March 12 2021, Issue No. 7

THE 5D THINKING NEWSLETTER

A UNIQUE APPROACH TO READ THE UNIVERSE

Special read: *"Robots and Autonomous Cars: Metaphors of Life" by Dr Yunus Cengel*

SNEAK PEAK OF WHAT'S INSIDE:

- *How does our nose work?*
- *An Interview with a Fall 2020 Certificate Program Participant*

Book Review:

The Hikam
Ibn Ata'Allah Al-Iskandari
By Noora A Ameri

Welcome to the seventh edition of

The 5D Thinking Newsletter!

Dear Subscriber,

Welcome to the seventh edition of the 5D Thinking newsletter!

In this edition, you can learn about the 5D Thinking Approach to the human nose and read an article by Dr Yunus Cengel entitled “Robots and Autonomous Cars: Metaphors of Life". This issue also contains a review of Ibn Ata'Allah Al-Iskandari's enlightening book "The Hikam" as well as an interview with a Fall 2020 Online Certificate Program Participant, Noor Al Ameri. This edition also includes some tips for teachers on how to facilitate intention-setting in the classroom.

Remember, you can unsubscribe at any time by clicking on the link at the end 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 Nose

Stop and smell the roses," is a familiar invitation. It is a call to slow down and enjoy life in the present moment. Scientific research shows that this is indeed sound advice for finding satisfaction. Staying present is good for the body, mind, memory and soul.

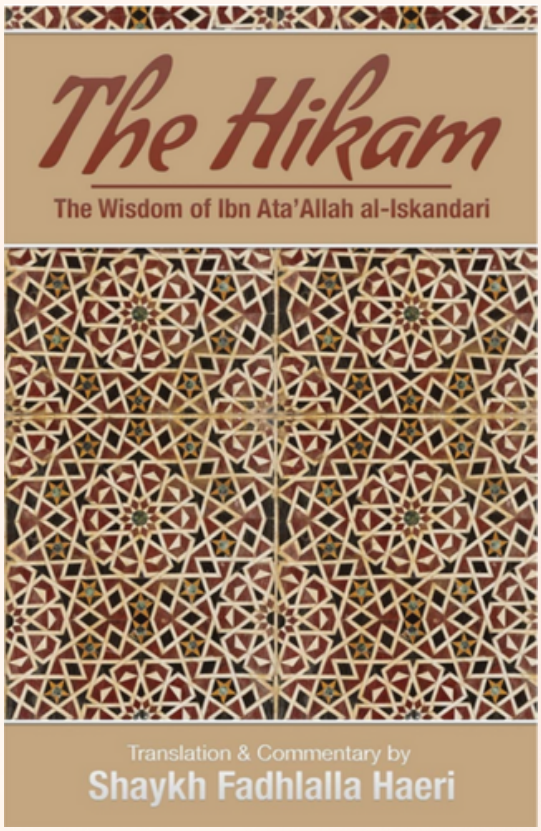
Of course, pleasant odors are not limited to roses. Just think about the sweet aroma of freshly baked cookies. Think about inhaling the crisp air of a pine forest or the smell of your favorite food. There are countless smells that enrich your daily life. You detect smells by inhaling air that contains odor molecules. Although it takes only seconds for you to identify a certain smell, in reality, the olfactory system is a very complex biological process.

In the **first** dimension, Analytical Thinking, we explore the structure and functions of the human nose. Next, in the **second** dimension, Analogical Thinking, we compare the role of an electronic nose with the nose's ability to detect smells and the brain's ability to distinguish between various scents and elicit emotional responses to them.

Then, in the **third** dimension, Critical Thinking, we reflect on how the human nose is much more sophisticated and complex than any chemical sensor or detector. We also explore how the invention of the electronic nose came to be. In the **fourth** dimension, the Meditative Thinking dimension, we explore the hidden message in the design of the human nose and reflect on the attributes of its Maker. Finally, in the **fifth** dimension, the Moral Thinking dimension, we consider the value of our sense of smell and discover how our daily life would be affected if we could not detect certain scents in our environment.

For a free download of "5D Thinking on The Human Nose", please click here.
To test your knowledge on the human nose, please click here.

Book Review:
T h e H i k a m
Ibn Ata'Allah Al-Iskandari
By Noora A Ameri



"If He opens a door for you, thereby making Himself known, pay no need if your deeds do not measure up to this. For, in truth, He has not opened it for you but out of a desire to make Himself known to you.
Do you not know that He is the one who presented the knowledge of Himself to you, whereas you are the one who presented Him with deeds? #at a difference between what He brings to you and what you present to Him!"

