

## **Lesson 7: "Sacred Time" - (3a) "Understanding Time"**

(These notes were taken after watching the online lecture video by Fr. Louis Ha Keloon.)

### **Theme of this class: Time**

The theme of this class is "time". Although time is so complicated, we can still understand it. It is because people are constantly measuring time in their daily lives. In fact, we cannot leave time. Time, like space, involves the idea of the universe. The ancient idea is that the universe is basically unchanged and will continue to exist for a long time. However, the current concept is that the universe is moving, expanding, and is expanding at a high speed, and has a beginning and an end. These changes in the concept of the universe have affected people's different views on time.

### **Purpose of this class:**

- Understanding the cosmic time
- Understanding the human time
- Understanding "Sacred Time"

### **Contents of this class:**

- Discuss the cosmic time
- Discuss the human time
- Discuss "Sacred Time"

### **Chinese traditional wisdom and idioms about time expressions**

Ancient China did not develop philosophical discussions about time like in the West, but traditional Chinese wisdom and idioms continue to tell us many expressions about the measurement and nature of time. For example: There is a gap in "The Passing of the White Horse", which shows that time is so short. "Time flows like a stream" has been said in the Tang Dynasty, which means that after time has passed, it will not come back. Well, from the beginning of the Yuan Dynasty, it was said that "one inch of time is one inch of gold", and this time was measured by the shadow of the sun on the ground, and time was measured by length. As for "time flies like an arrow", it was already said in the Ming Dynasty that time is directional, that is, it has a fixed direction. The time for meditation to talk about "an incense stick " is usually 35 minutes, which means that the material changes of "an incense" are from the beginning to the end of burning. In short, the material changes are related to time.

### **Classification of time**

Fr. Louise Ha divided time into "cosmic time", "human time" and "sacred time". This was purely for convenience.

## **Cosmic Time**

As for cosmic time, it cannot be separated from "measurement" and those timers, so we will think of clocks.

## **Clocks**

A clock tells what time it is, which of two events occurred first, and how long an event lasts. For this purpose, the clock requires at least two subsystems:

(1) Stable and regular ticking; the ticking rhythm of a clock using a cyclic process, measured in cycles per second. The more frequently a clock ticks, the better.

(2) Counting these ticks; to measure the time elapsed between two events and display what time it is now.

Since the clock needs to display this tick count, we have experienced many different types of clocks:

Mechanical clocks use large and small gears to pass between each other to display the tick count. The driving force that drives the mechanical clock is pendulum or spring:

- Pendulum clock - powered by the constant motion of the pendulum
- Mechanical clock - powered by spring

There are winding and electronic clocks. Non-mechanical clocks are made of quartz. The frequency uses the voltage of the quartz crystal to trigger electronic oscillation to display the time:

- Electronic clock - powered by electricity
- Quartz clock - Quartz is very accurate because the voltage of a quartz crystal has as many as 32768 cycles per second.

The frequency of the atomic clock is even more powerful. It uses the atomic resonance frequency standard, which is 9,192,631,990 times per second, so it is very accurate. In fact, atomic clocks use electricity to drive them to indicate the time. The atomic clock, which appeared in 2004, is believed to significantly improve GPS positioning capabilities.

Another type of radio-controlled clock, it actually receives the "standard time" radio waves emitted by the base station of the atomic clock to automatically correct the time and calendar. This type of clock is used to measure time.

However, the latest development is to use light to measure time, which uses the distance traveled by light every second as a standard. In fact, in the past, the meter was based on a metal bar in Paris as a standard. As a meter standard, it is recognized all over the world. However, now this meter is indicated by light seconds. Now when we talk about time, we will use light to express it.

## **Verification of the general theory of relativity**

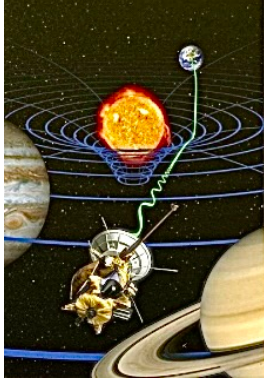
In this part, we mainly introduce time using some things that Hawking said in his brief history of time. His book was published in 1988 and has sold 25 million copies. It is a popular book that tells us how people throughout the ages viewed time, so it is very suitable for our course. In the book, he cited some verifications of Einstein's general theory of relativity. These verifications are important because general relativity has such an impact on modern scientists' concepts of the universe. The concept of the universe is also related to time, so we put forward the four verifications mentioned by Hawking.

### **First verification: Light Deflection**

Light must travel along the geodesic of "space-time", and the geodesic is measured underground according to the ground. We know that the Earth is round. Due to the fact that space is curved, meaning that light does not appear to travel in a straight line in space. In this way, general relativity predicts that light must be bent by a gravitational field.

For example, the light cone at points near the Sun is deflected slightly inward due to the Sun's mass. Light from a distant star that passes just near the Sun is bent at a small angle, so that the star appears to be in a different position to an observer on Earth. Under normal circumstances, it is very difficult to observe this effect because the sun's light makes it impossible to view stars that appear in the sky near the sun. However, it may be observed during a solar eclipse, where the sun's light is obscured by the moon. This verification is called "light deflection", which means that light is bent by a gravitational field.

