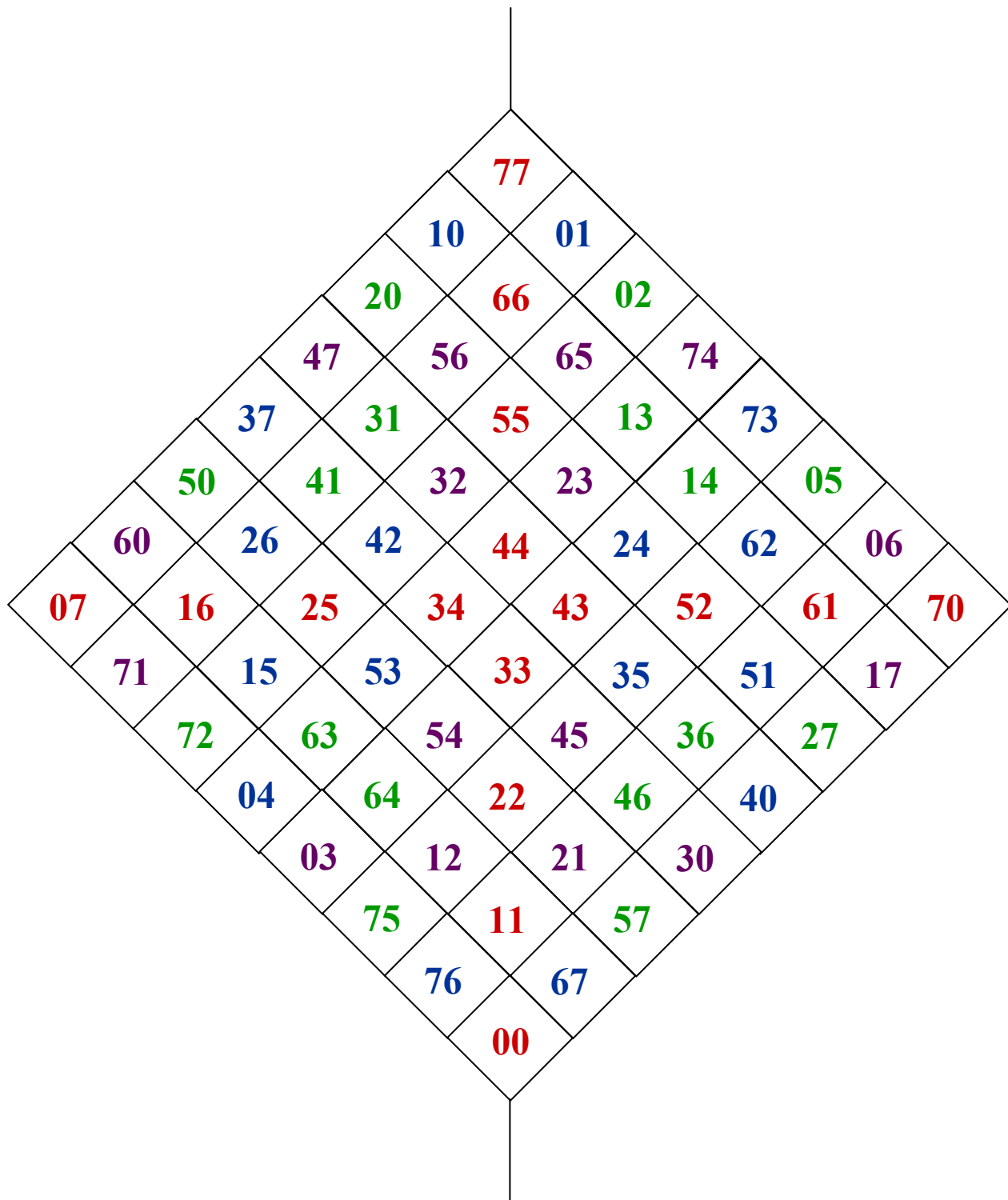
*Jean Gebser*

## OCTAL PAN MAGIC SQUARE #1

|    |    |    |    |    |    |    |    |
|----|----|----|----|----|----|----|----|
| 77 | 01 | 02 | 74 | 73 | 05 | 06 | 70 |
| 10 | 66 | 65 | 13 | 14 | 62 | 61 | 17 |
| 20 | 56 | 55 | 23 | 24 | 52 | 51 | 27 |
| 47 | 31 | 32 | 44 | 43 | 35 | 36 | 40 |
| 37 | 41 | 42 | 34 | 33 | 45 | 46 | 30 |
| 50 | 26 | 25 | 53 | 54 | 22 | 21 | 57 |
| 60 | 16 | 15 | 63 | 64 | 12 | 11 | 67 |
| 07 | 71 | 72 | 04 | 03 | 75 | 76 | 00 |

This Pan Magic square is in Base 8 using the colored numbers from the Great I Ching. Each square is a Magic Square in its own right and all diagonally opposite numbers, which are the same color, adds up to 77 Base 8. Note the Magic Square is symmetrical down the 77 – 00 diagonal

## OCTAL PAN MAGIC SQUARE #1 SYMMETRY



## OCTAL PAN MAGIC SQUARE # 2

|    |    |    |    |    |    |    |    |
|----|----|----|----|----|----|----|----|
| 77 | 40 | 20 | 17 | 01 | 36 | 56 | 61 |
| 04 | 33 | 53 | 64 | 72 | 45 | 25 | 12 |
| 10 | 27 | 47 | 70 | 66 | 51 | 31 | 06 |
| 63 | 54 | 34 | 03 | 15 | 22 | 42 | 75 |
| 02 | 35 | 55 | 62 | 74 | 43 | 23 | 14 |
| 71 | 46 | 26 | 11 | 07 | 30 | 50 | 67 |
| 65 | 52 | 32 | 05 | 13 | 24 | 44 | 73 |
| 16 | 21 | 41 | 76 | 60 | 57 | 37 | 00 |

This is another Base 8 Pan Magic square using the colored numbers from the Great I Ching.. Again each square is a Magic Square in its own right and all diagonally opposite numbers, which are the same color, adds up to 77 Base 8.