About the Author: Taj ad-Din Abu'l-Fadl Ahmad b. Muhammad b. Abd al-Karim b. Ata' Allah al-Iskandari, al-Judhami ash-Shadhili, known simply as Ibn 'Ata' Allah : was born in the middle of the 7th century AH/13th century CE in Alexandria, Egypt in 658 AH during the Mamluk era.

He was a distinguished Jurist according to Hanbali school of thought. One of the great sufi imams, also known as a muhaddith, preacher, and Maliki jurist. He was Abu the student of al-`Abbas al-Mursi (d. 686) and the second successor of Imam Abu al-Hasan al-Shadhili, and he was the first to spread the Shadhili teachings in writing.

In his book "Al-Hakam Al-Attiyya", the writer Ibn Ata Allah of Alexandria is keen to narrate a group of rulings that take you to the sincerity of faith in God and refine the meaning of the great faith through separate wisdoms that can be projected on many aspects of our life that are full of fluctuations and difficulties.
This book is written to awaken the heart and provide a new perspective on love, loss, rizq, tawakkul, happiness and pain. It will teach you how to live this life without allowing life to own you. It is a manual of well-written wisdoms on how to be totally connected with Allah.
It fills the heart and brain with light and hope- a wonderful blessing. Ibn Atta'a Allah beautiful insights and wisdoms have inspired readers from all over the planet. To put it simply, this book is a must-have for every Muslim's library.

"Among the signs of success at the end is the turning to God at the beginning"
- Ibn Atta'Allah Al Iskandari

Robots and Autonomous Cars: Metaphors of Life

by Dr Yunus Cengel

Dr Yunus Cengel *is Professor Emeritus at the University of Nevada and the author of several well-known college textbooks in Engineering.*

Although a technological wonder, a state-of-the-art robot with artificial intelligence is a life-like but lifeless entity. It is an inanimate high-tech gadget. Some robots look and act like humans and mimic them so well that we may have a hard time differentiating those lifeless so-called 'humanoids' from live humans. What sets robots (and other smart devices) apart from ordinary inanimate entities is that they are a combination of precision hardware and sophisticated software. That is, a robot has a precisely organized physical body that is fully controlled by a set of instructions prepared specifically to enable the robot to perform assigned tasks. When the code is executed by an external agent, such as a human operator, the software drives the robot and controls its inputs and outputs in full compliance with the encoded instructions. The domain of control or influence of the software is limited by the robot. Also, there is no built-in agent within the robot and thus no traits of will, self-initiation, knowledge, or consciousness. If the robot is not prompted to say or do something, it will just stand there like a dummy. Therefore, a robot and an autonomous car can be expressed as

Robot = Physical body (hardware) + Software + Operator
Autonomous car = Physical body (hardware) + Software + Operator

The features and the rules of operation of a robot or autonomous car, with allowance for the operator to intervene via input commands, comprise the software of the robot or autonomous car. No one can predict the behavior of a robot by simply examining its hardware, including all the electrical activity in its microprocessor, with millions of transistors, and the patterns of that activity. Such an attempt is simply untenable. All technologically savvy people will agree that the 'character' of a robot comes from the software package that is loaded and the capabilities included in that package. It is the executed commands in the software that makes a robot what it is, since the software drives and controls hardware – hence the name 'driver' for the software of devices. A friendly robot can be changed to a killer robot by simply changing its software or even just some of the instructions within the software. This is why hackers are the nightmare of institutions whose safe operation depends on protecting their software from intruders, which is becoming a growing challenge in this highly connected world.

A robot or computer without software is a dead robot or computer, no matter how sophisticated its electronic circuitry is. Note that the hardware and software are compatible but distinct entities, even for machines with AI and deep-learning capability that modify the software within a specified framework. Software is simply a collection of inscribed passive commands with no inherent causal power. The software has supremacy over the hardware since software rules over hardware and fully controls it. Also, the character of a robot comes from its incorporeal software, not the corporeal hardware with the sophisticated electronic circuitry. (The character of a live being also comes from subtle life, not the robust body.) The difference between a friendly robot and a monster robot is the software loaded, and thus the coders. A bad-natured robot can be converted to a good-natured one by simply changing its software. So much for the much-feared monstrous robots of science fiction.