**Second verification:** It is a signal sent from the Earth by launching a space probe. When it passes through the Sun, the blue line represents the curvature of space-time caused by the mass of the Sun; the green wave represents the space between the Earth and Cassini. A radio signal transmitted between space probes; it is delayed by the curvature of space-time. This verification is to prove the relationship between light and mass.



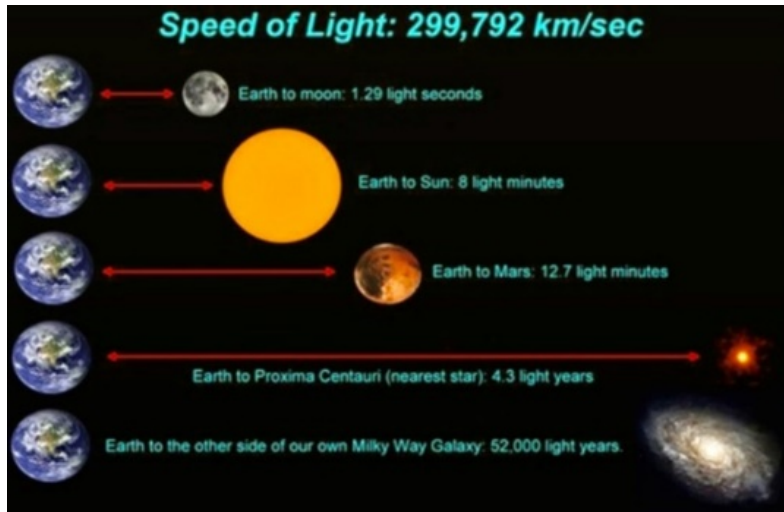
**Third verification:** This is a hypothetical experiment, that is, it is not actually done. Suppose one of the twins goes to live on a mountain top while the other stays at sea level. If they meet again, one will be older than the other. In this case, there is very little difference in age. But if one of them is traveling a long distance in a spacecraft traveling at nearly the speed of light, the difference will be much greater. When he comes back, he will be much younger than the other person left on earth. This is called the twin paradox. This hypothesis is to prove that in the theory of relativity there is no single absolute time. Instead, everyone has his own measure of time, which depends on where and how he moves.

**Fourth verification:** Using a pair of very accurate clocks mounted on the top and bottom of a water tower, it was found that the clock at the bottom, closer to Earth, ran slower. Clocks at different altitudes on Earth will have different speeds. According to the predictions of general relativity, time appears to pass more slowly near a massive object like the Earth. This is because light energy is related to the number of vibrations of light per second: the greater the energy, the higher the frequency. As light travels upward from the Earth's gravitational field, it loses energy, so the time interval between the two crests of the light becomes longer. Seen from above, everything happening below appears to take longer.

The above verifications are actually intended to prove the light, the mass of the object, and the bending. Issues like these are all related to the time of the universe.

### \* Before 1915

1915 is a very important moment, because 1915 is the day when the general theory of relativity was introduced. There was a special theory of relativity before, which was published in 1905. Ten years later, in order to solve the problem of Newtonian gravity, Einstein formulated the general theory of relativity. Let's look at what that view was like before 1915.



First of all, let us first understand what the speed of light is. The speed of light is almost as fast as 300,000 kilometers per second. This light can be obtained by scientists in real time. Therefore, the light we see from the moon now is the light 1.29 seconds ago. And the light we see from the sun is the light 8 minutes ago, that is, we can only see the light emitted by the sun 8 minutes later. Mars takes 12.7 minutes, and other galaxies far away take light years, which is calculated based on the speed of light in one year. Just calculated in seconds and minutes, if it takes a year, then to calculate how far the light has traveled, it needs to be calculated in light years. This method of measurement changes many things.

Before 1915, space and time were thought of as fixed arenas in which events took place, unaffected by the events that took place within them. According to Newton's theory, the attraction between objects depends on the distance between them. Even the 1905 special theory of relativity accepted this view. Objects move, forces attract and repel each other, but time and space extend completely unaffected and infinitely forward.

Newton's law of gravity is the belief that any two objects attract each other, with the force proportional to the mass of each object. The further apart the objects are, the smaller the gravitational force. This law holds that there is no single static standard. If we say that object A is at rest and object B is moving at a constant speed relative to object A, it is equivalent to saying that object B is at rest and object A is moving.

The lack of a static absolute criterion suggests that one cannot decide whether two events that occur at different times occur at the same location in space. Newton could not assign an absolute spatial location to events, so he gave up the absolute space that Aristotle believed in.

But both Aristotle and Newton believed in absolute time. That is, people can measure the time interval between two events, and the time will be the same no matter who measures it. Time is

completely separate and independent from space. This is what most people regard as common sense.

Einstein pointed out in 1905 that as long as the concept of absolute time is abandoned, there is no need to conceive of "ether" to fix the speed of light waves. The basic assumption of this theory, known as relativity, is that the laws of science should be the same for observers regardless of the speed at which they move freely. No matter how fast observers move, they should measure the same speed of light.

The basic assumption of the theory of relativity is that mass and energy are equivalent  $E=mc$  ( $E$  is energy,  $m$  is mass, and  $c$  is the speed of light). And nothing can move faster than light, because when an object approaches the speed of light, its mass rises extremely fast, requiring a huge amount of energy to accelerate up. But it can never reach the speed of light, because then the mass will become infinite, which requires infinite energy to do it. For this reason, relativity limits any normal object to motion faster than the speed of light.

