

THE 5D THINKING NEWSLETTER

A UNIQUE APPROACH TO READ THE UNIVERSE



Special read: "Reading the Creation: You and I" by Dr. Colin Turner

SNEAK PEAK OF WHAT'S INSIDE:

- 5D Thinking on the Human Skin
- A Tale of the Kachumbar Salad
- Tips for Teachers



Book Review:

A Beautiful Question:

Finding Nature's Deep Design
by
Frank Wilczek

Welcome to the ninth edition of

The 5D Thinking Newsletter!

Dear Subscriber,

Ramadan Mubarak and welcome to the ninth edition of the 5D Thinking newsletter!

In this issue, you can explore the 5DT Approach to *The Human Skin* and read an enlightening article by Dr. Colin Turner entitled "Reading the Creation: You & I". This newsletter also contains a review of the thought-provoking book "A Beautiful Question: Finding Nature's Deep Design" by Frank Wilczek, as well as a wonderful article by Saba Irshad Ansari entitled "A Tale of the Kachumbar Salad". This edition also includes an overview of our upcoming summer certificate program "Existence and Meaning: A Multidimensional Approach" hosted by Uskudar University. In this edition's "Tips for Teachers", you can learn why adolescence is a critical time in which to encourage the development of critical thinking skills in your students.

Remember, you can unsubscribe at any time by clicking on the link at the bottom of the newsletter. We hope to continue to inspire you with the Five Dimensional (5D) Thinking Approach to education.

On behalf of the 5D Thinking Team,

Nadine Kamal

5D Thinking on the Human Skin

Human skin is more than a waterproof covering of the internal organs. It contributes to our physical appearance and biological health. In fact, the skin is the body's largest organ and is home to our body's first line of defense. It is designed to protect the body from the cold and heat as well as from germs and toxic substances. In this unit, we take a journey to explore the amazing gift of our skin and sense of touch.

In the **first** dimension, Analytical Thinking, we study the skin's structure and understand its many functions that include protection, storage of blood, thermoregulation and production of vitamin D. We also discover how the skin is designed to repair itself. Next, in the **second** dimension, Analogical Thinking, we compare the design and function of human skin to artificial skin, and "self-repairing" fabric.

Then, in the **third** dimension, Critical Thinking, we reflect on how artificial skin, CTS sensors and "self-repairing" fabrics came to be and how they are no match to the sophisticated human skin. In the **fourth** dimension, Meditative Thinking, we explore the hidden message in the phenomenon known as touch and reflect on the attributes of its Creator. Finally, in the **fifth** dimension, Moral Thinking, we consider the value of our skin and discover how our quality of life would be affected if we lost our skin and sense of touch.

Reading the Creation: You & I

Dr. Colin Turner

My dear human fellow, we might be from opposite ends of the earth, but the breath that is in us is the same and the blood that runs through our veins is one. Likewise, glasses may be different, but the light that shines from them is the same light. Thence, existence is one, not many, and we are all created from a single soul. The outward forms of all things are countless, but the inner truth is one. In multiplicity there is unity and in many-ness there is oneness. A one followed by an infinity of zeros may seem like a huge number, but in actuality, real existence belongs only to the One.

My life and yours, my human fellow, is like an inscribed word, written by the Divine 'pen of power'. It points from every direction to the Divine names. As for the meaning of your life, it is to act as a conscious mirror to the manifestations of Divine oneness. Your life is an index and catalog of Divine wonders, and a scale for measuring the attributes of your Creator.

It is an inventory of all that exists: it is a map of the cosmos and a summary of the vast book of creation. Your life is a collection of keys with which to open the treasure-chests of Divine power. It is a pattern formed by the perfections that are scattered over created beings and attached to time.



As for the perfection of your life, it consists in perceiving the lights of the pre-eternal Sun which are reflected in the mirror of your heart. It lies in displaying intense love for Him as a conscious being. It lies in passing beyond yourself in your desire for Him. It lies in establishing the reflections of His light in the very centre of your heart.

It is on account of this mystery that your Lord said the following, raising you to the very highest of the high:

"The heavens and the earth cannot contain Me. How strange, then, that I am contained in the hearts of My servants..."

Now, dear human fellow, can you see what the value of your life actually is?