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Similarly, an autonomous car does not have a human driver that can see the road, control the steering, adjust the speed, break to avoid accidents, and stop at the destination. However, it has a driving software that processes the signals coming from sensors and performs all the necessary smart actions. Even if we do not see the driving software and have no idea as to where in the car it is located, we do not doubt its existence and capabilities. This is because we know that the physical parts of a car – the engine, steering wheel, brakes, and the gas pedal – have none of the attributes of a driver, and those parts have no ability to coordinate their acts collectively to make the car move while being mindful of the variable traffic conditions. In the absence of imposed influences by people and other beings, matter itself is driven by the laws and forces of nature alone. Also, the driving software does not need to be physically present in the car; it may reside in a cloud storage system. In such remote-controlled autonomous cars, all the vehicle needs is a signal-processing center and a modem to communicate with the virtual driver in the cloud.

In the case of autonomous cars whose driving software resides remotely, the claim that the intense electrical signals of the microprocessor gives rise to the driving software that then decides what to do and where to take the car is somewhat ridiculous. Presenting as evidence the correlates between the patterns of electrical activity in the microprocessor and the tasks performed does not make the claim any less absurd. Here the underlying thinking is that existence is limited to matter, and since there is no apparent physical driver or driving software, then it must be the microprocessor that is the next best candidate to generate its software and drive the car. Unless we give up the preconceptions that limit thought and expand our horizon of existence to include invisible entities such as commands that reside in the cloud – in this case – it is clear that the autonomous cars would remain a mystery.

Also, distilling an active agent out of the software – which is just a collection of inscribed passive commands – is an imagination running wild and is also as preposterous. Every autonomous car comes with a physical body and software. But without an external operator, the car will just sit there. The active agent that commands the car must be an overarching entity such as you and me with the traits of will, purpose, knowledge, consciousness, and power. During routine driving, the microprocessor of the autonomous car commands the engine, the steering wheel, and the brakes in full compliance with the driving software. Hidden in the software instructions are the intentions of the software engineers.

Robots and Autonomous Cars: Metaphors of Life

by Dr Yunus Cengel

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We can make the following inferences by comparing an autonomous car with an identical car with no driver or autonomous driving feature:

- The driving software takes the autonomous car in operation and its passenger to a specific place. Therefore, it exists and is purposive.
- The software is of a different nature than the hardware of the car, including its microprocessor, and it cannot be reduced to hardware. Therefore, the software is a subjective existence.
- The driving software controls and rules the hardware. Therefore, the software is primary and the hardware is secondary. That is, the software has primacy and supremacy over the hardware.
- An ordinary car without a driver must remain static, but an autonomous car is on the go. Therefore, it is dynamic.
- The sphere of influence of the driving software is specific to the car, and thus autonomous driving is a local phenomenon.
- All components of the car, including the engine, the brakes, and the steering wheel, act in harmony. Therefore, the driving software has unity.
- The car seems to know the traffic rules and how to adjust to traffic conditions. It also seems to know all parts of the car, their functions, and their limitations. Therefore, the driving software possesses the information.
- The driving software is represented by symbols made of matter-energy, but its essence is the meaning of the commands. Therefore, the software is a subjective entity (the 0's and 1's of the software have no idea about what they represent).
- The driving software comes with apparent traits – sensing, reasoning, speeding, and honking as necessary – and thus it has an apparent character.
- The driving software follows well-defined rules depending on the traffic conditions (as relayed by satellite or online information) and thus it has a code of operation.
- When in traffic, the driving software makes a lot of decisions that are typically made by drivers, such as choosing the best route, and thus it has a concealed built-in virtual agent (which is a manifestation of the code writers).
- The driving software commands; the physical car obeys. That is, the car fully complies with the instruction of the software. Therefore, the driving software resembles a causal agent.

A similar inference can be made for the robots. It appears that the elusive life is to a cell or any living organism what software is to a robot or an autonomous car. Using this factual analogy as a guide, we can also make similar inferences for life by comparing living beings to nonliving ones.

