

# The New Characteristics of Time Affecting to Sciences and the Future of Storytelling-Global

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## ABSTRACT

This study is a pure research. The objective of this study is to use the law of the direction of time which was first found in 2002 for filmmakers to predict what were the results of the Future Storytelling-Global. Two paradigms of time were used to be data to analyze: (1) time dimension from Minkowski's 4-D model which explains the time dimension separating from numbers in three principal axes (x, y, z, t), (2) new finding on characteristics of time (xt,yt,zt). The investigation found that future filmmakers will get different results if they change the paradigm with using two same groups of factors of production. Many new characteristics of time are affecting to mathematics, physics, and economics. The Future of Storytelling-Global will be changed if the new characteristics of time are studied. The new opportunity of educators who want to develop their subjects with new characteristics of time was opened widely.

## Keywords

time, new characteristics, Future Storytelling-Global, law of the direction of time, time equation.

## 1. Introduction

Aristotle trusted that space-time were total qualities, which did not concern any frame of reference which they were measured in similar values in all positions of the universe ("Time | Internet Encyclopedia of Philosophy", 2016). Time could be viewed as a flat plane, and the space as the vertical plane. Later, with the Galileo's Principle of Relativity, Galileo viewed that time was an absolute values but space was the relative value. The time measurement was a "heap of planes" like "deck of cards." (Norton, 1999; "Galileo Galilei - New World Encyclopedia", 2016; Wikipedia, 2015).

In 1905, Einstein explained new characteristic of time as a relative value, not an absolute value. The time dimension depends on a frame of reference. The traveling of twins was used to explained time dimension depending on the frame of reference. While the first one in the frame of reference as rocket was traveling in space with high speed, another was in the earth. Both of them are living in different frame of references. Ten years later, they met each other and found that the first one was younger than the second one.

Later, Hermann Minkowski presented his 4D space-time to explain the theory of Einstein's Special Relativity ("Hermann Minkowski Facts, information, pictures | Encyclopedia.com articles about Hermann Minkowski", 2018). The time dimension in a three-dimensional body is among three principal axes with mathematical model as (x, y, z, t). Notably, there is no time value in the three principal axes. See Figure 1.

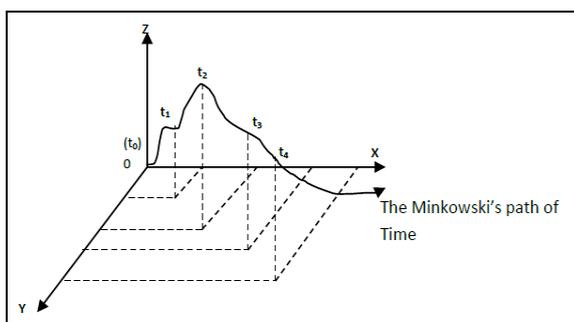


Figure 1: The path of the time dimension following Minkowski's 4D space-time.

Minkowski concluded that positive numbers have positive time values and negative numbers have negative time values as well. If time values are negative in past Light Cone of Minkowski, then time traveling can be possible.

In 1988, Stephen Hawking still used Minkowski's 4-D models to explain about time. He created the new phrase "arrows of time" to explain time in three kinds: Thermodynamics, psychology, and the expansion of the universe. For example, when the time passes, the energy from foods would decay. Also, when the universe expands, objects in the sky will increase the lack of the discipline. Notably, the arrow of time is still not the direction of the time dimension. Time still is scalar which has not any direction. In 1995, Paul Davies wrote his book "About Time." He concluded that the time dimension is a missing link that scientists have never known (Davies, 1995).

In 2002, Poramest Boonsri found the new characteristic of time by proving mathematically. He proved that a time value always matches with a number in all lines or curves. First of all, he found that the time dimension is in everything that has been changing all the time in the universe. Time can link sciences and social science together. Time links all activities in the economy together. Also, time links all dimensions. In the three-dimensional world, all things consist of a length, a width, and a thickness.

In the line, there are a lot of continuous points. Each point was made with different time values. Mathematicians use many different numbers in a number line to show different points. If time is in everything, and everything is represented as numbers, so it should be time in all numbers. Numbers are in a number line; so time values should be in the number line as well. Number line can be showed as length, width, and thickness which are the subsets of distance.

Besides, he saw that when we drew the line, we always spent our time to do. We would get long distance in two cases: (1) using long period of time to draw the line with given speed of drawing, and (2) using high speed of drawing with given time to draw the line. The relation among distance, velocity of drawing, and time is obvious. After having found the Newton's equation of distance which showed the relation among distance, velocity, and time,  $S = vt$ , where  $S$  represents the distance of the line,  $v$  (or  $dS/dt$ ) represents the velocity of drawing the line, and  $t$  represents the time value used to draw the line, Boonsri used the Newton's equation as the beginning point of his mathematical proof with his hypothesis about a time value as "the time value always matches with a number in a number line."