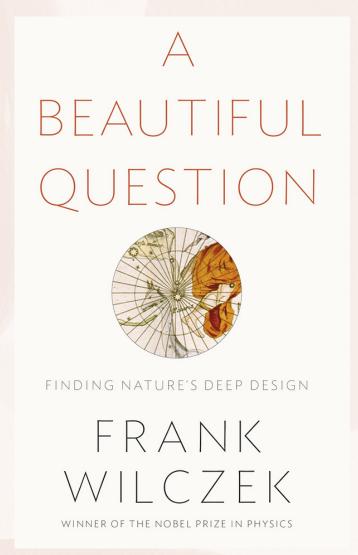
Book Review:

"Does the world embody beautiful ideas?"

Reflection on the book by Nobel Laureate Frank Wilczek: A Beautiful Question by Dr Necati Aydin

"I have a friend who's an artist and has sometimes taken a view which I don't agree with very well. He'll hold up a flower and say "look how beautiful it is," and I'll agree. Then he says "I as an artist can see how beautiful this is but you as a scientist take this all apart and it becomes a dull thing," and I think that he's kind of nutty. First of all, the beauty that he sees is available to other people and to me too, I believe...I can appreciate the beauty of a flower. At the same time, I see much more about the flower than he sees. I could imagine the cells in there, the complicated actions inside, which also have a beauty. I mean it's not just beauty at this dimension, at one centimeter; there's also beauty at smaller dimensions, the inner structure, also the processes..."

Richard Feynman, a Nobel Laureate and one of the greatest physicists of the 20th century, relayed the above personal story with an artist friend demonstrating the age-old rivalry between scientists and artists. The above quote summarizes my impression when I read A Beautiful Question: Finding Nature's Deep Design by Frank Wilczek- another Nobel Laureate in physics. The book asks a beautiful but puzzling question:



"Does the world embody beautiful ideas?" Or "Is the world a work of art?"

Wilczek believes that the answer is certainly "yes". In fact, he begins the book claiming that "if an energetic and powerful Creator made the world, it could be that "what made Him create the world was nothing but "an impulse to make something beautiful". Wilczek quotes Galileo to tell readers that he is not the only one thinking this way: "The greatness and glory of God shine forth marvelously in all His works and is to be read above all in the open book of the heavens." Indeed, many people throughout history have been puzzled with abstract and physical beauty. For instance, the golden ratio (Phi) seems to govern the proportion of many things which appear beautiful. To Wilczek, if the universe seems beautiful, the equations which explain universal phenomena must be beautiful as well.



"Does the world embody beautiful ideas?"

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Wilczek takes the debate to a new level by placing beauty among the fundamentals of the universe. He argues that beauty is not just added quality. Rather, it is the underlying principle behind every speck in the universe. In a sense, the matter is nothing but embodied beauty. Thus, understanding one helps to understand the other better. They work in harmony. In fact, Wilzcek defines beauty as harmony, order, and symmetry. Thus, as scientists study the order in the universe and formulate it in equations, they observe astonishing beauty in the form of harmony and symmetry. Therefore, the pursuit of knowledge and beauty should take us to the same destination which is the underlying order in the universe.

Wilczek takes us back to Ancient Greece to support his core argument. He began with the Pythagorean theorem of a2+b2=c2 about right-angled triangles which unveil the **beautiful relationship between numbers and shapes.** Since then, scientists have discovered many other equations beautifully describing certain physical properties or the fundamental laws of nature. Wilczek details stories of great scientists such as **Kepler**, **Newton**, **and Maxwell who were inspired by abstract beauty.** For instance, Maxwell came up with a certain set of equations to show how electricity and magnetism are related to each other. He also used his equations to discover the matched speed of light and electromagnetic undulation. For him, that was not a coincidence. When he combined electricity, magnetism, and light through a **system of equations and visualized them "pictorially"**, **Wilzcek explains**, **they resemble "a dance of concepts through space and time"**. He claims that "having experienced the ineffable beauty of Maxwell's equations, one would be disappointed if they were wrong".

Wilczek argues that the four forces that dominate in the universe "embody, at their heart, a common principle: local symmetry." He defines symmetry as "change without change". In other words, what appears beautiful to us is the display of the same thing from a different perspective. Thus, a repeated pattern in different perspectives and perfectly ordered arrangements seem aesthetically pleasing. What we really like is the perfect order and harmony in the waves of oceans, the

design of plants, and the synchronized flow of wind and air.