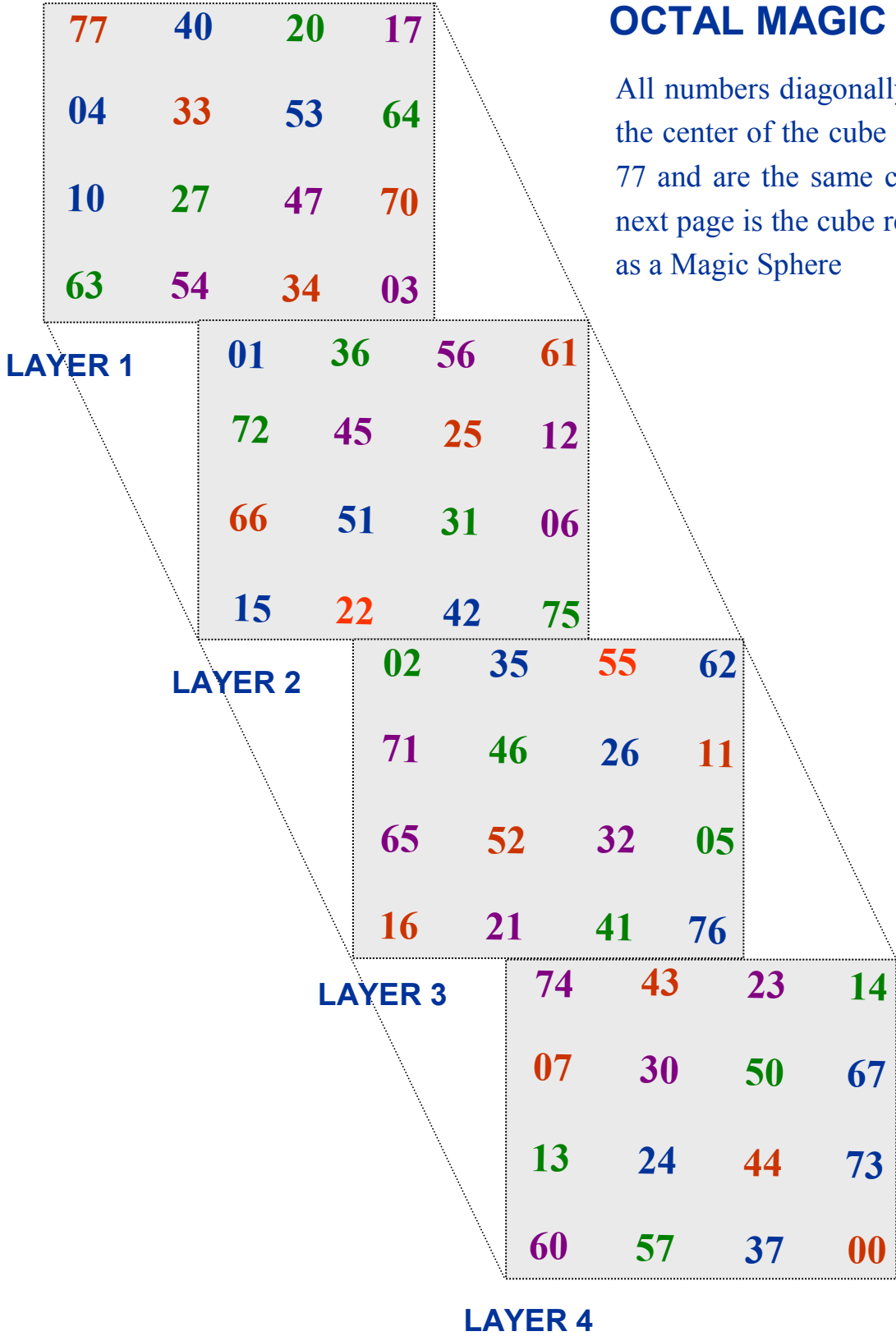
## OCTAL MAGIC CUBE LAYERS

| LAYER 1 |    |    |    | LAYER 2 |    |    |    |
|---------|----|----|----|---------|----|----|----|
| 77      | 40 | 20 | 17 | 01      | 36 | 56 | 61 |
| 04      | 33 | 53 | 64 | 72      | 45 | 25 | 12 |
| 10      | 27 | 47 | 70 | 66      | 51 | 31 | 06 |
| 63      | 54 | 34 | 03 | 15      | 22 | 42 | 75 |
| 02      | 35 | 55 | 62 | 74      | 43 | 23 | 14 |
| 71      | 46 | 26 | 11 | 07      | 30 | 50 | 67 |
| 65      | 52 | 32 | 05 | 13      | 24 | 44 | 73 |
| 16      | 21 | 41 | 76 | 60      | 57 | 37 | 00 |
| LAYER 3 |    |    |    | LAYER 4 |    |    |    |