He found that the distance such as width, length, and thickness depends on the only time value,  $S = f(t)$ . Notably, when we draw a line, there is time spent in such drawings. Many people think that the line depends on the speed of drawing ( $v$ ) and the value of time; however the mathematical proof indicates clearly that the line depends on the only value of time. As a result, when we increase longer period of time, the distance will be longer. This forms the origin of the relation between time and distance.

Besides, all six sides on the three principal axes have positive distance, and the distance could not be negative; as a result, all sides have positive values of time too. Also, uncountable numbers have to have its values of time. Each time value is matching with a number in any number line and three principal axes. See Figure 2. The new characteristic of time after Einstein's work finally has been found. The opened secret of time opens mind of readers.

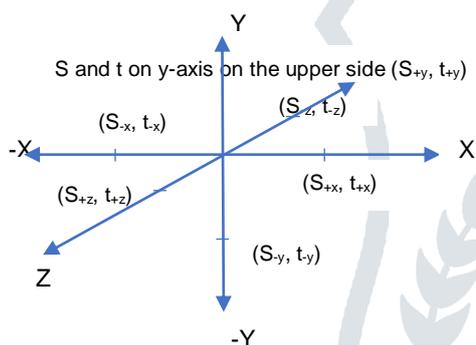


Figure 2: Each value of time (t) and distance (S) on six sides of three axes is always positive because of positive distance.

The values of time and distance in all directions always are positive. This proof shows that the Minkowski's 4D model is an imaginary and not real.

In 2017, Boonsri show the relationship between distance and numbers on the number line as well. Different drawers can determine different numbers (at the same positions) in their lines. We can call a number "a determined number." For example, at  $S = 1$ , the drawer No.1, 2, and 3 is giving the number as 100, 10, and 1 with different kinds of unit respectively. Similarly, at  $S = 4$ , the drawer No.1, 2, and 3 is giving the number as 400, 40, and 4 respectively. See Figure 3.

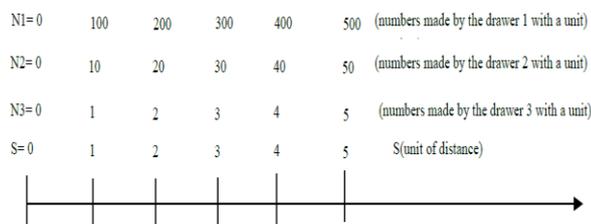


Figure 3: Different drawers may give different numbers at the same positions

The drawers look like women who are giving different names of a baby. The other names will follow the first names. We can write the relation among  $S$ ,  $N$ ,  $R$ ,  $v$ , and  $t$  as follow:

$$\frac{N}{R} = S = vt = \left(\frac{dS}{dt}\right)t = \left(\frac{\Delta S}{\Delta t}\right)t \dots\dots\dots (2)$$

This equation (2) is one of the most important aspects about time concerning determined numbers. Mathematicians determine two kinds of numbers on the six sides of three principal axes, but the relation between all numbers (with positive and negative) and distance is still positive because the distance and the value of  $R$  always are positive.

Besides, Boonsri pointed out two formulas which one can calculate the exact position of a value of time in a number line: (1) using the distance from the origin to the determined number and the velocity of drawing the line at the following equation;  $t = \frac{S}{v}$  (2) using the determined number with only the positive sign, the value of R, and the velocity of drawing at the following equation,  $t = \frac{|N|}{R.v}$ .

$$t = \frac{|N|}{R.v} = \frac{S}{v} = S \left( \frac{\Delta t}{\Delta S} \right) \dots \dots \dots (3)$$

The equation (3) called “the linear time equation” is one of the most important aspects about time in various aspects. The values of time always match with numbers in three axes which may be explained with mathematical form as (xt, yt, zt) instead of (x, y, z, t) of Minkowski’s model.

