

EIOdodu2 preliminary draft 5-3-2026

Ecological Intuition is a cosmology type of idea for your consideration. It is based on the assumptions that you and I are conscious entities with physical bodies and that we are communicating with each other using the English Language.

In many cases we can see each other, listen to the sounds each other make, and have physical contact with each other. In other cases we can communicate with each other by talking on a phone or exchanging written texts in English via letters, books, or the internet.

We know that humanity has compiled an extensive library of information, knowledge, and wisdom and that all of this is available in our English Language. The problem is that there is way more material available than any individual can hope to consciously engage and understand. However, with practice, we can develop a sense as to what is available and how to access that when it is needed or useful. This is the essence of Ecological Intuition.

I will try to present this Ecological Intuition idea using the KISS principle (Keep It Simple Stupid) and the Cosmic Crossword Puzzle (CCP) in which you can use a proposed structure for your own words and ideas, or even develop your own structure for your words and ideas. The idea is to extract common structural elements of language that we have personally experienced and which recur in English and whatever other Natural Languages we may have used as well as logical, mathematical and programming languages.

These structural elements can be grouped into two categories. The first represents actual personal experiences we have with ourselves and our external physical reality. These personal experiences do not require language. They are just interactions we have with the universe. They may include experiences with the symbolic representations of language, but this just means that language itself is just another part of the universe with which we can interact. Call these the Reals.

The second category represents ideas. These may be ideas about our personal experiences in our external physical reality, or they may involve other constructs which we may create or encounter that have little or no connection to our perceived external physical reality. All ideas are expressible with a symbolic language of some sort, even if these are just grunts, or whistles, or hand waving. Call these the Ideals.

In this presentation each category is viewed as having a one three structure. They have a core, a noun or idea, and a three cycle of interrelated functions or expressions.

Here is an example of how the initial common language elements can be defined for the Real group;

A noun core; people, organisms, places, things,

And a three cycle of;

Verbs; descriptions of change or states of being,

Modifiers; adjectives, adverbs, words which express properties and characteristics relational words; various ways to connect or use nouns, verbs, and modifiers.

All of these correspond to our actual experiences. They exist in contrast with the Ideals, which comprises an additional four elements that exist in our minds and languages but are not part of the external physical reality that we can directly experience. These include;

An idea core; a mental construct that exists only in language,

And a three cycle of;

communications of these ideas with each other,

symbolic representations of ideas and their communications, and

the incorporation of these ideas, their communications and representations, into symbolic formalisms such as exist for English, other Natural Languages, mathematics, and programming languages.

All of these elemental concepts can then be intuitively associated with each other to create a symbolic language structure in our minds that can be externally represented as a symbolic formalism in our external physical reality. The nature of this intuitive structure will gradually evolve as we gain personal experiences and encounter or create new ideas. This will lead to an increasing comfort and familiarity with our individual intuitions. Then when we encounter new situations, physical events or ideas, we will have a sense as to how they interact with our existing structure. Can or will they contribute to our evolving intuitive emotional understanding.

We call this Ecological Intuition because it will be a function of the ecosystems that comprise the environments or contexts of our personal experiences or ideas. As we currently define life, every living thing is composed of cells which contain RNA, DNA, and proteins. Thus we all have at least one common language. This leads to a sort of genetic intuition. Something we are born with. However, we all live in different local environments and this leads to different types of intuition. For example, we as humans live in natural ecosystems that are connected to and a part of a global ecosystem. Our bodies comprise a cellular ecosystem which supports a neurological ecosystem, our brains, which supports our conscious thinking processes involving language and decision making. Our involvement with each other creates a social ecosystem or community, which on a larger scale leads to political and religious ecosystems.

So how does this work. How can we develop and use our Ecological Intuition in the complexity of our lives. To simplify this process I will initially represent each of the eight fundamental language elements with a single letter as follows.