The theory of relativity ended the idea of absolute time! Each observer has a time measured by the clock he or she carries, and the readings of the same clock carried by different observers do not necessarily agree.

Newton's laws of motion put an end to the idea of absolute position in space. And the theory of relativity gets rid of absolute time.

In fact, the theory of relativity is very complicated. We only need to briefly understand its explanation of the universe, time, and space, because we are not trying to study the theory of relativity, but just want to know what current scientists see, and use this theory to understand time.

It was just mentioned that Newton's laws of motion put an end to the concept of absolute position in space, while the theory of relativity got rid of absolute time. So, now scientists believe that time and space are not absolute. "Not absolute" means: when we take a ferry, sometimes we unconsciously think that the pier is moving, but in fact it is a moving ship.

Sometimes, we cannot tell which one is static. This view is actually the view that has been developed now. As for time, we cannot measure it with a ruler. Due to the problem of the bending of light and the human observation of speed, hence, the length of time and distance are inconsistent. This changes the view of time and space, and also changes scientists' understanding of the universe itself. Of course, we may still be stuck in the so-called common-sense view held by most people, which means that we can measure anything at the same time, and a space is fixed for everyone. In fact, in our daily life, it is feasible to follow this common-sense concept.

So, scientists have to put an end to this view, because they want to study space, study the universe, and then study the speed of light, and study whether time can be reversed, whether they can go to the future and back to the past. When faced with such a question, they came up with this idea that it is not absolute time or absolute space. In fact, because they had some verification, they felt that their idea was correct.

### **Time is the moving image of eternity**

Plato (c.427–348 BC)

Having discussed the verification of general relativity, we look back at different views in history. For example: Plato believes that there is an absolute idea, so time is a moving illusion of this eternal absolute idea, that is, we cannot see what the truth is. We only see its shadow, a shadow of the Absolute Idea.

### **Time is the number by which motion is measured**

Aristotle (384–322 BC)

As for Aristotle, he believed that the natural state of an object is to be at rest (the earth is at rest) and only move when acted upon by a force or impact. A heavier object falls faster than a lighter object because there is a greater force pulling it toward the Earth.

### **Absolute time view**

Newton (1642–1726/27)

Newton proposed that the motion itself we just mentioned can be relative, and the mutual attraction of objects is proportional to the mass of the substance. It is also related to its distance, the farther away it is, the smaller it is, and the closer it is, the larger it is. Although he put forward such a theory, everyone still basically thinks that time is absolute, which means that time will not change, that is, it is the same time in different places and different people.

Newton's first law: An object will keep moving in a straight line at the same speed unless it is acted upon by an external force.

Phenomenon that occurs when an object is acted upon by a force, Newton's Second Law: When an object is acted upon by a force. It will change its speed, and its rate of change is proportional to the external force it receives.

Newton's law of gravity: Any two objects attract each other, and their gravitational force is proportional to the mass of each object. The further apart objects are, the less gravitational force they have.

Newton believed that there was no single static standard. If we say that object A is at rest and object B is moving relative to object A at a constant speed, it is equivalent to saying that object B is at rest and object A is moving.

### **\* After 1915**

Albert Einstein · 1879 - 1955

What we remember most about Newton's universal gravitation is that an apple fell on his head from the tree. He thought, why must that apple fall on my head? Therefore, he proposed that gravity is caused by the universal gravitation of matter attracting each other, and no matter how heavy the object is, the falling acceleration is the same; then, when the apple matures, the universal gravitation will attract it towards the center of the earth, that is, it will fall downwards.

### **The mass of the Earth bends the space**

However, Einstein believed that this explanation was incorrect, so he wanted to explain the gravity phenomenon of Newton. In 1915, Einstein proposed that there is no gravity at all in the universe, but he believed that the reason why matter attracts each other is not because of gravity, but because "space-time" is not flat. "Space-time" is "warped" due to the distribution of mass and energy within it. The gravity between matter comes from the curvature of "space-time". Therefore, the reason why the object fell should be because the mass distorts space-time, and matter "falls" along the curvature of four-dimensional space-time. This is Einstein's explanation.

In the case of the Earth, objects do not move along the trajectory closest to a straight line in curved space due to gravity, but due to the curvature of "space-time". When we fly, the navigator usually guides the pilot to fly the shortest route between two airports, that is, the geodesic path. It goes along a straight line of the four-dimensional "space-time" (that is, the dimension of three-dimensional space plus time). But in three-dimensional space (length, width, and height are used to represent that space) it looks like it follows a curved path.

His conclusion: He believed that the structure of "space-time" affects the movement of objects, and the movement of objects also affects "space-time". Then, "space-time" and objects influence each other. He also deduced that "space-time" is something we talk about within the universe we know, but we don't know anything outside it. When we talk about this universe, in fact, we have to refer to "space -Time" these two things are discussed together. This means that people used to think that the two things "space and time" are separate, one is time and the other is space. That is, a space is at rest, and we move there. When we move, there is time, and another unrelated thing that does not affect each other is also happening. However, the general theory of relativity believes that this is not the case, and that "space and time" are connected together in our



universe, where we live now. We cannot just talk about space and not time; nor can we just talk about time and no space. Fr. Louis Ha mentioned the "flipbook" for everyone to watch before attending the class. This flipbook is a book of many pictures, but when you turn it, it keeps flipping. So, to a certain extent, there is a certain amount of "space-time" that needs to be connected together, and we can see a living time and a living picture. Then, our life is a living "space-time" connected together.