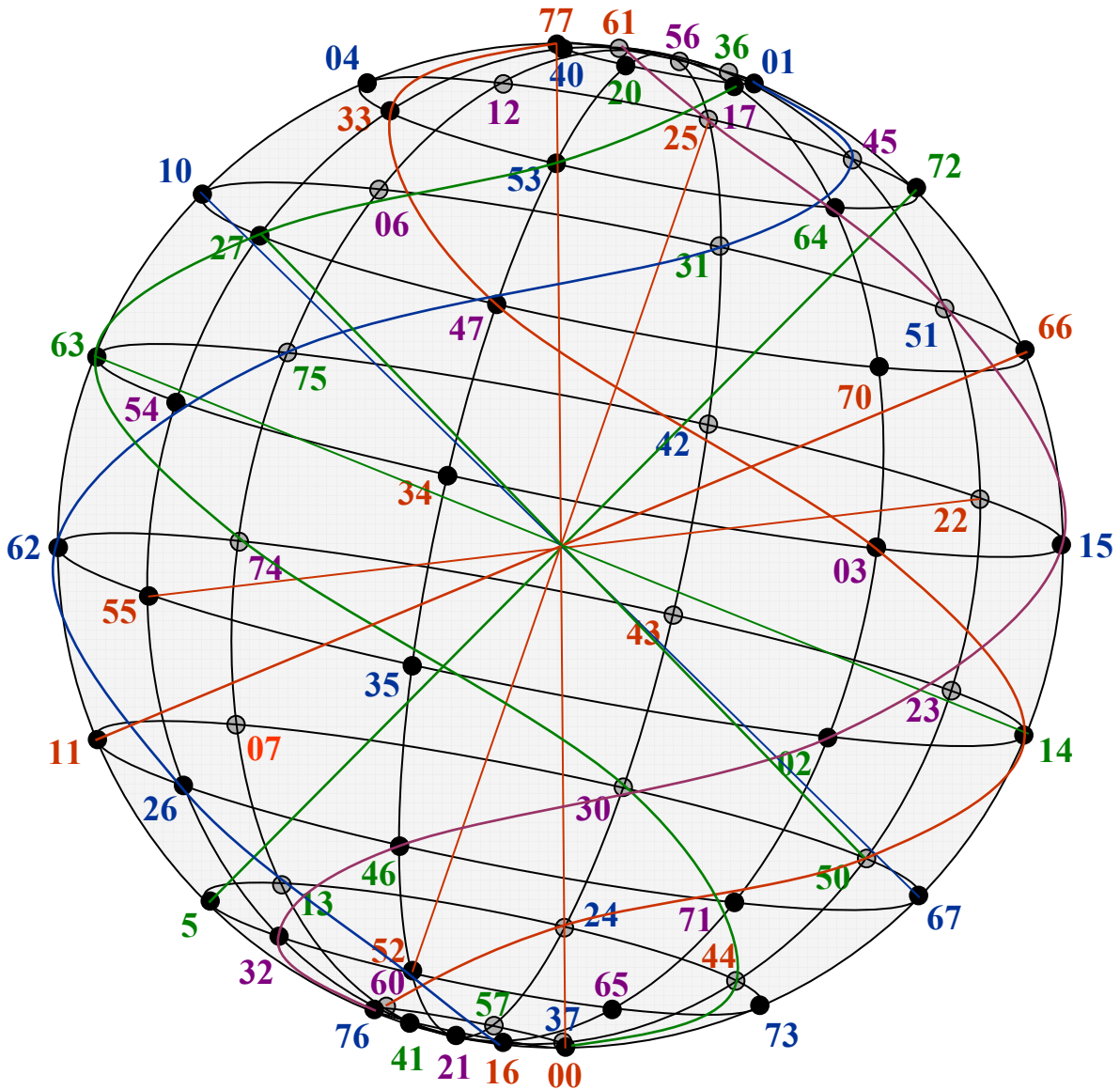
This magic square easily converts into a magic cube.

# OCTAL MAGIC CUBE

All numbers diagonally through the center of the cube add up to 77 and are the same color. The next page is the cube rearranged as a Magic Sphere



# OCTAL MAGIC SPHERE



Keep Clicking.....

The above magic sphere was created so that all numbers diagonally opposite through the center of the sphere add up to 77 Base 8 and are the same color. All numbers on the same latitude add up to  $3 \times 77$  Base 8 and all numbers on the same longitudes add up to  $6 \times 77$  Base 8. All lines flowing around the sphere as indicated also add up to  $6 \times 77$ .