Category 1: The Reals

U for nouns

I for verbs

E for modifiers

A for relationals

Category 2: The Ideals

O for ideas

Q for communications

Y for symbolic representations

H for the symbolic formalisms, how symbolic representations interrelate.

The question now is how to relate all of these structural elements to each other and to our personal experience, both physically and ideally. To do this I will present a series of illustrations, starting with My Room, a primitive geometric way to consider these ideas. This will be followed with examples from sculpture, from our history (including the emergence of art in indigenous communities), from various

working ecotechnology systems, from a top down look at some of our current mathematics, and from the construction of several abstract symbolic formalisms.

Let me start by introducing you to My Room. I picture this as a cube. I am the conscious core, standing in one corner of the room. I look out at the rest of the room as having length, width, and height. I can interact with and measure them. There are other things in the room and they also seem to have length, width, and height. The things change and move around and this creates a notion of time, which I can also measure. The things have properties or characteristics, color, shape, texture. They can interact with each other or with me, or I can interact with them. It is all connected and very real.

In the opposite corner of My Room are my core ideas. They don't have length, width, or height and I can't see them or feel them, but they do seem to connect or communicate with me, and potentially with others. I can sort of hear them singing or talking in my head. I can represent them with symbols or sounds, give them names or numbers. These symbols can then be interrelated into language, formal systems of connectivity. They swirl around in my head as art, music, history, memories, emotions, desires, and beliefs. All a part of My Room.

To illustrate here is a picture of My Room. See Figure 1.

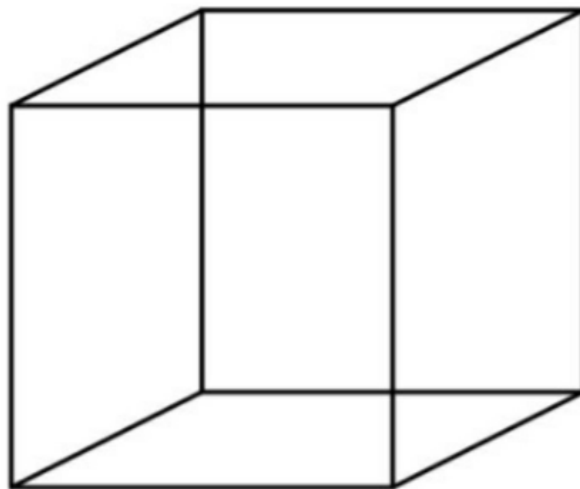


Figure 1.

This is called a Necker Cube and while it looks like a cube it is also ambiguous. Is the front square facing left or right. I can't tell and it doesn't matter. There is no

right answer. The cube has eight corners and so I can label each corner with one of the basic elements of language mentioned earlier. See Figure 2,

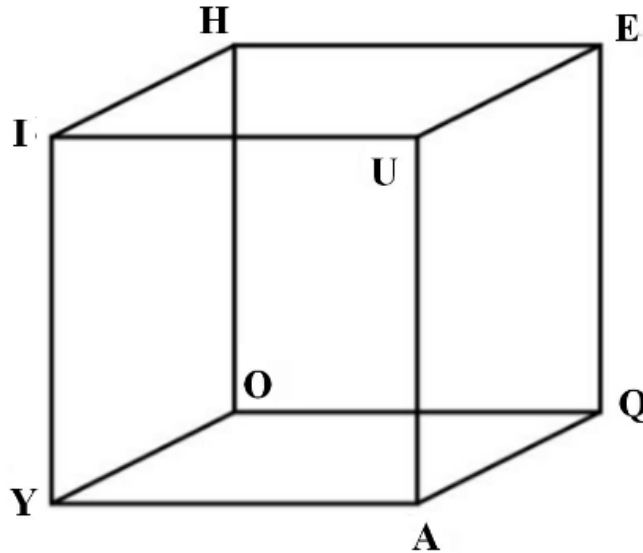


Figure 2.

