

Korean Seon (Zen) and Mathematical Visual Poetry

Kaz Maslanka (Mool Kae)
San Diego, California
kaz@kazmaslanka.com

Abstract

This paper is an introduction to mathematical visual poetry with examples inspired from my practice with Korean Seon (Zen) and Korean culture. I will discuss a few structures that I have been exploring for the last 28 years.

Proportional Poems

I would like to illustrate what I call “Proportional Poems”.[7] These poems utilize mapping metaphors into the adjacent sides of a pair of similar triangles, setting up the proportional relationship solving for one variable you get the following: $a = bc/d$. Furthermore these poems are discussed in the vernacular by expressing them as a is to b as c is to d or $a/b = c/d$. It is also fun to note that the poems can be solved for any of the variables to add richness to the poetic experience. An example is the following: Kimchi is to Cabbage as Doenjang is to Soy Beans. Or we could say apples are to apple butter as peanuts are to peanut butter. So if we solve for apples would get apples = apple butter times peanuts divided by peanut butter or solving for Kimchi we get: Kimchi equals cabbage times doenjang divided by soy beans. Notice the logic is still rigidly in place yet the metaphorical quality of the words shine through. Granted the above examples are mundane however, let’s look at the following:

The Fog. The concept of Dharma has many meanings in various contexts. The description of “Dharma” in the first paragraph of wikipedia will give those not familiar with the word some meaning to use as a tool to access this work. In Figure 1 we see a photo of Biro Ahm that I shot at the Tongdosa monastery near Busan South Korea. The mathematical poem in the vernacular reads as: The “Dharma” is to “Fog” as “An Island” is to “The Ocean”.



Figure 1. *The Fog* [1]

Bathing Ghosts. In Figure 2 we see two bath houses constructed near the temple gate at the Songgwangsa monastery near Suncheon South Korea. The purpose of these facilities is to enable the ghosts that visit the temple to bathe before they come into the temple complex. The following expression is inspired by those bath houses. In the image you see the bath houses as well as the poem. The poem reads in the vernacular as: “Salvation” is to “Depraved Ancestors” as “Moonlight Over The Temple Bridge” is to “Bathing Ghosts.”



Figure 2. *Salvation* [2]

The Heart Sutra. In Figure 3 we see a mathematical visual poem that takes a section of the Buddhist Heart Sutra and maps it into the proportional poem structure. “Form is to emptiness as emptiness is to form” can be written as “form divided by emptiness is equal to emptiness divided by form”. If you divide both sides by “form” and multiply both sides by “emptiness” you get the equation shown in the image. The equation reads as “one is equal to emptiness squared divided by form squared.” The title of the piece “Venerate your experience - not this!” reminds us to venerate our ‘experience of the moment’ not the concept of the Buddha.



Figure 3. *Venerate Your Experience - Not This!* [3]

Orthogonal Space Poems

The next mathematical structure that I wish to illustrate, I call the “orthogonal space poem”. This type of mathematical poem is always in the structure of $a = (b)(c)$. I usually display these poems in the form where the equation is solved for b ; $b = a/c$ for I enjoy the dynamics of how the poem is read when we think about taking the limit of a/c when the denominator approaches zero. The following page has examples of this structure.

The Monastic Path. When visiting the Tongdosa monastery a few years ago I met a monk who exhibited a fascinating presence. From him, I sensed an extreme amount of confidence with no ego. He took me to a special room where, at times, the monks meditate for 10 to 12 hours a day for a hundred days. In this room he wanted me to take his picture yet, he did not tell me why. A couple of years later this series of images was brought to my consciousness. Figure 4 shows a depiction showing five stages of enlightenment followed by an orthogonal space poem inspired by the monk. The poem says Lucidity is equal to Confidence divided by Ego. In the poem, for a fixed Confidence level, as the denominator Ego approaches zero the value of Lucidity increases without bound.



Figure 4. *The Monastic Path* [4]

Sunset Sutra. Figure 5. utilizes a photo of an incredible sunset that I shot from inside an airplane that was flying over the Grand Canyon in Arizona. We all know that if you don't stay in the present moment then you will miss the sunset, for it changes rapidly. The mathematical poem expresses that the value of the Dharma is proportional to the value of a sunset. Furthermore as you take the limit as time approaches zero (the present moment) then the value of the Dharma approaches infinity.