## BENJAMIN FRANKLINS MAGIC SQUARE

|    |    |    |    |    |    |    |    |
|----|----|----|----|----|----|----|----|
| 14 | 3  | 62 | 51 | 46 | 35 | 30 | 19 |
| 52 | 61 | 4  | 13 | 20 | 29 | 36 | 45 |
| 11 | 6  | 59 | 54 | 43 | 38 | 27 | 22 |
| 53 | 60 | 5  | 12 | 21 | 28 | 37 | 44 |
| 55 | 58 | 7  | 10 | 23 | 26 | 39 | 42 |
| 9  | 8  | 57 | 56 | 41 | 40 | 25 | 24 |
| 50 | 63 | 2  | 15 | 18 | 31 | 34 | 47 |
| 16 | 1  | 64 | 49 | 48 | 33 | 32 | 17 |



## BENJAMIN FRANKLINS MAGIC SQUARE IN BASE EIGHT

|    |    |    |    |    |    |    |    |
|----|----|----|----|----|----|----|----|
| 15 | 2  | 75 | 62 | 55 | 42 | 35 | 22 |
| 63 | 74 | 3  | 14 | 23 | 34 | 43 | 54 |
| 12 | 5  | 72 | 65 | 52 | 45 | 32 | 25 |
| 64 | 73 | 4  | 13 | 24 | 33 | 44 | 53 |
| 66 | 71 | 6  | 11 | 26 | 31 | 46 | 51 |
| 10 | 7  | 70 | 67 | 50 | 47 | 30 | 27 |
| 61 | 76 | 1  | 16 | 21 | 36 | 41 | 56 |
| 17 | 0  | 77 | 60 | 57 | 40 | 37 | 20 |

This is Benjamin Franklin's Magic Square replaced with Base 8 numerals using the colored numbers from the Great I Ching Magic Circle.

## PROPERTIES OF BENJAMIN FRANKLIN'S MAGIC SQUARE IN BASE EIGHT

Magic Square #1 is based on the 8 x 8 magic square below, constructed by Benjamin Franklin. On the next page his numbers have been replaced by octal numbers. By using octal numbers, the underlying structure and harmonics of this famous magic square are exposed and explored.

The following properties of his magic square are revealed by using the octal numbers:

Every horizontal row and vertical column add up to  $4 \times 77$

The two main diagonals add up to  $4 \times 77$

If you stop half way along a row or column the numbers add up to  $2 \times 77$

Every four cell mini square (example indicated) adds up to  $2 \times 77$

The four  $4 \times 4$  mini squares (example indicated) add up to  $8 \times 77$