To specifically illustrate the ambiguity of the My Room diagram consider Figures 3 and 4.

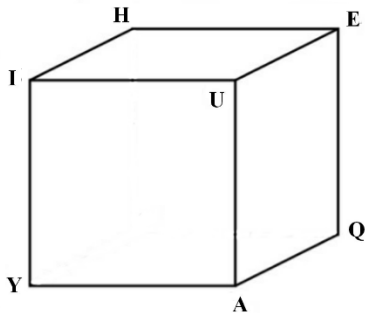


Figure 3.

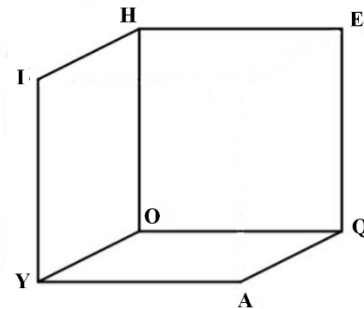


Figure 4.

These show two different outside views of My Room. A Real view and an Ideal view. In the Real view, Figure 3, we can see how I personally, or we, (as nouns, U), are directly connected to our actions (verbs, I), properties and characteristics (modifiers, E), and our context (relationals, A). This can be shown in Figure 5. The additional cyclical connections I personally have in the Real view between verbs, modifiers, and relationals, (I—E—A), can also be drawn on Figure 3 as shown in

Figure 6 in orange. These are called triads and they can cycle in two directions, clockwise and counterclockwise.

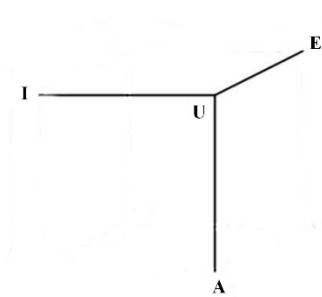


Figure 5.

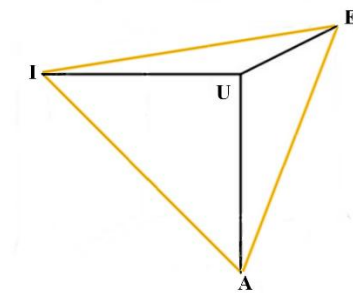


Figure 6.

None of the connections shown in Figures 5 and 6 are visible in the Figure 4 view. However, they all can be seen as additional lines on the surfaces visible in Figure 3. This is shown in Figure 7.

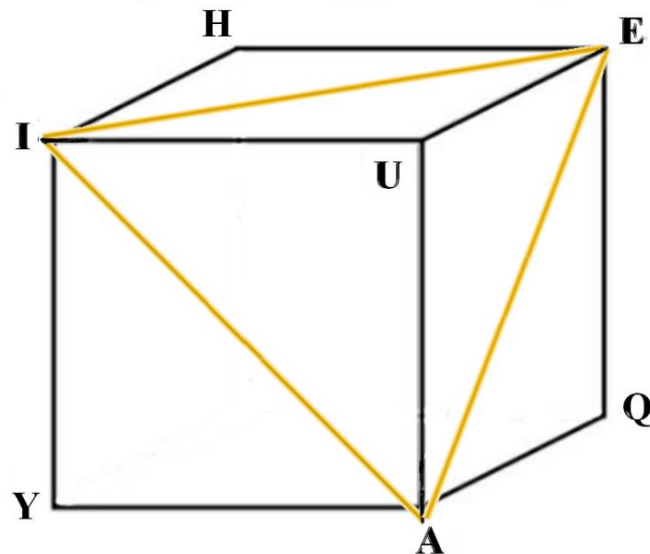


Figure 7.

A similar situation exists for the Figure 4, the outside view of the Ideals. Here we can show how my ideas (O), can be communicated (Q) with symbols (Y) and integrated into language (H), see Figure 8. We can also add the cyclical connections between communication, symbols, and language, Q—Y—H, shown as green in Figure 9.