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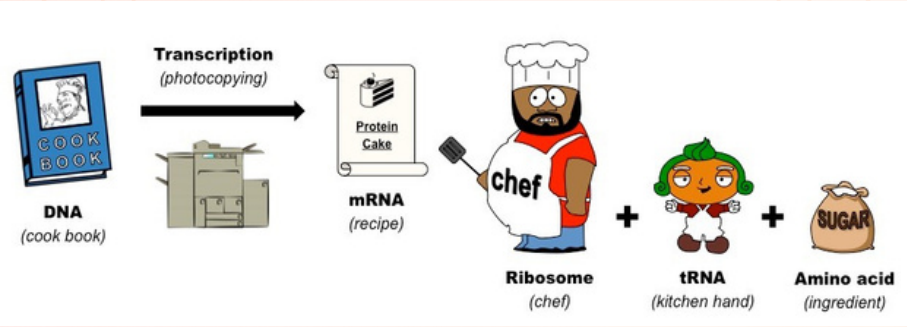
To see the resemblance, let us closely examine a living cell and compare it to a physically identical nonliving cell. The millions of molecules in a cell work in an orderly manner as a unit and collaborate fully to produce certain products – i.e., the insulin cells in a healthy pancreas synthesizing the insulin hormone. Each molecule seems to know its duties and possesses the needed skill to perform those duties and communicate with other molecules and work with them as a team in perfect harmony. Each molecule in a cell also seems to know what the cell is doing as a whole and the role it plays. The information contained within our DNA – which resembles a 1000-volume encyclopedia – is read, understood, and implemented by specific molecules with precision. The DNA with such a huge amount of information is also copied within the cell in a fraction of a second during cell division.

All these marvelous actions are associated with life. Considering that acts are indicators of the traits and capabilities of the actor, which is life in this case, we infer from what manifests in the contents of a cell that life is an agent that comes with the traits of purpose, intent, unity, order, organization, control, knowledge, skill, power, communication, reading and implementing information, and collaboration. At the organ or plant level, life also involves a higher purpose and output, higher order, harmony, connectedness, division of labor, and working as a team of cells within a larger entity. At the higher animal level, it involves an even higher level of purpose and output, with organs working together as one. It utilizes the five senses and exhibits limited levels of consciousness, intellect, instinct, and knowledge. At the human level, life comes with high levels of emotions, desires, intellect, reason, instinct, imagination, consciousness, and knowledge as well as conscience.



In short, the mysterious and miraculous life is a nonphysical, subjective, abstract attribute of animate beings. The nonmaterial life reigns supreme over the material body. It is immaterial and irreducible to matter or energy. As such, life is in the same category of existence as consciousness, free will, beauty, knowledge, and meaning, except that life qualifies as an agency.

Read, Rate and Comment!

REFLECTION TIME

"When one considers the various kinds of sustenance that living beings receive, one's attention is drawn to their **beautifully decorated forms,** their **fragrant aromas**, and their wonderfully **delicious tastes**: it is as though all of these **wonders** are **inviting us to show our gratitude.** These attractions excite living beings to show **appreciation and respect,** and to demonstrate their **thanks.** Such bounties attract the attention of all conscious beings, who cannot help but talk about them with **admiration.** All of those who receive such bounties are thus impelled to **respect them, and to show gratitude** for them, expressing thanks through **both word and act.** They experience the highest, sweetest pleasure and enjoyment **within thanks.**

Now while it is true that these bounties afford us the briefest of superficial pleasures, **through our thanks,** these delicious foods and bounties lead to the **favors of the Most Merciful One,** and to pleasure that is real, permanent, and without limit. And so ultimately these bounties lead us to **ponder** over the infinite, pleasurable favors of the **All-Generous Owner of the treasuries of mercy,** thus allowing us to taste the everlasting delights of Paradise while still i**n this world.**" **Said Nursi**

An Interview with Fall 2020 Online Certificate Program Participant:

Noora Al-Ameri

Aisha: Kindly introduce yourself.

Noora: My name is Noora Alameri, I am from the United Arab Emirates. I have graduated from the University of Sharjah with a degree in Applied Physics and Astronomy in 2017. After graduation, I have worked on a research project in the European Organization for Nuclear Research (CERN) and have been an Associate member from June – September 2017. After coming back from CERN, I was blessed with an offer to work as a Research Assistant at the Sharjah Academy for Astronomy, Space Sciences, and Technology.

I am currently working at the High Energy Astrophysics domain where we analyze data from several space telescopes in order to get a better understanding of Astronomical objects such as Neutron stars and black holes. Besides my major interest in science, I have a great interest in flourishing my inwardness side by participating/attending/supporting all programs that are spreading “Allah's Noor” to our material world.

Aisha: Why you were very concerned and excited about getting enrolled in the Fall program?