ONE. Figure 6 is not in the form of an orthogonal space poem or a proportional poem for it is much simpler and expresses the mathematical concept that anything divided by itself is equal to 1. The image embedded in the number one is the Chinese written character for "Buddha's mind". The border of the image was constructed from a photo of a sunset taken from an airplane. The star field in the center of the image is of the space between Scorpio and Sagittarius (the center of our galaxy) and the image of my cockroach friend was taken while he crawled across my sidewalk in San Diego.

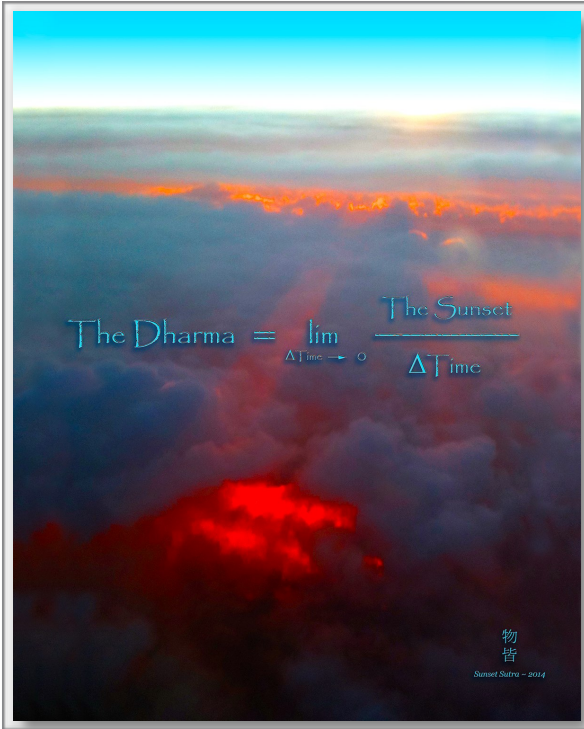


Figure 5. *Sunset Sutra* [5]

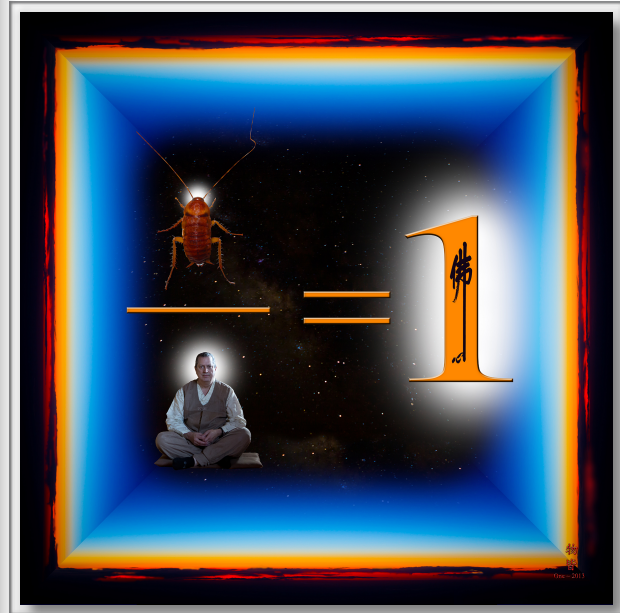


Figure 6. *ONE* [6]

References

- [1] <http://mathematicalpoetry.blogspot.com/2012/03/here-is-polyaesthetic-piece-titled-fog.html> (as of March 15, 2014)
- [2] <http://mathematicalpoetry.blogspot.com/2009/12/salvation.html> (as of March 15, 2014)
- [3] <http://mathematicalpoetry.blogspot.com/2010/06/venerate-your-experience.html> (as of March 15, 2014)
- [4] <http://mathematicalpoetry.blogspot.com/2012/03/monastic-path.html> (as of March 15, 2014)
- [5] <http://mathematicalpoetry.blogspot.com/2013/03/sunset-sutra.html> (as of March 15, 2014)
- [6] <http://mathematicalpoetry.blogspot.com/2013/06/one.html> (as of March 15, 2014)
- [7] <http://mathematicalpoetry.blogspot.com/2007/04/congruent-triangle-poems.html> (as of March 15, 2014)