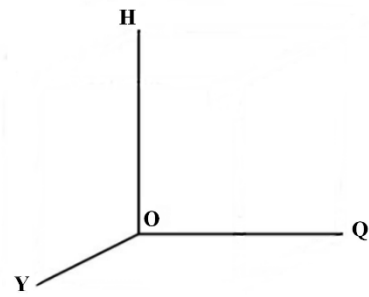


Figure 8.

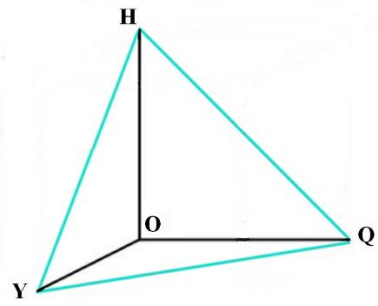


Figure 9.

None of these features are visible in the Figure 3 view but they can be visibly seen when added to the Figure 4 view. See Figure 10.

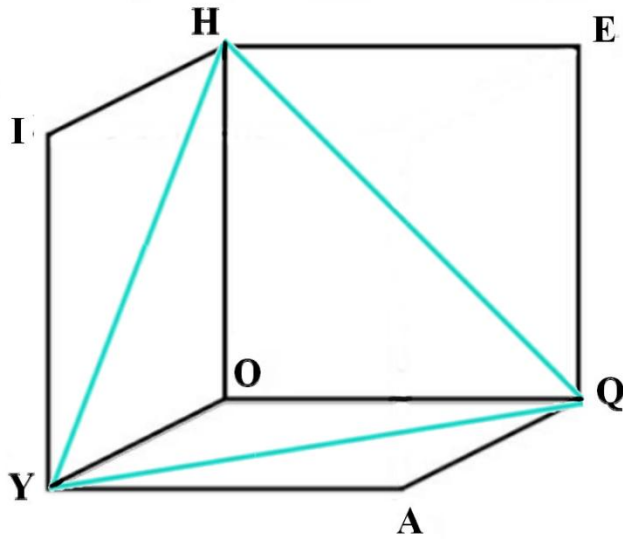


Figure 10.

The connections seen in Figures 6 and 9 can be combined in the My Room format as shown in Figure 11.

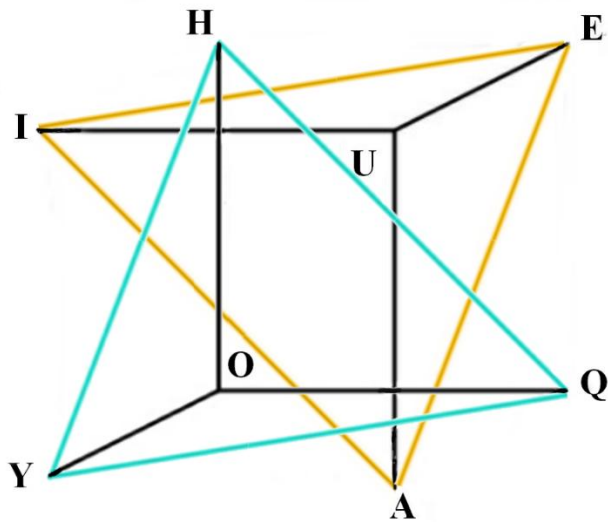


Figure 11.

You can see in this Figure that none of the Real symbols, UIEA, are directly connected to any of the Ideal symbols, OQYH. A version of this which provides a clearer view of this lack of connection can be obtained by eliminating the cyclical connections in orange and green. This is shown in Figure 12.