Noora: For me, enrollment in the fall program organized by the Uskudar university was like a gift from “Allah” and this message came at a critical time in my life. I had a very blurred idea about the connection between the Muslim and his God. Because our educational system did not touch upon the Spiritual aspect and how important is to feed your spiritual aspect by being connected to Allah (All the time).

You know when you find yourself lost in a hot desert and suddenly someone will appear and bring you a cup of cold water? This how the program appeared to me. The best thing is I saw a lot of people from different nations and countries and they have boosted my willingness to pursue more knowledge and read a lot in order to sustain my beautiful connection with the creator (Allah).

An Interview with Fall 2020 Online Certificate Program Participant:

Noora Al-Ameri

Aisha: Are you finding yourself satisfied with the program outcomes?

Noora: The program was well organized, and I really liked the way how the lectures were presented. The best thing I loved, and it was a new experience to me is the discussion and reflection on the material being presented.

Being exposed to an educational environment that has different intellectuals from several nations was a super interesting experience. I still remember the best reflections from two of my colleagues (Malik Belal and Dr. Abdul Magid Khan).

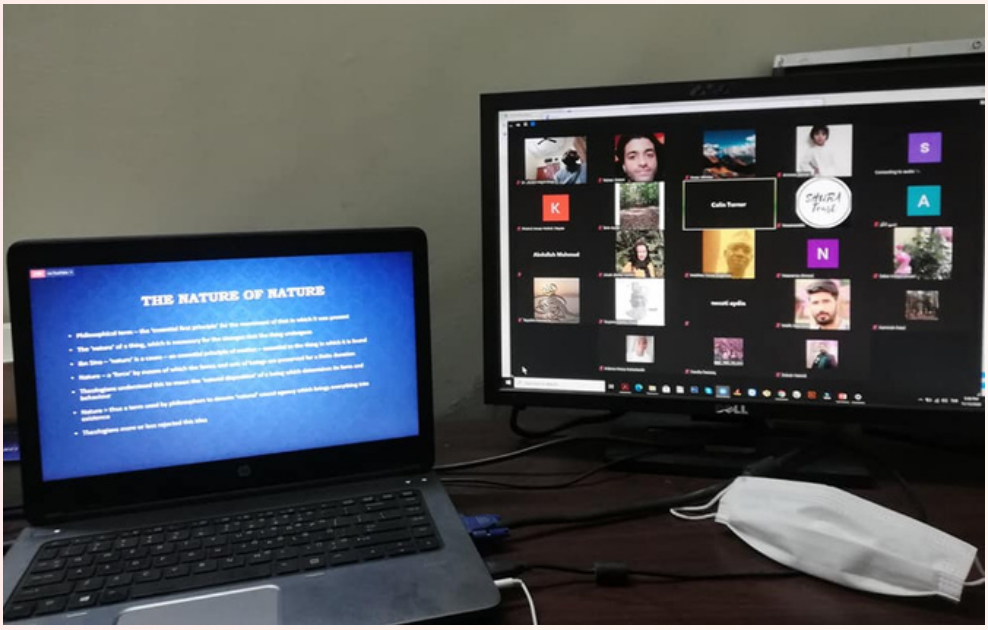
I have planned to enroll again just to expose myself again to the blessed environment again. (InshaAllah).

Aisha: Will you recommend anyone to register for the course?

Noora: Definitely. After every lecture, I sit with my sisters and talk about most of the important points and ideas being discussed during the class and they are now very interested and motivated to register for the upcoming course. It's not about the certification, it's about nourishing our minds and souls.

Aisha: Few words about "Said Nursi and Science in Islam" book?

Noora: Said Nursi and Science in Islam book is a breath of fresh air that uplifts the spirit, nourishes the mind, and heals the soul with the name of Allah. Reading this book gave me a whole new perspective on the purpose of life. I don't believe that anyone who reads this book could not benefit from its wisdom.



Tips for Teachers

By Nadine Kamal

Intention-setting can be a powerful tool to improve the quality of a student's experience in the classroom. However, it is important to keep in mind that teaching students to set an intention for the lesson or activity at hand is not the same as goal-setting or defining the lesson objectives. Whereas a goal could be *"At the end of this lesson, I will have learned how the brain retains information"* an intention could be *"I want to be a more reflective thinker"*. Simply put, an intention is a guide that helps students connect their actions to their root values. It is a way for students to define who they are and who they can be in the present moment.