Even musical tones of instruments are nothing but auditory harmony which can be presented through numbers as well in terms of the relationship between sound and the size of strings. For instance, when the ratio of the length of strings is 1:2, the musical tones form an octave, when the ratio is 2:3, they form a dominant fifth, etc. The ratio of the small whole numbers is the secret of different sounds in musical instruments. Wilczek does raise the question of "why" we like musical tones "whose frequencies are in the ratio of small whole numbers" without giving a convincing answer. In fact, Wilczek claims that the entire universe is tuned in to this harmony at a micro level when he describes atoms behaving like "tiny musical instruments" in their interaction with light as "harmonious ensembles and synchronized orchestras". The standard model of subatomic particles is nothing but a mathematical expression of an astonishing degree of harmonic pattern and symmetry. Therefore, Wilczek attributes the discovery of the quark model to the discovery of pattern recognition by two scientists.

Book Review:

"Does the world embody beautiful ideas?"

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Although the book provides a compelling argument to support its core argument that the world is a work of art, it does very little to go beyond that. Wilczek seems to be amazed how the nature of human beings to appreciate beauty is in line with the "deep design" of nature. However, he does not tell us **why everything is arranged in a beautiful way.** The Darwinian theory fails to explain the reason for the arts to be essential rather than accidental. In fact, life would be possible without color and beauty as it is perceived by animals. Like dogs, we could have been colorblind from birth. Wilczek does quote some scientists who believe that the universe is nothing but a Divine show:

"I feel carried away and possessed by an unutterable rapture over the divine spectacle of the heavenly harmony."- Kepler "This most elegant system of the sun, planets, and comets could not have arisen without the design and dominion of an intelligent and powerful being." –Newton

Wilzcek does not seem to be in agreement with spiritual scientists such as Kepler and Newton. He rather leaves the "big question" unanswered. Perhaps, that is how much you could go if you do not think deep enough. In the same way that light reveals beauty in physical objects, enlightenment -through scientific knowledge-reveals the abstract beauty in their very essence. However, in order to understand the meaning of revealed beauty, we need to engage in 5D thinking to find the ultimate source and meaning of manifested beauty in the universe.

The book gives us factual knowledge discovered through analytical thinking. As a result, we can realize that the universe is an embodiment of beauty at different layers. As we study each layer, we can discover beautiful patterns. If we engage in **analogical thinking**, we can compare the art in the universe to man-made arts. We can thus conclude that the art in the universe is more elegant. In fact, man-made art is nothing but a copy of the art in the universe.

At the **critical thinking** stage, we will realize that it is not possible to have such elegant art without an artist. In fact, we know from our experience that a small human portrait could not come into existence without an artist with will, knowledge, and power. Likewise, we know for sure that it takes a much higher level of skill to create the Mona Lisa painting. Thus, we can conclude that the beautiful art in the universe must be the work of an Artist.

At the **meditative thinking** stage, as we discover the interconnected order and harmony in the form of beautiful artistry, we will realize that the One who creates a flower must be the One who creates the entire universe. We will link beauty in the universe to the All-Beautiful Creator who discloses His infinite beauty through His works. We will realize that mind, matter, music, and metaphysics are all interconnected.

At the **moral thinking** stage, we reflect on the meaning of the artistry in the universe as an expression of love by the Artist who shows His love for His creation. We will appreciate the beautiful gifts and be thankful for them. We will perceive differences as enrichment. **Just as different colors enrich our visual experience**, **different perspectives enrich our lives**.

REFLECTION TIME

"Only the deaf appreciate hearing, only the blind realize the manifold blessings that lie in sight. Particularly does this observation apply to those who have lost sight and hearing in adult life. But those who have never suffered impairment of sight or hearing seldom make the fullest use of these blessed faculties. Their eyes and ears take in all sights and sounds hazily, without concentration and with little appreciation.



Helen Keller (1888-1968)

It is the same old story of not being grateful for what we have until we lose it, of not being conscious of health until we are ill. I have often thought it would be a blessing if each human being were stricken blind and deaf for a few days at some time during his early adult life. Darkness would make him more appreciative of sight; silence would teach him the joys of sound.

Now and then I have tested my seeing friends to discover what they see. Recently I was visited by a very good friend who had just returned from a long walk in the woods, and I asked her what she had observed. 'Nothing in particular,' she replied. I might have been incredulous had I not been accustomed to such responses, for long ago I became convinced that the seeing see little.

How was it possible, I asked myself, to walk for an hour through the woods and see nothing worthy of note? I who cannot see find hundreds of things to interest me through mere touch. I feel the delicate symmetry of a leaf. I pass my hands lovingly about the smooth skin of a silver birch, or the rough, shaggy bark of a pine. In spring I touch the branches of trees hopefully in search of a bud, the first sign of awakening Nature after her winter's sleep. I feel the delightful, velvety texture of a flower, and discover its remarkable convolutions; and something of the miracle of Nature is revealed to me. Occasionally, if I am very fortunate, I place my hand gently on a small tree and feel the happy quiver of a bird in full song. I am delighted to have the cool waters of a brook rush through my open fingers. To me a lush carpet of pine needles or spongy grass is more welcome than the most luxurious Persian rug. To me the pageant of seasons is a thrilling and unending drama, the action of which streams through my finger tips.