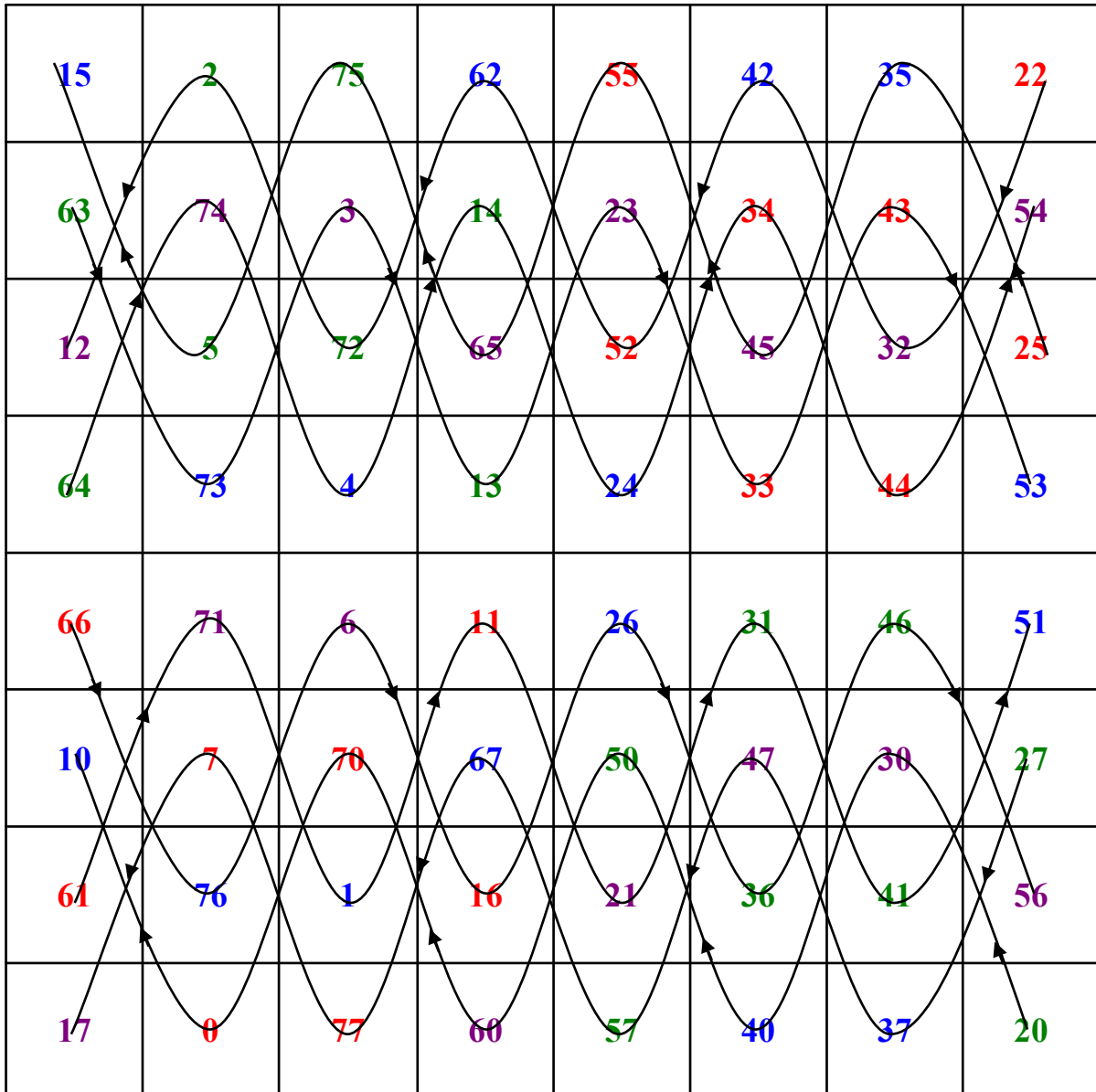
The  $2 \times 4$  mini squares (example indicated) add up to  $4 \times 77$

The rising and falling diagonals, as indicated, also give a total of  $8 \times 77$

The following pages show two examples of the inner structure of Benjamin Franklin's Magic Square which are only revealed by using Base 8 numerals and the colored numbers form the Great I Ching Magic Circle.

# INNER STRUCTURE OF BENJAMIN FRANKLINS MAGIC SQUARE IN BASE EIGHT

## Level 1



Note the increase in the numbers is ten Base 8 which create a series of eight identical harmonic patterns.