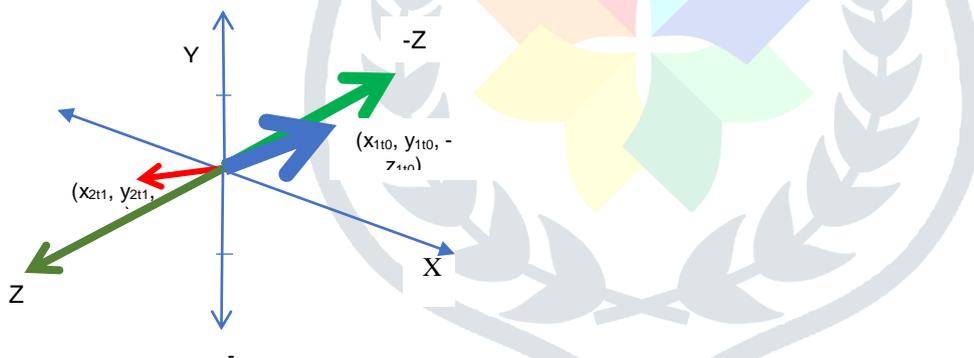
In 2002, Boonsri proved mathematically time as a vector, not scalar presented in Royal journal of Thailand which is still the top of the academic journal in Thailand (Boonsri, 2002). This new characteristic shows the importance of the direction of time which educators are not supposed to overlook in all subjects again. Besides, he found the law of direction of time which concludes that if the different direction of time exists, the time value and other element concerning time will be different from each other.

For example, if one living in Thailand is traveling to USA passing the east of Thailand such as Japan, he or she will get a day. For example, his travelling begins on February 23, 2019 from Thailand, his arriving is on the same day, Feb 23. In contrast, if the one is traveling to USA passing the west of Thailand such as India, he or she will lose a day. This shows the direction of time affecting to travel. While this time in Thailand is midday, but the same time in USA is a midnight right now. While the time in Australia is a summer, but the same time in Alaska of USA is a winter. The direction of time is something new in academic world, so this research is an objective to predict what is up on The Future of Storytelling-Global in the future when the paradigm of time changes from Minkowski’s 4D model, (x, y, z, t) to new characteristics of time, (xt, yt, zt).

**2. Methodology**

This study is pure research. The law of direction of time with mathematical model will be used to predict what is up on The Future of Storytelling-Global in the future. Two paradigms of time were used to be data to analyze: (1) time dimension from Minkowski’s 4-D model which explains the time dimension separating from numbers in three principal axes (x, y, z, t), (2) new finding on characteristics of time (x<sub>t</sub>, y<sub>t</sub>, z<sub>t</sub>). The variable -z is a point in the thick axis (-Z) which represents paradigm of people who follow Minkowski’s model (human resources). The variable z is a point in the thin axis (+Z) represents paradigm of people who follow new characteristics of time which is against Minkowski’s model (human resources). The variable x is a point in the x-axis represents capital of people who invest their money in film industry (capital). The variable y is a point in the y-axis represents technology of people who invest their money in film industry (technology).

The following figure shows the resultant direction of three variables in film industry.



**Figure 4:** the different directions of time produce the different values of time and different results of three kinds of numbers in three principal axes.

**3. Results**

**3.1 Result 1**

If the thin resultant line in the Figure 4 represents the resultant direction of three variables: (1) human resource who use Minkowski’s Light Cone model to support their imaginary to produce films concerning time travelling (first paradigm), (2) capital, and (3) technology; as a result, the ordered triple of the thin resultant line is (x<sub>110</sub>, y<sub>110</sub>, -z<sub>110</sub>). However, if the thick resultant line in the Figure 4 represents the result of filmmakers who use new characteristics of time which are different from Minkowski’s model (the second paradigm), (2) capital, and (3) technology; as a result, the ordered triple of the thin resultant line is (x<sub>111</sub>, y<sub>111</sub>, z<sub>111</sub>). Notably, the results of both cases are different from each other.

For example, present filmmakers who produced films concerning time travelling always used the model which is imaginary, (x, y, z, t), such as time can run with negative values; as a result, various filmmakers will produce many films which are the same as many past films such as “Terminator” or “Back to the Future.” *The prediction from this direction of time is The Future Storytelling-Global will look like the previous ones.*

In contrast, future filmmakers who produced films concerning time travelling used the new characteristics of time which is real, (x<sub>t</sub>, y<sub>t</sub>, z<sub>t</sub>), or time can run with positive values; as a result, future filmmakers will produce many films which are different from the first paradigm. *The prediction from this direction of time is The Future Storytelling-Global will not look like the previous ones.*

### 3.2 Result 2

Besides, after the time equation had been found, many researches of time were done continuously. The results of these studies which help filmmakers to see what is up in the future can be concluded as follow:

1. Time is a vector, not scalar (Boonsri, 2002). This new characteristic shows the importance of the direction of time which educators are not supposed to overlook in all subjects again.
2. Geometry of time dimension shows that there are at least eight resultant directions of the time dimension. The eight directions can form as six pyramids with one top. This new characteristic shows the shape of a pyramid as special shape called "time-field" (Boonsri, 2003).
3. With (1) and (2), time-field can be made and used to increase and decrease the growth rate of cells of being such as cells of plants, animals, and mankind. This shows that it is possible for scientists to reduce time of cultivation of plants, feeding animals, and healing human's wound (increasing rate) and it is possible for scientists to decrease the growth rate of cancer in a body (Boonsri, 2017).
4. In the subatomic level, there is an angle called "magic angle or  $54.7356^\circ$ " which scientists have known for a long time. Scientists know how to use it but they did not know why the angle exists in the subatomic level. For example, physicians could not see some tissues by using x-ray, but if they set their MRI with the magic angle, they will see what they want. The angle shows special characteristic. Geometry of time dimension helps us to mathematically prove that time is in the magic angle in subatomic level. This shows that scientists from the poor countries which have not much money for researching funds can use the directions of time in a three-dimensional body to study and use nuclear forces in any particles in subatomic level (Boonsri, 2017).
5. The time equation is the King equation which can be used to explain equations in physics and economics (Boonsri, 2017). In 1987, Michio Kaku, a theoretical American physicist, predicted that in the future, scientists will explain all equations in physics with an equation which will contribute and upgrade present theories in physics to the upper level. Right now, no leading scientists found the equation, BUT the equation has already been found.
6. A time value can solve N variables of N equations at a moment. This shows that it is possible for scientists to invent a very small supercomputer or air screen of a computer (Boonsri, 2017).
7. Gravity force has its poles. Geometry of time dimension helps us to mathematically prove that there is the polarity of gravity force. This shows that it is possibility to have cars moving without wheels and floating in the air including floating cities which can run away from earthquake and Tsunami. Spaceships which move with antigravity force are possible (Boonsri, 2017).
8. Magic angle can be used to produce an electromagnetic cell which can automatically charge its energy. This shows that it is possibility for most countries to have very low cost of energy for next generation (Boonsri, 2016).
9. Time equation can prove that demand and supply curves in microeconomics of present mainstream economists are discontinuous points occurring simultaneously, not a line. This shows that in the core of microeconomics, there is something wrong which mainstream economists could not overlook anymore (Boonsri, 2013).
10. Time can prove that mainstream economists use words of barter system in price system. From (9) and (10), they show that in the core of microeconomics, there is something wrong which mainstream economists could not overlook anymore (Boonsri, 2018).
11. Time can link microeconomics and macroeconomics together (right now, the theories of two levels of economy of mainstream economists could not link the levels together (Boonsri, 2014).
12. The direction of time can show that present mainstream economists still overlook the importance of time dimension. From (11) and (12), they show that it is possibility of new paradigm of solving economy for next generation (Boonsri, 2015).
13. Time travelling is still possible because three principle axes are something called "Time Hole" that time dimension is zero. For example, at the x-axis, we can see that only values of x are changing, but y and z values are still zero; as a result, moving with higher space of y and z dimensions (or directions) on the x-axis, time travelers can go anywhere they want to go. Similarly, at the y-axis, we can see that only values of y are changing, but x and z values are still zero; as a result, moving with higher space of x and z dimensions (or directions) on the y-axis, time travelers can go anywhere they want to go too. Also, at the z-axis, we can see that only values of z are changing, but x and y values are still zero; as a result, moving with higher space of x and y dimensions (or directions) on the z-axis, time travelers can go anywhere they want to go as well.

### 4. Conclusion.

New Characteristics of time are affecting to sciences and the Future of Storytelling-Global. The direction of time can produce the different results from economic products including film industry of many countries. The new characteristics of time pointed out that the advanced technology which bases on higher level of science from present can be produced for people to use. Also, the new opportunity of educators who use the new characteristics of time will increase their advantage from global-market competition. New sciences may be produced by scientists from the third-world country because the new characteristics of time are new paradigm which scientists in the leading countries have no ideas about it.

With the law of paradigm, if people find new paradigm of a subject (or idea, concept, else), they will be pushed to the starting point of the new paradigm. In the past, clock makers in Switzerland found the new paradigm of a clock which was produced by a Swiss inventor, the makers were pushed to the starting point of the NEW watches and they did not know that they did not know any things about the new paradigm. Later, Japanese merchandizers bought the patent of the clock. In present, we know this kind of watch as "a quartz watch." and Swiss makers lose the top rank of watch buyers while they thought that they really know everything about watches and clocks. Understanding about time may open new views of all dimensions that time is matching with them. For example, the film named "Alita" was produced by Cameron (human resource) who bought the story from Japanese artists. The film is the resultant direction of two new variables: (1) paradigm, (2) technology.

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