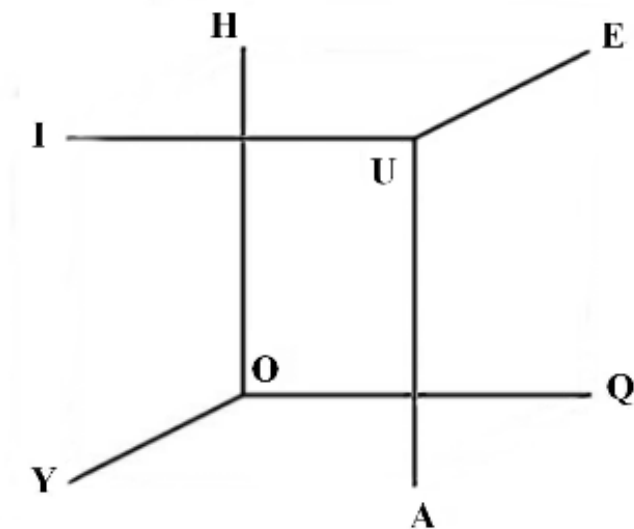


Figure 12.

However, this does not show how the two perspectives, the real and the ideal, are connected to each other in My Room. One way to resolve this is to connect the four cube diagonals so that one real connects with one ideal, $U—O$, $I—Q$, $E—Y$, and $A—H$. There are two versions of this. One which includes all four diagonals, and one which excludes the cube diagonal $U—O$. The $U—O$ diagonal could be excluded because it includes me as the observer – creator of the Reals and the Ideals. Hence it represents the original definition and is not an independent form of how these are connected. For example, if you and I are talking together I am present in the communication. But if you are reading this in a book or article, then I am not there. In either case these cube diagonals identify a new point in the My Room cube, a center of the room. This is shown in Figures 13 and 14 where they represent a **First Form of Intuition**. This may relate to the RNA-DNA-protein internal genetic intuition I mentioned earlier.

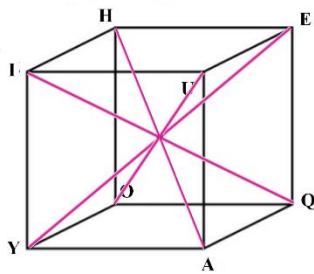


Figure 13.

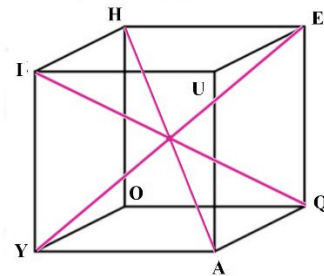


Figure 14.

A **Second Form of Intuition** can be obtained by adding six edges to Figure 12. These connect one real and one ideal with each other, $H-E$, $E-Q$, $Q-A$, $A-Y$, $Y-I$, $I-H$. This restores the diagram to that shown in Figure 2 with the edges in red. See Figure 15. This represents what we know, What we have learned, studied, read, observed, and been taught. These connections cannot be measured as with the reals, and they are not part of the initial description of the Ideals. Although they can be described by the ideals.

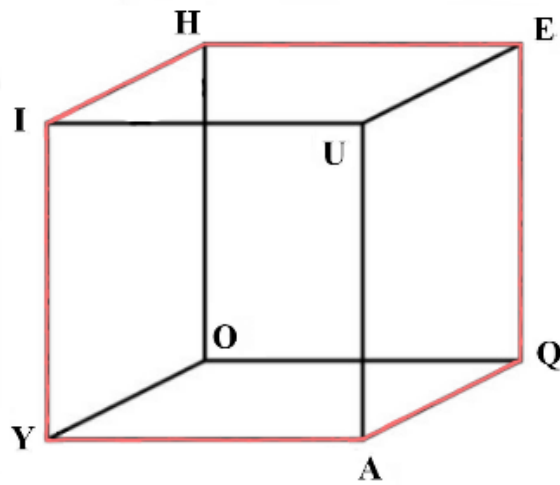


Figure 15.

