



The ZB Formula

Diploma Thesis
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Introduction

Zurich, July 2005: Fritz F. Smith explains vividly the different types of fulcrums. For some reason, this was the first time I thought of describing the effect of Zero Balancing with the help of a mathematical formula. A bit later, during lunch time, I told Fritz about my idea. As a result, he encouraged me to pursue it and to choose the topic as my diploma thesis.

Like everybody else, I try to combine newly acquired knowledge with existing knowledge. In this case, it was the world of mathematical formulas we know from physics and electrical engineering. I first heard of terms like "field of energy", "field of force" or "flow of energy" years ago when I studied engineering, but in a different context of course.

This paper represents reflections on Zero Balancing aimed at deepening my knowledge of it by finding and describing parallel phenomena in different worlds.

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An object in the field of energy

In his book entitled "Inner Bridges", Fritz F. Smith writes: "Every upright object, whether animate or inanimate, acts as an antenna or lightning rod, conducting energy within the environment." The quality of the flow of energy varies, depending on the type of object. Fritz F. Smith gives a description of it by making a comparison with pine trees and apple trees:

A pine tree forest has a clear and straight structure

→ leading to a strong flow of energy – and a feeling of tranquility and heaviness

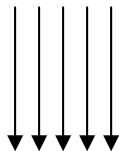
Apple trees are smaller, not so massive and have wild branches

→ representing diffuse energy – and resulting in a diffuse, accidental, lighter and softer feeling

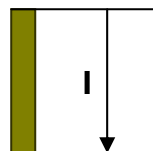
For me, this example was a good starting point for approaching the ZB formula.

Active length (I) in the field of energy:

Field of energy (E)



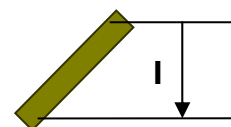
Aligned object (pine tree)
(e.g. trunk of a pine tree)



Active length (I)
impacted by the field
of energy (E)

Non-aligned object

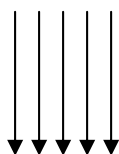
(e.g. branch of an apple tree)



Active length (I)
impacted by the field
of energy (E)

Direction of flow of energy (I) through the object:

Field of energy (E)



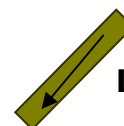
Aligned object
(e.g. trunk of a pine tree)



Energy flow vector (I)
directed towards the
object

Non-aligned object

(e.g. branch of an apple tree)



Energy flow vector (I)
directed towards the
object

Energy always flows in the direction of the object. In the case of a non-aligned object, this means that the flow of energy (I) will not be in line with the field of energy (E).

Using our example of the apple tree, this means that due to the large number of differently oriented branches, many energy flows in different directions develop.



Calculation of the flow of energy (I) through an object in the field of energy (E):

$$I = E * G * l$$

Flow of energy (I) = field of energy (E) * conductance (G) * length (l)

Explanation of formula and impact on the flow of energy:

	Explanation	Impact on the flow of energy
Flow of energy (I)	Strength of flow of energy through the object	
Field of energy (E)	Aligned field of energy	The flow of energy is the greater the stronger a clearly oriented field of energy acts in the direction of the object
Conductance (G)	Describes an object's capability of conducting energy	The flow of energy is the greater the better an object's capability of conducting the flow of energy
Length (l)	Defines the object's length in line with the field	The flow of energy is the greater the longer an object and the better an object is aligned with the direction of the field of energy

Development of formula:

- Ohm's law*: $U = R * I$

(U=voltage, R=resistance of conductor (here the object), I=current)

- In a homogeneous field*: $U = E * l$

(U=voltage, E=electrical field strength, l=aligned length in the field)

→ $U = R * I = E * l$, hence $R * I = E * l$ or, in other words, $I = E * l / R$

Since fractions are difficult to read in formulas, I substituted the resistance (R) by the conductance (G): $G = 1/R$ → $I = E * l * G$, or $I = E * G * l$

*Source: Kuchling, Taschenbuch der Physik 1986, pages 396, 397 and 409

Thoughts on attraction:

Which people do we consider attractive? Is it not interesting to see that a great flow of energy (E) also generates a high magnetic field strength?

$$H = I / 2\pi r \text{ (magnetic field strength (H) = flow of energy (I) / (distance (r) } 2\pi \text{))}$$

→ The attractive force (H) is the greater, the greater the flow of energy (I) and the shorter the distance (r) of the objects.



The balance of energy and structure

Why is it necessary to have a balance of energy and structure?

According to the above formula $I = E \cdot G \cdot l$, we can simultaneously maximize both the flow of energy (I) and the structure. If we strengthen the structure, we obtain a higher conductance (G) which in turn increases the flow of energy (I). So why do we want to have a balance?