In general relativity, space and time become a dynamic force: when an object moves, or a force acts, it affects the curvature of space and time; in turn, the structure of "space-time" affects the curvature of space and time. The way objects move and forces act. Space and time not only affect everything but are affected by everything that happens in the universe. Space and time cannot be discussed outside the boundaries of the universe; events in the universe cannot be discussed without using the concepts of space and time.

In fact, cosmic time is a human interpretation. If there were no humans, would there be cosmic time? Will there be space in the universe? Will there be mass, energy, light, motion, change, direction? We have to remember that light is what we see because of our vision, and that is the light we see now. Of course, light waves have their own vibrations. Although we cannot see them, they are always vibrating, so they are no longer the light which we think of it. Therefore, the time of the universe raises many questions. In turn, it doesn't provide many answers, and it doesn't tell me what time is. So many scientists have measured this time, talked about its relationships, etc., but what have they told me? No.

## **Human Time**

Fr. Louis Ha remembered that Hawking said that today's philosophers have no need to do their businesses because they do not know much about science. And science has replaced philosophy. His words can be an inspiration to philosophy researchers. In fact, it is too arrogant to say this; what scientists can give people is some verification, and finally provide people with some convenience and comfort, but at the same time, it also brings a very destructive force. Philosophers throughout the ages have actually tried to solve human problems. In fact, people's problem with time is ultimately to understand the relationship between cause and effect, to understand the problem of a person's free will, to understand the personal problem of whether a person can undo what he has done before, that is, the problem of sin. To a certain extent, philosophers work hard to find an answer based on people's worries about time and space in life. Fr. Louis Ha felt that they could actually give many answers. From his own perspective, they may be more practical and better answers than the answers given by the scientists.

Fr. Louis Ha showed a picture of a Greek mythological statue. The god of history (Clio) is engraved on the top, and the god of time (Chronos) is engraved on the bottom. The god of time, Chronos, kept tearing away what happened in time with his hands, in order to cancel it; while the god of history, Clio, held an inkstone and a pen in one hand, while the other hand pressed the God of Time and told him not to erase the traces left by time, because he wanted to write it into history. In fact, this statue expresses the tension and struggle between time and people, that is, the continuous passage of time. But people have their own memories, called history, which means not just the present, but also the past and the future. So, when we look at time from this perspective, how do we look at it from a philosophical level?

### **Time is an extension of the soul**

Augustine of Hippo (354–430)

Confessions of Saint Augustine (Volume 11)

Fourteen

What exactly is time? Can anyone easily describe it in a nutshell? Who has a clear idea of this and can express it in words? But in conversation, what is more common and familiar than time? Of course, we understand it when we talk about time. We also understand it when we hear others talk about time.

So, what exactly is time? No one asked me, but I knew it clearly. Someone asked me, and I wanted to explain, but I was at a loss. But I can confidently say that I know that if there is no past, there is no past time; if there is no coming thing, there is no future time; and if nothing exists, there is no present time.

Since the past is gone and the future has not yet come, how can the past and the future exist? Now if eternity is now, there is no time, but eternity. The present becomes time because it moves toward the past; then how can we say that the present exists? The reason why we are now is that we will not exist soon; therefore, unless time moves towards non-existence, I cannot correctly say that time does not exist.

Twenty

One thing has become very obvious: the future and the past do not exist. It is incorrect to say that time is divided into three categories: past, present and future. Perhaps it is more accurate to say: time can be divided into three categories: past “present”, present “present” and future “present”. These three categories exist in our hearts and cannot be found anywhere else; the present of past things is memory, the present of present things is direct feeling, and the present of future things

is expectation. If I can say this, then I see three categories of time, and I do not admit that time is divided into three categories.

People can still say: time can be divided into three categories: past, present, and future; since we are used to passing on rumors, let us just say it like this. I do not care about this, nor do I object or reject it, as long as I realize that the future mentioned does not yet exist, and the mentioned past does not exist either. In our conversations, few words are accurate and many words are inaccurate, but people will understand what we are trying to say.

Fr. Louis Ha summarized St. Augustine's remarks on time as follows: [Augustine said that time is actually the extension of the soul. He said philosophically that the reason for being "present" will no longer exist, that is, there is a "present" now, because there will be no "present". There is a "present" because there will be no "present". Then, "future" and "past" do not exist. He said that when he was a child, someone taught him that there is "past", "present" and "future"; especially when studying grammar, there are "past", "present" and "future" in grammar. But he said, in fact, there is only "present", there is no "future", and there is no "past". Then, things in the past appear in the present as "memory", things in the present appear in the present as our "feelings", and things in the future appear in the present as "expectations". Although this idea is so ancient, Fr, Louis Ha felt that it had a very basic view. Even the latest philosophers are inseparable from the question of how to understand our past, present, and future.]

### **Time is the pure form of transcendental emotional intuition**

Immanuel Kant(1724–1804)

Kant believes that time is not an empirical concept abstracted from experience, but as an inevitable representation of all direct perceptual experiences; it is a transcendental pure form beyond experience; because there are "simultaneous" or "successive" intuitions because people cannot conceive of various phenomena without using time, because people have set up a single-dimensional universal time and use infinite time as the basis for time measurement.

Kant's conclusion is that time neither exists in itself nor is it an objective determination attached to things; therefore, when we abstract away all the subjective conditions of its intuition, time cannot survive. in other words,

First, time is not an unreal object but still a real entity; that is, it is not a thing in itself.