A **Third Form of Intuition** can be obtained by considering the triads that can be visibly constructed on the surfaces of the perspective shown in Figure 4, reshown below. This Figure can show how any two reals can connect with an ideal. This connects a second form comprising a real and an ideal, connected to a second real. This ties in what we know, the first real and ideal, with what we do, the second real. There are six different ways of doing this in Figure 15; H—E—Q, Q—A—Y, Y—I—H, Q—O—I, Y—O—E, H—O—A. The following figures step through this illustrating each triad with a different color.

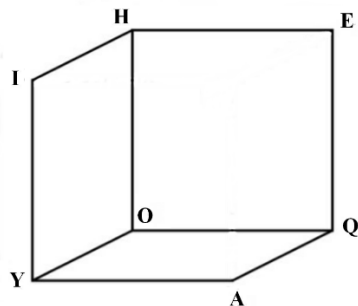


Figure 4.

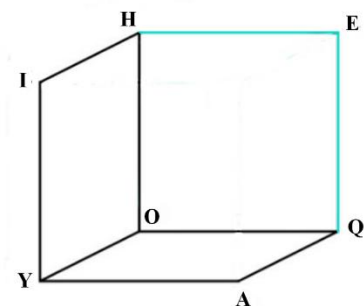


Figure 16 HEQ

Figure 16 shows the HEQ triad in light green. Figures 17 and 18 show respectively, the QAY triad in orange, and the YIH triad in red.

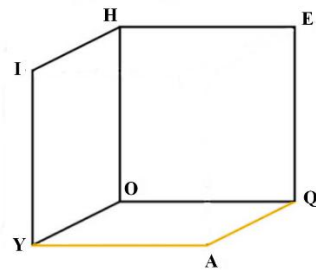


Figure 17 OAY

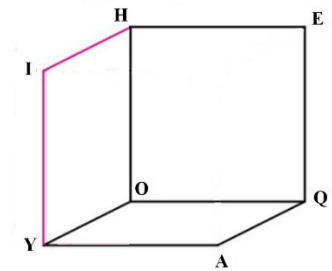


Figure 18 YIH

Figures 19 and 20 show respectively, the QOI triad in dark green, and the YOQ triad in dark blue.

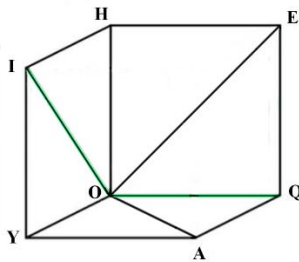


Figure 19 QOI

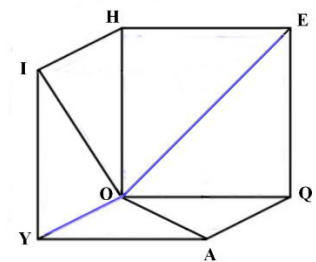


Figure 20 YOQ

Figures 21 and 22 show respectively, the HOA triad in yellow, and the combination of all the two real and one ideal triads in their respective colors.

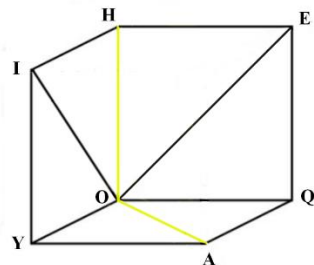


Figure 21 HOA

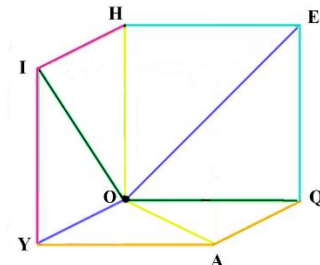


Figure 22

Triads connecting any two ideals with a real have been excluded as they are shown in Figure 3 and depend on U being there. The triad connecting the three non core ideals, QYH , will also be excluded since they comprise the definition of the Figure 4 perspective and hence are already present and not intuitive in Figure 4. However, the three non core reals, $I—E—A$, can be included since they are present in the Figure 4 diagram and identifiable as a cycle even though their defining core U is not present. This cycle was shown in Figure 6 in orange and is shown below with the cycle in gray as Figure 23. By removing the core U and its connections to I , E , and A the cycle itself is shown in Figure 24.