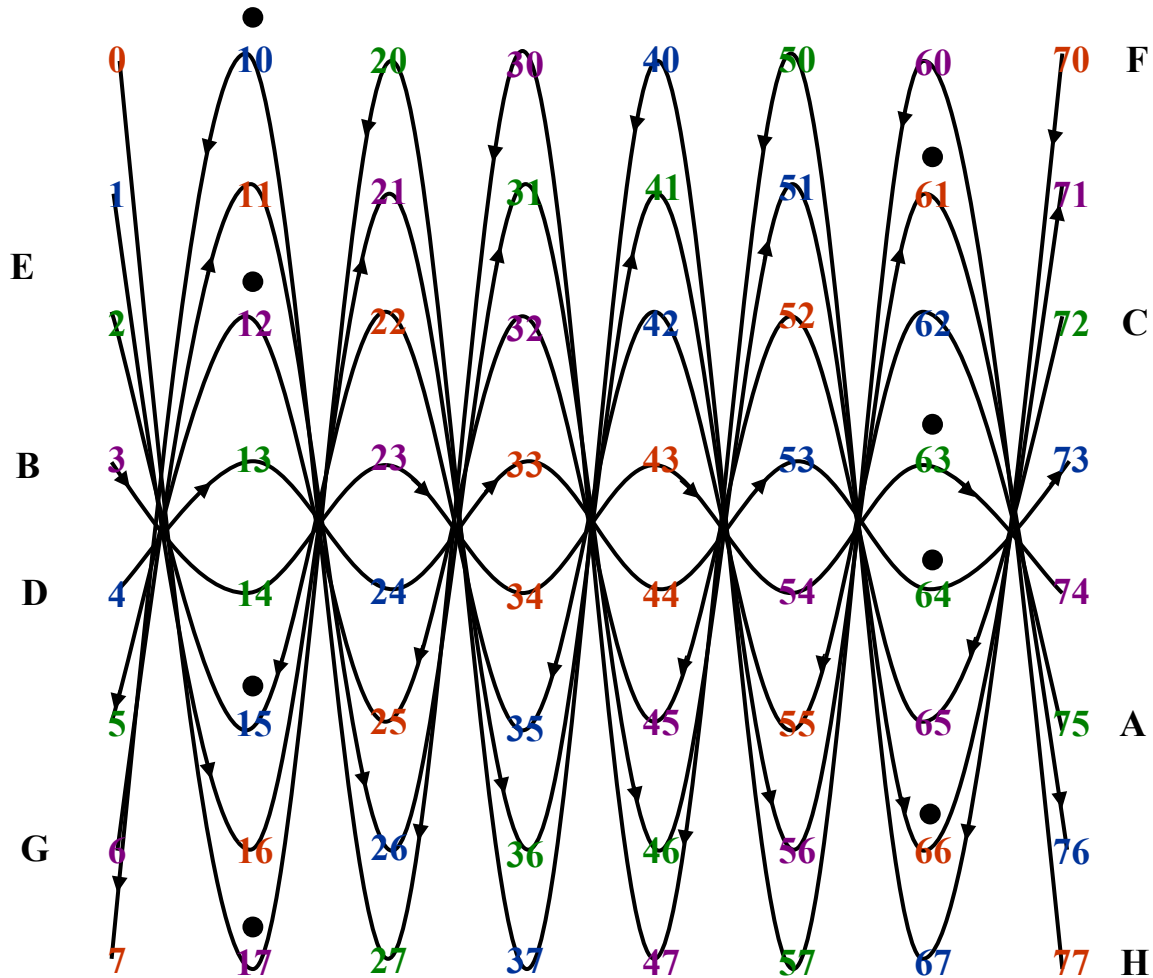
## INNER STRUCTURE OF BENJAMIN FRANKLINS MAGIC SQUARE IN BASE EIGHT Level 2

|    |    |    |    |    |    |    |    |   |
|----|----|----|----|----|----|----|----|---|
| 15 | 2  | 75 | 62 | 55 | 42 | 35 | 22 | A |
| 63 | 74 | 3  | 14 | 23 | 34 | 43 | 54 | B |
| 12 | 5  | 72 | 65 | 52 | 45 | 32 | 25 | C |
| 64 | 73 | 4  | 13 | 24 | 33 | 44 | 53 | D |
| 66 | 71 | 6  | 11 | 26 | 31 | 46 | 51 | E |
| 10 | 7  | 70 | 67 | 50 | 47 | 30 | 27 | F |
| 61 | 76 | 1  | 16 | 21 | 36 | 41 | 56 | G |
| 17 | 0  | 77 | 60 | 57 | 40 | 37 | 20 | H |

The following page shows another level of harmonics which are created from the numbers in each row being superimposed onto the base eight numbers in numerical order.

# INNER STRUCTURE OF BENJAMIN FRANKLIN'S MAGIC SQUARE IN BASE EIGHT

## Level 2



The lines that appear indicate the location and direction of the numbers within each row of the magic square. The letters in black indicate the row from the previous page while the black dot indicates the first number in the row. The lines produce four levels of harmonics. The two levels of harmonics are a clear demonstration of the underlying Base eight nature of Benjamin Franklin's 8 x 8 magic squares.