Second, time is not a determination or order obtained by relying on things themselves, otherwise it would not be a condition of the object, and it cannot be recognized and intuitively understood a priori through comprehensive propositions. And since time is neither a thing itself nor exists in an object.

Third, time must be a form of inner feeling, that is, it is an intuitive form of ourselves and our inner states. As such, time cannot be a determination derived from external phenomena, nor does it belong to any form or position. However, it can determine the relations of all representations existing in our inner state.

Fourthly, time is the transcendental formal condition of all phenomena in general - (space only serves as the pure form of the phenomena of external intuition).

Fr. Louis Ha summarized Kant's remarks on time as follows: [Kant believes that "time" is not obtained from experience, but already exists before we have experience, and it is obtained from our intuition. This "time" does not have a time of its own, that is, "time" is not an object itself, but it is not like one object attached to another object. It is a kind of our inner feeling, a form we add to things, and this form is a transcendental form. Kant put forward the idea of time very importantly. Although he did not think like the scientists proposed by Hawking, in essence, he turned time into how people see that time and how people feel that time through their inner feelings. In fact, the tone is the same as that of St. Augustine, and it comes from a spiritual event. ]

### **Friedrich Nietzsche , 1844-1900**

Thus Spoke Zarathustra

Nietzsche Volume 5: Illusions and Mysteries

"Stop, dwarf!" I said. "Me! Or you! But I am the stronger of the two: you don't know my deepest thoughts; you cannot hide them!" - Then something happened that lightened the burden on me: because the dwarf jumps off my shoulder, you negligent one! He sat on a stone in front of me. Where we were standing, there was a pillar gate.

"Dwarf! Look at this pillared door!" I added: "It has two faces. Two roads meet here: but no one has yet reached their end. The long road back: stretches for an eternity. This long road forward - this is also an eternity. The two roads go against each other and are in direct conflict: but this pillar gate is their meeting point. The name of the pillar gate is engraved on it: 'moment'. There is one who follows either path - always moving forward: dwarf, do you believe that these two paths will always conflict?"

"Everything that is straight must be lied." The dwarf whispered contemptuously: "All truth is crooked; time itself is also a ring." "You, serious spirit!" I said angrily, "Don't answer me rashly. Come on! Otherwise, I will help you lame and throw it to where you are sitting. Don't forget to carry you to a higher place! Look at this moment!" I continued: "From this moment's pillar door, a long The endless road goes back: there is eternity behind us. Shouldn't the one who can run in

all things have already run that road? Shouldn't the one who can reach in all things have reached completion and passed? Already existed: Dwarf, how do you explain this moment? - Shouldn't this pillar have already existed? Isn't everything so intertwined that this moment holds everything in the future? Does it also determine itself? So, the runners among all things: should they follow the road ahead again! - Is this a long road for ghosts to visit? Shouldn't we come back for eternity?

Fr. Louis Ha summarized Nietzsche's description of time as follows: [Nietzsche uses another very special way to express time, which is by telling stories. There is a pillar gate in the story, which is the meeting point of two roads. Both roads lead to eternity, and the two roads meet at that pillar gate. The name of this pillar gate is "moment". At that moment, two roads to eternity meet at this pillar gate. As for whether this pillar has passed? Because when you see it, it has already passed. This is what Nietzsche emphasized about time. In fact, when we think of time, we think of eternity. The intersection between eternity is a "moment", and we are in this "moment", and that "moment" will continue to pass.]

### **Kahlil Gibran · 1883-1931**

#### The Prophet Chapter 12: On Time

An astronomer said, Master, what is time like?

He replied: You want to measure the infinite and immeasurable time.

You want to adjust your manners and even guide your spirits according to the times and seasons.

You are willing to be a stream of time and watch the water pass by on the bank.

However, the infinity within you realizes the infinity of life.

It knows that yesterday is just a memory of today, and tomorrow is just a dream of today.

Therefore, it that sings and thinks within you is still in the state of that first moment when it scattered the stars across the sky.

Who among you does not feel the infinite power of love?

Who can not feel that love, though infinite, is still bound to himself, and cannot be transferred in the thoughts of love and the deeds of love?

Isn't difficult time just like love, inseparable and without gaps?

But if you think it necessary to measure time by seasons, let each season include the others.

Let today embrace the past with memory and embrace the future with hope.

Fr. Louis Ha summarized Gibran's remarks on time as follows: [The writer Kahlil Gibran's statement is that time cannot be measured because life is infinite, with memories and dreams. We use "memory" to embrace the "past" and use "hope" to embrace the "future". His view of "time" is also "present". We live in "present", and "present" includes our infinite life and our infinity of life. So, in this kind of life, we continue to "remember" and "hope" like this, that is, "present" includes "memory" and "hope." Just like the intersection of "past" and "future" will be "present".

Gibran thought that it was so beautiful. Fr. Louis Ha recommends everyone to read that book if you have the opportunity. In the book "Prophet", there are many philosophies of life.]

### **Martin Heidegger , 1889-1976**

Being and Time, Chapter IV

Section 81 - The occurrence of the concept of "Within Timeless" and "Vulgar"

The temporality of existence of "Dasein"

As the world unfolds, time becomes public; this disclosedness of the world includes the discoveredness of beings within the world, and with this state of being revealed, time has always been wasted because whenever "Dasein" cares about something, it must calculate time. However, when it comes to "people" explicitly adjusting themselves to time, it lies in the use of clocks.