This approach is very interesting when we look at the joints in our body. Every joint can be viewed as a disruption of the bone, therefore representing a resistance for the flow of energy which in turn reduces the conductance. If we regarded the "structure" merely as a mass with no function, the optimum would be reached if the joints grew together. But structure means mass **and** function. The basic law of our body tells us that "what is not required will be discarded". Hence, joints that are not used deteriorate and the bones grow together (e.g. sacrum).

But where is the optimum of energy and structure for a joint? The optimum depends on the function for which the joint was made. The joints that are very important for great flows of energy and great stability are optimized for good conductance. Conductance can be improved by keeping the disruption as small as possible (e.g. fixed joints) and / or by making the area of transition as large as possible (e.g. knee joint).

The above formula shall be extended by taking this aspect into account.



The ZB formula

Formula $I = E * G_{optimum} * l$ describes the correlation between energy and structure in a homogeneous field of energy. The aspect missing here is the fact that the structure has to perform a certain function. The optimum of a joint is achieved when the function (movement, stability) can be ensured without significantly affecting the flow of energy. The formula can express this in the following way:

$$I = E * G_{optimum} * l$$

Flow of energy (I) =
field of energy (E) * conductance_{optimum} (G_{optimum}) * length (l)

	Explanation
Flow of energy (I)	Strength of flow of energy through the object
Field of energy (E)	Aligned field of energy
Conductance_{optimum} (G_{optimum})	Describes an object's capability of conducting energy. It is the optimum of highest possible conductance and simultaneous performance of the required function
Length (l)	Describes the length of the object aligned with the field

To find the optimum is always important when two or more influencing factors act in opposite directions. Conductance_{optimum} (G_{optimum}) in the formula expresses the result of the search process. So the formula is now complete for use in a homogeneous field of energy.

The ZB formula in connection with frequencies and oscillations:

- In principle, the ZB formula also applies to homogeneous fields of frequencies and oscillations
- The flow of energy (I) depends on how the oscillations of the field of energy (E) match the oscillation characteristics of the object
- Thus, conductance_{optimum} (G_{optimum}) also expresses the optimum conductance for the individual oscillations
- I can imagine that a group or system also aims at attaining the common conductance_{optimum} (G_{optimum})



The fulcrum and the ZB formula

Reflections on the ZB formula and the fulcrum phenomena:

	Explanation	Reflections from the ZB formula's perspective
Half moon vector	Clear, strong and aligned field of energy across an entire area	The flow of energy increases due to the alignment of different directions of flow with the aligned field of energy in the entire area
Lifting fulcrum	Field of energy about the reference point	The flow of energy increases because of the possibility of better conductance in the region
Moving fulcrum	Field of energy about a reference line	The flow of energy increases because of the possibility of better conductance in the region The flow of energy increases since the movement brings about an alignment with the reference direction

The formula applies to homogeneous fields of energy. In inhomogeneous fields, consideration must be given to the vectors, that is, to the direction of the individual fields. We use a fulcrum to generate clear and homogeneous fields. Thus, as far as the effect of a fulcrum is concerned, the formula is adequate.

Using the fulcrum, we create possibilities and spaces that enable the body to find its optimum. We find the result of this optimum in the ZB formula with the conductance optimum (G_{optimum}).



Meditation and the ZB formula

When developing the ZB formula, another thought emerged. In the case of the pyramid meditation, we create lines of energy – into the Earth, through our bodies and up into the heavens. If I try to read the effect with the help of the ZB formula, we accomplish two things: a) better conductance (G), and b) we strengthen the field of energy (E) through common practical work. A bold idea: can we also extend the length (l)? Is it possible to notionally change the size of the object? According to the formula $I = E \cdot G \cdot l$, every single interpretation leads to a stronger flow of energy (I).

When the music plays

After these formulas and considerations, a few completely free thoughts:

Is our being energy? Are we structure, enabling us to discover who we are? Is our body the place where our being can express itself through materialization, where it can show us the music that is played inside? Where do expressions like "inner voice" or "listen to the body" come from?

I see the body as a big orchestra representing melody, harmony and rhythm. Every organ assumes the role of a different instrument. I think that Zero Balancing gives every single instrument the opportunity to stop playing for a little while and to attune it again to the other instruments in the orchestra.

I believe that there is even more meaning attached to it. The bones and joints are the parts of the body most connected with the vertical flow of energy and, therefore, with nature and the universal energies. Through this connection, Zero Balancing becomes an important link between inner and outer world. In an orchestra, the oboe is used for attuning the orchestra. Is the skeleton the oboe in our body, so to say? The clearer the tone, the better the orientation for the other organs to get attuned.

Compared with our subconscious mind, the proportion of consciousness is very small. The signals given by our body are expressions of our subconscious mind. If we use Zero Balancing to sharpen our perception, we are given better access to our innermost – our being.