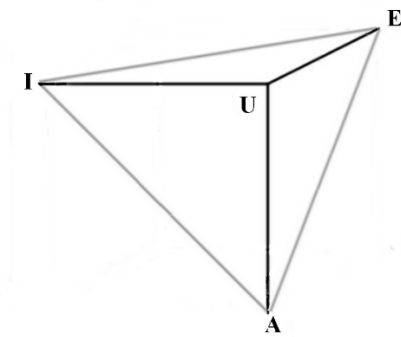


Figure 23.

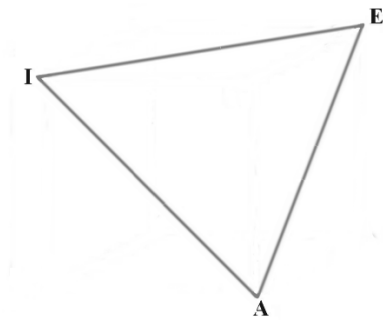


Figure 24.

A combination of Figure 24 with Figure 22 is shown in Figure 25. This takes the six colored triads connecting two ideals with one real and combines them with the real three cycle.

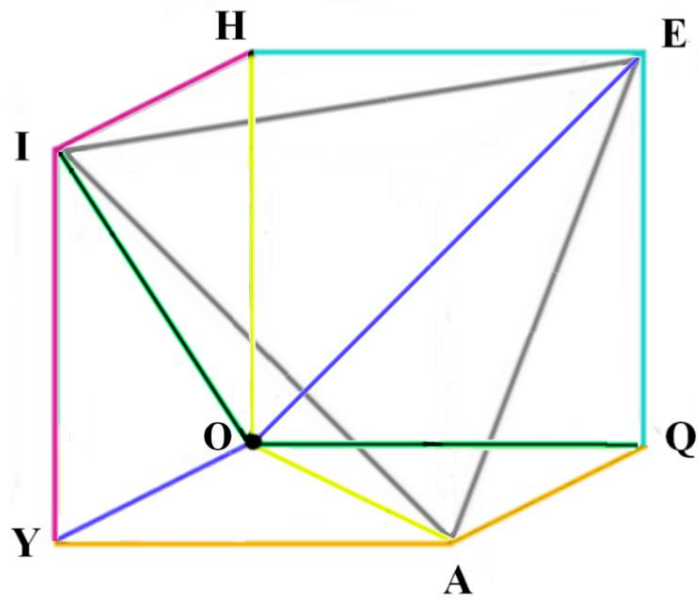


Figure 25.

There is an interesting aspect of Figure 25 that can be shown as follows. First enclose each labeled vertex in a circle as shown in Figure 26.

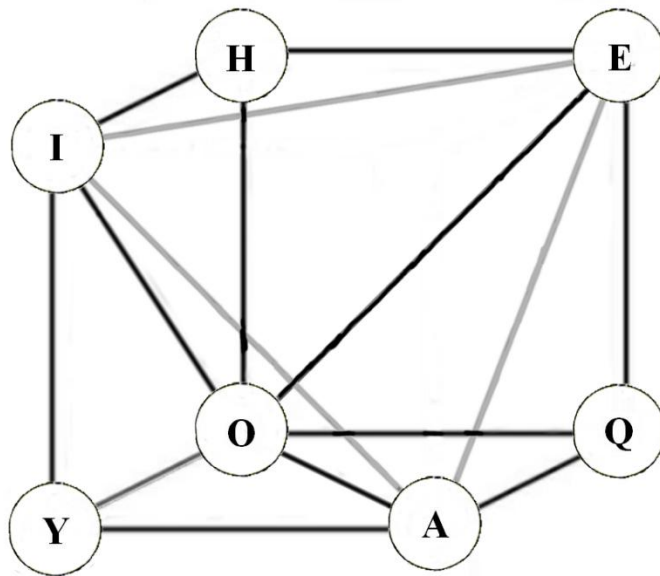


Figure 26.