The existential temporal meaning employed by the clock reveals itself as making present of the rotating pointer. The activity of following the position of the pointer in a current way is counting. There is always a temporary ecstatic unity that temporalizes in a self-absorbed ecstatic unity. To dwell in the "then" somewhat presently means to open one's vision to what was "on that former occasion" in a way that speaks of the present, that is, to the now-no-longer's horizons are wide open. The present expectation is prepared for "then", which is equivalent to saying that the way Tao talks about the present is open to the vision of the "later", that is, it is open to the vision of the now-not-yet. What comes to pass in such a presentization is time.

Fr. Louis Ha analyzed Heidegger's remarks on time as follows: [Heidegger is a person who has a great influence on time and modern philosophy. Many modern thinkers are influenced by him. His influence was the use of "phenomenology". The so-called "phenomenology" refers to what exactly is an ontology and an entity? We don't pay attention to it, leave it alone, and do not talk about what that thing is in the end. We look at "phenomena" that we can understand. What we experience in life should be viewed as a "phenomenon". It would be bad if it were a final object, because it is not. It is not, but we are all exposed to it. So, Heidegger invented a teaching called "Dasein". "Dasein" is actually our personal life. The "being" born in life is this kind of "Dasein". Such an existence here and now, this moment is "time", and this place is "space", which is the "being" in "time and space". He wrote a very famous book, "Being and Time". It is because of this book, he influenced some later thinkers. In the book, he talks about popular time. The so-called popular time is the time that we understand by common sense. This time is "past", "present", and "future", and "present" is between "past" and "future". We were helplessly thrown out. As "beings" like us, we cannot make our own decisions, so we have been thrown out in the "time and space". It is because we were thrown out in this way, it has the nature of time. The "Dasein" of human beings itself has the nature of time. Therefore, he is not talking about what time is like, but he is talking about people having temporality to see something, and what

changes is "time". People see "has been" and "will be", and then there is "death" in "will be", that is, one of the characteristics of human beings is to face death, that is, this "Temporality itself already includes a "death" and an "end". This is how Heidegger understands "people". What did he say about that time? He said, "What comes to pass in such a presentization is time". This was not fluent to hear because he was speaking in the language of philosophical analysis. However, in fact, what he said is almost the same as what St. Augustine said. He just changed what Saint Augustine said and expressed it in his phenomenological terms. What he said is: the so-called presentization means that we are standing in the "present" now. This "Dasein" has a sense of time in this "present", that is, we have retained something and we are waiting for something. Something is to keep the past that is no longer the present and look forward to the future that will become the present. That is to say, this time is actually open, it is open to retain some things. That is, I retain those things that were once present, and then the "future" that will become the "present", I am just looking forward to it. These two conditions taken together are what we call time. This way of speaking is based on his philosophical theory and is expressed in language. However, if you analyze it, it is actually the same as what St. Augustine said.]

### **Narrative Time**

Paul Ricœur · 1913-2005

We experience time in two different ways:

- Cosmic time as linear continuity - passing time and days and the progression of our lives from birth to death - the "river" of time.
- Phenomenological time; time experienced in the past, present and future.

"Human time" is a complex experience that integrates phenomenological time and cosmological time. For example, saying "Today is my birthday" invokes two temporal orders: a chronological date anchors the phenomenological concept of "birthday."

In phenomenological time, the sequence of "past-present-future" is premised on the continuity characteristic of cosmological time. The past is always before the present, and the present is always after the past and before the future. The order of inheritance is unchanged.

In cosmic time, the identification of so-called anonymous temporal moments as "before" or "after" in continuity draws on a phenomenological orientation to the past and the future.

Fr. Louis Ha analyzed Ricoeur's views on time as follows: [The book Ricœur wrote is called "Time and Narrative". He also has a very insightful view of time, which is "time of narration." The so-called time is actually telling a story, and life is a story. Fr. Louis Ha said that it was actually very simple, just like his mother told him that being a human being is just "A Breath". It

is because during "One Breath" you say something and that sentence is your story. Ricoeur believes that the "cosmic time" which we just talked about in the first section of this lesson and the "phenomenological time" talked about from Kant to Heidegger actually need to be integrated together and cannot be separated. He believes that even if there are no people, the universe will still exist, and the changes in the universe will also exist, but there is just no people. However, since there are people now, this "cosmic time" needs to be integrated with the "phenomenological time" that people see. When it comes together, that is "human time." And "human time" is not purely what we perceive from phenomena. It also includes the actual objects of the universe we face, its mass, energy, speed, distance, etc. Ricoeur said it in two sentences. He described that in "phenomenological time", the order of "past", "present" and "future" is based on the continuity of "cosmological time" as a premise, that is, he already has the continuous characteristic of "cosmological time" is taken as a premise, so in "phenomenology" we can see "past", "present" and "future". On the contrary, in "cosmic time", the so-called anonymous time, that is, the time that does not know what it is, is turned into "time". Just before and after the continuity, he draws on the "past", "present" and "future" views of "phenomenology". So, he said that "human time" is to integrate the continuity of before and after in "phenomenology" and the two views of "past", "present" and "future" that people see. That is the formal time. His book "Time and Narrative" is very interesting. Fr, Louis Ha said that everyone should read it if they are interested. Ricoeur said that storytelling actually has three things. The first is prefiguration. Before you tell a story, you already have a rough idea of what you are going to tell. Then, the second thing is that when you talk about it, you have a configuration. The so-called configuration is arrangement, arranging for that person to appear here, talk about this time first, talk about that thing later, etc., that is, how do you allocate. Finally, the third thing is refiguration. The so-called refiguration means that you tell a story, whether you or others, so the whole story will be re-read, that is, you can get a meaning from this narrative. Ricoeur said that in fact, the so-called "time" is this "prefiguration", "configuration" and "refiguration", which means telling the story. And life is a story, or, some people say that life is a stage. That is, no matter what, there is an event, because there is such a person and such a life happened, then this is time.]