At times my heart cries out with longing to see all these things. If I can get so much pleasure from mere touch, how much more beauty must be revealed by sight. Yet, those who have eyes apparently see little. The panorama of color and action which fills the world is taken for granted. It is human, perhaps, to appreciate little that which have and to long for that which we have not, but it is a great pity that in the world of light the gift of sight is used only as a mere convenience rather than as a means of adding fullness to life."

Excerpt from the essay by Helen Keller as published in Atlantic Monthly (January, 1933) The emphasis is added.

Tips for Teachers

Developing Critical Thinking Skills in Adolescence

Nadine Kamal

The critical time period in which critical thinking skills develop is adolescence. The reason for this is that myelin sheath production-the creation of the fatty layer surrounding nerve cells in the brain-increases dramatically during this stage of development. The production of myelin sheaths is called *myelination*. Myelination is designed to make it easier to establish connections between different parts of the brain- which is essential to critical thinking.

Science has shown that the prefrontal cortex is the main center for critical thinking in the brain. Interestingly, it is also the region that is the last to reach maturation in teens. Myelination in adolescence contributes to the rapid development of this region.

This means that as parents and educators, it is important to take full advantage of this stage of development to maximize critical thinking skills in our teens. How can we do this?

1. Create a Safe Space for Students to Ask Questions

Fear can hinder learning. By creating a space in which your students feel secure enough to express themselves without the fear of being reprimanded, you will help them unleash their curiosity about the world around them. In adolescents, the amygdala tends to be overstimulated in emotional situations, which is why you will notice that some of your students might exhibit exaggerated reactions to the slightest of provocations or criticism.

2. Stimulate, Stimulate, Stimulate

Extracurricular activities are not just a way to keep your teens active. Increasing the range of experiences your child is exposed to is a way to strengthen specific neural circuits in the brain. Diverse activities give your teen a chance to establish personal connections with others, solve problems and develop analytical skills that in turn support the healthy development of the prefrontal cortex.

3. Develop their Mind Mapping Skills

Mind mapping is a great way for students to structure knowledge and establish relationships between ideas- which is key to solving problems and critical thinking. Click here for some examples.

5D Thinking Blog Article: A Tale of the Kachumbar Salad

Saba Irshad Ansari

Cold nights and warm afternoons, sprouting trees and the sweet scent of blooming flowers, animals returning from their hiatus and the euphony of chirping birds, all of this marks the setting in of the spring. It seems as if the earth has dressed itself up in a thick verdure blanket to exhibit its joie de vivre to celebrate the arrival of the spring season and to mark the end of the grey winter days. This is a sight that is cherished by all, especially by those who have been longing the light summer salads on their lunch tables after early morning walks to the farmer's market to get their hands on fresh vegetables.

Kachumbar is a refreshing salad typically enjoyed in the spring and summer. It is made with the finely chopped cucumbers, tomatoes, shallots, fresh coriander and mint leaves tossed together with yoghurt and sprinkled with some Himalayan black salt, black pepper powder, and roasted ground cumin, and is often served with the warm pita bread. This joy of eating the fresh and healthy salad should compel one to assay the fruition of cucumbers, tomatoes, etc. from tiny buds blooming into flowers and eventually turning into a vegetable or fruit. How can a seed become a sapling and then a plant from the lifeless soil in just a few months? After having been grown in the same soil and receiving similar nourishments how are various vegetables or fruits so distinct in flavor and texture from each other? How come is it possible that the sun which shines everyday renders different nutrition and taste to different plants? Science tells us that every seed is composed of three components viz. the embryo, the endosperm, and the seed-coat, and that they absorb the exact amount of water as much as they need to soften the coat and break open the soil. Then, despite being essentially same in their basic structure, how and why do plants vary from each other in its appearance, product, and taste?

On the other hand, the best contrast to the farm grown food is the synthetic food which is making headlines nowadays. Synthetic food is a sort of replica of the farm grown food which scientists make artificially by using the "plant-based" genes. In order to make it, scientists first need to identify the gene sequences of proteins that give a particular food its characteristics. A plant-based food manufacturer, for example, may seek to identify the protein that gives cheese its 'stretchy' gooeyness. Once the gene sequence for the desired trait is identified, it is recreated synthetically in a lab, inserted into a living organism such as a bacterial cell which then like a miniature factory proceeds to make copies of the desired protein.