We can manipulate Figure 26 a little bit to generate Figure 27.

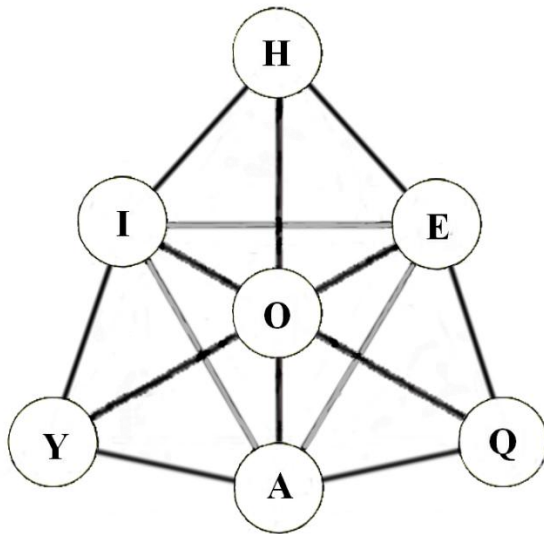


Figure 27.

A small amount of additional manipulation turns this into Figure 28 which is the Fano Plane representation of one of 480 different versions of an octonion.

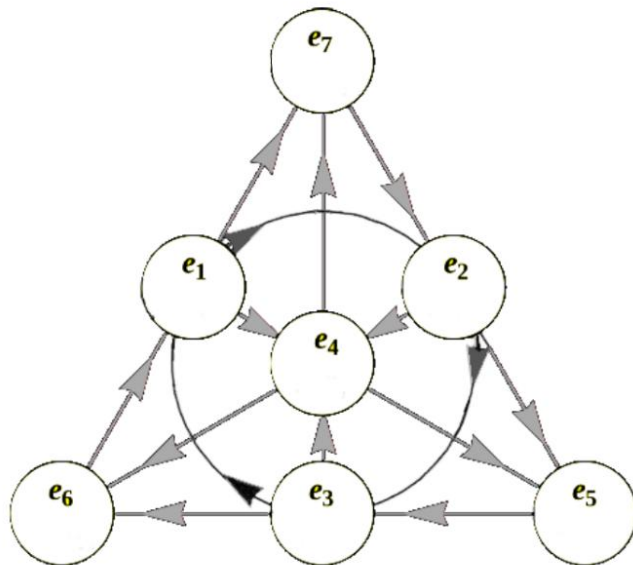


Figure 28.

In Figure 28 the linguistic representation of the vertices of the My Room diagram corresponds to the Fano Plane notation as follows;

U e_0

I e_1

E e_2

A e_3

O e_4

Q e_5

Y e_6

H e_7

Thus the Fano Plane diagram will show 6 linear triads;

H—E—Q, $e_7—e_2—e_5$

Q—A—Y, $e_5—e_3—e_6$

Y—I—H, $e_6—e_1—e_7$

Q—O—I, $e_5—e_4—e_1$

Y—O—E, $e_6—e_4—e_2$

H—O—A. $e_7—e_4—e_3$

And one circular triad;

I—E—A $e_1—e_2—e_3$

This possible generation of the quaternions as an intuition of the third kind could have some interesting implications. For example octonions could be considered to be the most fundamental concept of number since they contain the other normed division algebras, the quaternions, complex numbers and real numbers. See an article by Noson S. Yanofsky.

[Chaos Makes the Multiverse Unnecessary - Nautilus](#)

Octonions may also be able to describe RNA, and hence DNA and proteins. See J Gregory Moxness;

[Octonion - Visualizing a Theory of Everything!](#)