### **David Christian · 1946- :**

#### **\* Maps of Time**

Hawking proved in the 1970s that even black holes lose energy and disappear after countless unimaginable epochs. Their death by quantum evaporation will last for a period of time that is more than a billion times longer than all previous experiences. Compared with this long period, a billion years is equivalent to a grain of sand on the beach.

Behind the black hole, there will be left an unimaginably thin soup, composed of a gradually decreasing number of photons, nuclei, electrons and positrons. They gradually and slowly move



away from each other, and no further physical processes will occur. No major event disturbs the miserable barrenness of this universe. This universe has exhausted its energy and will eventually face eternal life - perhaps eternal death is a more accurate description.

Imagine an observer witnessing the final death throes of a black hole. To him, billions of years are but a creative flash of time at the beginning, a moment that makes up a bizarre hodgepodge of complex entities. At this moment of spring, before it cools down and turns dark, the creativity of the universe is exploding. And in at least one nameless galaxy there has emerged a networked, intelligent species capable of thinking about the universe as a whole and reconstructing its past.

This creative flash may have been purposely planned for humanity, and perhaps this is the ultimate reason why the universe was created out of nothing. Modern science by no means provides sufficient justification for such an anthropocentric belief. Instead, it seems that we are just one of the weirder creations of the universe during the youngest, most energetic, and most fertile stage of its long life. While we no longer see ourselves as the center of the universe, or the ultimate cause of its existence, for many this idea is still very lofty.

Fr. Louis Ha summarized the maps of time described by David Christian as follows: "It is very lofty, that is, a long time in the universe, when it comes to the earth in our galaxy system, it is in the solar system. Humans on the earth are actually such a surprisingly intelligent species, and this intelligent species can see the universe as a whole and reconstruct the past of the universe. Is the appearance of the universe suddenly arranged? Is it the final cause and reason for the creation of the entire universe? He said that although science does not provide a reason, it is very sweet to think about it. If we think about it as human beings, it turns out that we are so great despite being so small, which is already amazing.]

### **Ray Huang , 1918-2000**

\* China a Macro History

We use three large segments to represent the numerous short-term developments. Our journey is continuous, day and night, like what Indian religious people call "karma" or what Western theologians call "predestination". That is to say, from the perspective of a history reader, what freedom of choice we are entitled to starts from where we stand, in the footsteps left by our forefathers. The arrows pointing skyward suggest our idealistic tendencies. Moral power has to be a vital force, since the mass movement represented by the drive of each arrowhead, involving self-sacrifice of an enormous magnitude, cannot be launched without some sense of universal justice, genuine or assumed. But to counter it, there is always a centrifugal pull. Should we call it original sin, or, as Chinese philosophers refer to it, "human desire"? World history evolves out of the inter-reaction of the yin and the yang.

The ultimate meaning of history, seen in this configuration, resides in its wholesome aesthetic quality. The reader is reminded that the entire written history of mankind extends over something less than 10,000 years, indeed a very short segment within the life of the universe, which may well be a small portion of something else. Following Kant, we can only say that "things in themselves" are unknowable. The dotted portions of the spiral - the prehistory period as well as the unknown future enable us to sustain our faith in the long-term rationality of history beyond the realm of our mundane experience.



Fr. Louis Ha summarized Ray Huang's remarks as follows: [Ray Huang also talked about macro history, but he talked about the macro history from a Chinese perspective. He mentioned Kant, who said that we do not know the future of things themselves, we only know the phenomena of things. So "phenomenology" started to develop from here, that is to say, instead of talking about what the thing itself is like, we might as well talk about the phenomena we see and experience! Ray Huang quoted Kant, saying that he did not say what he meant, but that the things he experienced formed an arc. The outward short line is the ideal, and the inward line is the tendency, tending to the so-called "original sin" and "human desire". To put it in perspective, "human time" means that if there is no human being, we cannot understand this "cosmic time". Even if there is, it is not something that humans can understand. It is actually meaningless to talk about "cosmic time", mass, energy, light, motion, change, and the direction of time without anyone's wisdom. Therefore, from a human perspective, the great thing about man is that he gives meaning to the world. Of course, you must first give meaning to your life, and then your life will begin with the "present" now. This "present" itself includes the "past" and the expectation of the "future". This kind of life is real life, but we have to give it meaning.]

### **Sacred Time**

"Sacred time" is like looking at a door that is ajar. When light shines through it, we will see the "sacred time."

### **Dante Alighieri 1265-1321**

Divine Comedy

"Oh, eternal light, only you exist within yourself, only you can understand yourself, you are understood by yourself, and you understand yourself, you love yourself, and you smile at yourself! That aura scene seems to be conceived in you, like a reflected light. It is carefully looked at by my eyes. I feel that the color dyed in it is exactly the same as the color of our image. Therefore, I put all my eyes on it."