Teachers can also benefit from setting an intention at the beginning of the lesson. Should a teacher face behavior management issues with a particular set of students for example, he/she can identify a personal intention as follows: *"I would like to be more empathetic to my students' struggles today."* Or *"I want to connect more deeply with my students this morning by being more in tune with their individual needs."*

How to implement intention setting for the 5D thinking approach in the classroom:

At the beginning of the lesson (or activity): Ask students to define their personal intention at the beginning of the lesson. Remind them that this intention has to include a specific character trait such as becoming more empathetic, a better listener, more patient, a better collaborator, more reflective, etc.

During the lesson (or activity): Check in with your students at random to help them refocus their attention on their initial intention. If they are working on a group project, for example, you can ask a student who has set his intention to become a better critical thinker: "How are you handling disagreements with your peers today?" "How can you think out of the box?"

At the end of the lesson (or activity): Ask your students to reflect on the outcome of their intention. This can be achieved by answering a YES/ NO question such as "Did I embody my intention today?" OR by completing a two-minute reflection writing exercise. If time allows, you can also give students a chance to share constructive peer feedback.

Reminding students to become more mindful of their chosen intentions can help them feel more centered, present, and self-aware in the classroom.

Program Starts on June 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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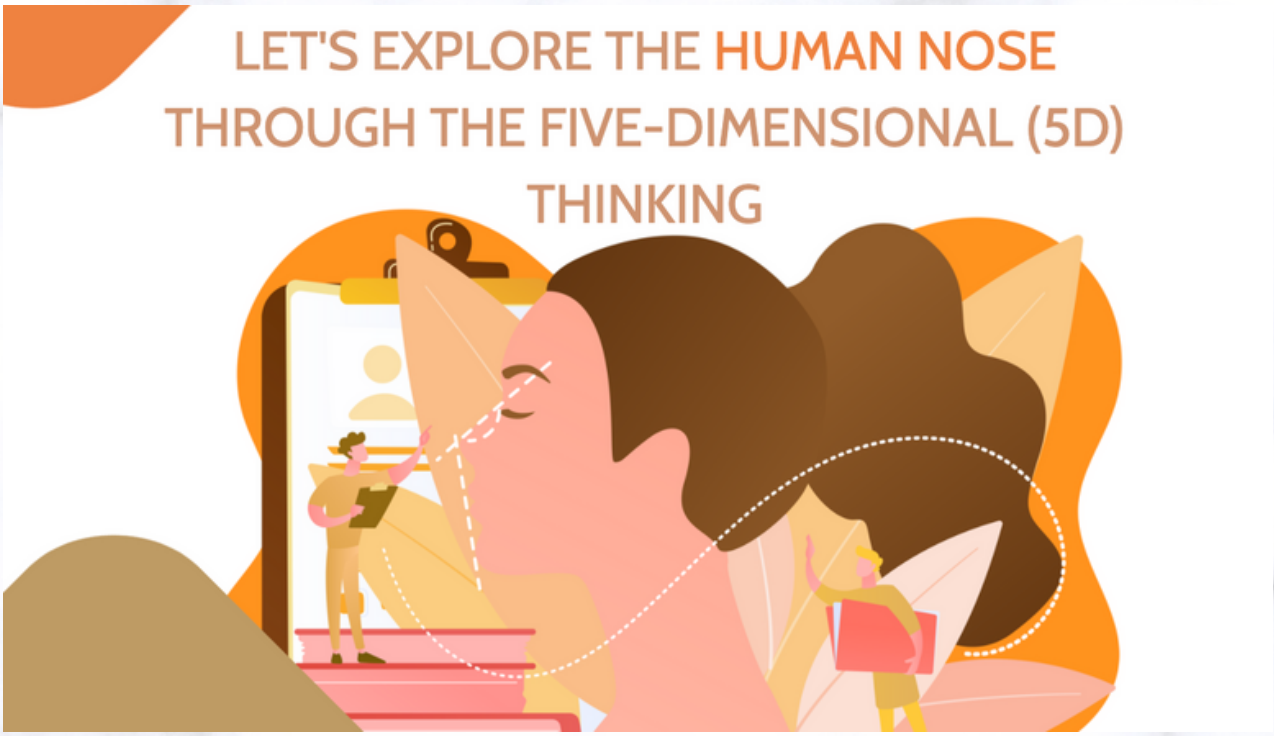
Click on the image below to view the YouTube clip on the seventh topic of the 5D Thinking approach.



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