



MeconoMorph; Interview with Viktor Gennel

Artist, inventor, entrepreneur, and creator of MeconoMorph

A significant part of my job working with the Collegiate Entrepreneurs' Organization (CEO) includes interacting and working with talented young entrepreneurs. It's inspiring to see the businesses and inventions that these young entrepreneurs are working on.

Although I have years of experience with startups and working on my own endeavors, there are times when I come in contact with something so unique and different that I can't comprehend what they are trying to do and what drives them to do it. I recently came into contact with a concept of this nature – MeconoMorph.

MeconoMorph is described as "[The Morph of Mecons](#) boils Art, Math and Business together in a concept of morphing and flowing geometry." I like to boil it down to an innovative, creative, and specific way of folding business cards to create a piece of art, which can be stacked with others to create a larger structure.

MeconoMorph was created by Viktor Gennel. Viktor, as you will witness in this interview, is an interesting and extremely innovative individual with more talent and intelligence than I can understand. I interviewed Viktor about his business and movement MeconoMorph, his background as an artist and inventor, and what lies for him in the future. You can view Viktor's extensive work through [Viktorg.com](#).

Michael Luchies: How would you explain a Mecon to someone who doesn't understand the mathematical principles behind the structure?

Viktor Gennel: Mecon is a term that was invented by Richard Buckminster Fuller. It's not widely used, nevertheless it sounds intriguing and interesting enough to name a geometric object whose correct term is a truncated octahedron.

Its cubes are shapes well-known for making ideal 3D structures because they closely pack space. One might ask – are there other objects that can do that? The answer is – not many. In the family of semi-regular polyhedra only one such object exists – Mecon.

Besides being an Archimedean solid, it's also a perfect and the simplest fullerene, if built as a wireframe. It distributes the loading stress very efficiently thus allowing to create the MeconoMorph.

ML: What is the history of your fascination with Mecons?



VG: Since my early childhood I have been amazed by tessellations – periodic parquets filling a plane with no cracks. There are many of them using very different polygons in many different arrangements. I used to play with pieces of bread, crackers, cheese and such, exploring all of the possibilities. Somehow I was specifically interested in limiting the shapes to one, like triangles or squares.

Unlike cubes with their boring repetitive squares, Mecons have different faces – hexagons in addition to squares. They can build many types of periodic spatial structures like honeycombs, pyramids, cubes and many intermediate shapes and forms. Just by themselves with no additional objects needed. Mecons are universal bricks. They have been used in Art, Architecture, even in space exploration as one the most convenient and efficient construction. Some of the applications can be found [here on my board](#).

ML: What structures have you created so far and what feedback have you received from your work?

VG: If you mean structures related to MeconoMorph – it's MeconoMorph itself in many different incarnations. Feedback is mostly awe, which is very dear to me and I am very appreciative. I can clearly see when people feel it and that gives me the highest feeling of fulfillment.

ML: Have you always been artistic, or is the creation of MeconoMorph more from the practice of mathematics? What other artistic based projects have you worked on in the past?

VG: Well, I have an artistic education background in addition to a regular engineering diploma. My most interesting activity has been implementing my skills and knowledge in a field of three [dimensional puzzles](#). After years of inventing puzzles I realized that I am not that interested in puzzling people comparing to leading them to discoveries of universal laws. The puzzles are mainly Geometry machines, and the less artificiality I added to them the better they'd come out. In general I am very interested in achieving impossible objectives. One of such projects is my gallery of [non-round rollers](#).

I make jewelry. Well, this is the most obnoxious overstatement. I made one piece of jewelry, which is of course – [an impossible object](#). My wife loves it, and you know what – it turned to be my best selling object ever.

I also enjoy photography and writing fiction, as you probably guessed, in Russian. I won a contest in 2000 and I was published in some paper publications.

ML: What is your ultimate goal with MMorph?

VG: I've been asked this question many times and every time I choke. The question is mostly meant as this – what can you ultimately get out of this, moneywise, fame, popularity. Or it can mean – what is the



final shape and/or size.

I believe the most accurate answer to these questions is awe. Awe is what I feel myself building this endless structure. When it manages to cause a Wow reaction – I consider the goal being achieved. There are many intermediate goals – like building a certain shape, getting to a set height. To beat the world record I need only six feet.

The ultimate goal could be creating a perpetually working system taking business cards from the outside world and transforming it into its body. Some of the older Mecons can get destroyed (or maybe some of them can spawn a different MMORPH – who knows), they will be replaced and the whole structure will continue growing as a living system.

Summary

Viktor Genel is a creator and innovator like I have never seen before. From puzzles to jewelry to Mecons, his creations continue to captivate people and astonish art lovers as well.

Although the concept may seem complex, one look at a [Mecon constructed](#) out of business cards is sure to draw the awe of even the most skeptical viewer.

Sources

[Viktor Genel](#)