5D Thinking Blog Article:

A Tale of the Kachumbar Salad

Saba Irshad Ansari

The artificially grown protein can then be used as a food ingredient in the manufacturing of the plant-based food such as "meatless" chicken strips or plant-based cheese for vegans. It is important to remember that scientists have to first copy the recipe (genes) of a particular plant in order to make food from it synthetically. Having said that, this is not an easy task. Growing synthetic food is an intensive job which requires a massive effort and complete dedication of a huge team of experts. The food also needs to be clinically tested before it is declared fit for consumption. All of this process undoubtedly makes it extremely pricey.

If one were to reflect upon the kachumbar that is right in front of him and wonder how all vegetables that happen to be in his bowl together make such a delicious meal then he must surely wonder how can a tasteless, lifeless soil grow such flavorful and aromatic vegetables simply by using the energy of the sun and minerals from water? And, why is it so difficult to replicate these flavors in a lab? If it is the seed carrying the genetic information that is required for the plant to grow exactly the same way regardless of where it is sown in different parts of the world then who gave the seed those genes and traits in the first place? In fact, genes are like the recipes in a cookbook listing the ingredients required to form plants or trees. Just as a deliciously cooked meal cannot be attributed to the recipes in the cookbook without having someone cook it with intention, power, conscience, and intelligence, a seed cannot come to life with that inbuilt recipe (genes) only without having someone willing to bring it to life someone who has power, mercy, and wisdom unlike any other, and someone who nurtures it ceaselessly for it to become a plant and produce fruits and vegetables. Just like a scientist is using the genes in his test lab to make the plant-based synthetic food, the seed must then have a Creator too who created the genes for the first time.

The success of the synthetic food proves that scientists must be highly knowledgeable because they are able to produce through replication something which is similar to its original. Then what sort of knowledge should the maker of a seed possess who has designed its genetic information? While synthetic food needs to be remade manually with the same efforts on every demand, the plant on the other hand will continue to grow and provide endless supply of vegetables seasonally every year and that too for free until it wears out and dies. The Creator of the seed must then be the sole active agent behind all these phenomena and the One who must be All-Knowledgeable, All-Wise, All- Powerful, and Most Generous because only the One who has knowledge of the hidden and the apparent and has power to make it happen and is so generous to endlessly provide sustenance to all His creatures for free can make it happen flawlessly with the correct precision and timing.



5D Thinking Blog Article: A Tale of the Kachumbar Salad

Saba Irshad Ansari

So, the next time you are having kachumbar or any other farm-grown food, think of it as a gift from God. Be grateful to Him because He made all that happen only to put those vegetables in your bowl as if they were brought to life only for you, as if the arrival of the spring season was planned for no one but you. This reflective thinking should be able to instill in you a sense of gratitude towards the One who is the actual force behind all of this. It should make you realize that whatever you eat or own is actually a gift from God because He loves you endlessly and unconditionally, and in return all He asks from you is the submission of your will to none but Him alone, and to be kind and compassionate to all His creatures. The simple tale of the kachumbar salad thus leaves you with the realization of all these phenomena only to make you more grateful to God and humane to your fellow-creatures.





(i) Meg Wilcox, Why genetically engineered foods have some scientists nervous about the future? (May 14, 2019, 1:24 pm). Retrieved from URL

https://www.eater.com/2019/5/14/18623258/impossible-foods-synthetic-lab-grown-meat-science

Program June Starts on June Starts 7th. 2021

USKUDAR UNIVERSITY

SUMMER 2021 ONLINE CERTIFICATE PROGRAM

EXISTENCE AND MEANING: A MULTIDIMENSIONAL APPROACH

Application Deadline: May 15th, 2021

The program is based on a multi-dimensional thinking approach to scientific knowledge, inspired by Muslim Scholar Said Nursi's mana-i harfi (other indicative) method of reading the book of the universe.

Program Courses:

The program will consist of three Masters level courses:

1) **RNK-PHIL 542:** Epistemology of Science:

A Theoretical Approach

2) RNK-PHIL 543: Philosophy and Teaching

of Science: 5D Thinking Approach

3) RNK-PHIL 544: Reading Said Nursi

Reading The Creation

The courses will be taught live via Zoom in 7 weeks starting from June 7th.

Who shall apply?

Anyone who is interested in an integrated approach to science, self, philosophy, education, and spirituality.

*Scholarship is available for eligible applicants.

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www.5dthinking.org



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