Fr. Louis Ha summarized what Dante said as follows: [Dante felt that "sacred" is "eternal light". In Dante's "Divine Comedy", he spent a lot of space describing "light". You will be surprised how he can use so many verses to describe such a simple thing as "light". However, he describes "light" in a variety of situations. Among them, he said that the "eternal light" is the creator, which he saw when he went up to heaven. Then, when we have the opportunity to go to heaven in the future, we will see that "light".]

### **\* Eliade: The Sacred and the Profane - The Nature of Religion**

#### Chapter 2 Sacred Time and Mysteries: Profane time and Sacred Time

For religious people, time, like space, is neither homogeneous nor coherent. On the one hand, there is the so-called sacred time period in time, that is, the time of festivals; on the other hand, profane time also has its own value. Through rituals, religious people can safely pass from the profane period to the sacred moment.

Sacred time is, by its very nature, reversible. It is the original mystical time present here and now. The time in every religious festival, in every liturgy, is a sacred event that happened in the past, that is, the mystical past that happened "in the beginning," and is now realized again. It can be repeated and looped infinitely, and it will never "past". Therefore, sacred time is ontologically eternal time, which neither changes nor exhausts itself.

Therefore, religious people live in two kinds of time. Of course, the more important one is living in sacred time. This sacred time appears under the paradoxical side of cyclic time, that is, it is reversible and repetitive time. It is a kind of time, through the liturgy, the present is periodically reconstructed as the eternal mystery is presented. This attitude towards time is enough to distinguish religious people from non-religious people: religious people refuse to live only in the so-called historical present, and try to obtain sacred time, which can correspond to eternal time. Non-religious people actually experience some kind of temporal incoherence and heterogeneity. For them, time can also be divided into two categories: the monotonous time of work, and the time of grand celebrations, in short, the time of festivals. Non-religious people also live in various rhythms that are different from the ordinary world, and they also experience different intensities of time.

However, there is indeed a fundamental difference between religious people and non-religious people, that is, religious people can experience a sacred time zone. It is not part of the profane time zones that precede or follow it. The sacred time zone is an original time, consecrated through God and His manifestation in festivals. For non-religious people, time can be the present, neither broken nor mysterious. Time constitutes the deepest extent of existence. It connects all lives. Therefore, time has a beginning and an end, and his life will disappear.

For religious people, it is completely the opposite. The profane time zone can be interrupted periodically, because certain rituals can interrupt the profane time zone and enter the non-historical sacred time zone, that is, enter the sacred time zone that does not belong to the historical present in time. Christianity radically changed the experience and concept of liturgical time, and this stemmed from the Christian's conviction of the historical fact of Jesus Christ. The Christian liturgy unfolds in this historical time consecrated to the incarnation of the Son of God.

The entry of sacred time into existence is once and for all. It does not unfold from another time, because no time existed before it, and its true existence is narrated in various myths.

Fr. Louis Ha summarized the "sacred time" which Eliade talked about as follows: [Eliade's book "The Sacred and the Profane" itself tends to focus on "sacred time". Fr. Louis Ha felt that the most important thing which Eliade said was that we live in the "present". But, if we are "religious persons", we live in this "present", and by sharing that "sacred time", we can go to eternity. That is to say, we know that "present" is temporary and subject to change. "Eternity" is the time we expect "now", where "eternity" is sharing this "sacred". But, how do we know that we do this? It is through experiencing that "sacred time" in our ordinary time. Therefore, we can be sure that we can reach the "sacred time" of "eternity".]

### **Paul Tillich , 1886-1965**

The god of time is the god of history

First, it means that he is God acting in history toward an ultimate goal. History has a direction in and through which new things will be created. This goal is described in many different terms: general happiness, victory over the forces of evil represented by the imperialist states, the coming of the Kingdom of God, both historical and extra-historical, a transformation of the shape of this world, etc. There are many symbols, some immanent, as in old prophecy and modern Protestantism, some transcendent, as in later Revelation and traditional Christianity, but in all these cases time leads, creates something new, Paul Call it a "new creation." The tragic cycle of space is overcome, and history has a clear beginning and a clear end.



The god of time

Fr. Louis Ha summarized what Tillich said about "time and history" as follows: [Tillich talked about "The god of time (Chronos)". The man in the picture is holding a time funnel in his hand, and the other hand is holding a harvesting sickle, that is the "god of time". History is like this, with a clear beginning and a clear end. The new creation that St. Paul talks about is to overcome our tragic cycle. ]

### **Thaddeus Hang, 1923-2004**

Philosophical thinking towards the future

\* People's yearning for eternity

Physicist and philosopher B. Pascal said it well: Man is a self-contradictory thing. "The years of life reach not one hundred, yet the heart is in constant worry for a millennium." He is so fragile and small, but he is able to think. He is a "thinking reed". People pursue value, truth, goodness, and beauty. People can never be satisfied. As soon as one expectation is satisfied, they immediately think of the second or third... In short, he pursues eternal love and happiness.

I think it can be said that it is a common fact that people are dissatisfied with reality and yearn for infinity and eternity: everyone hopes to be immortal, and love novels and lyric poems all over the world can also be used as evidence. We don't have to go around the world and do massive polls to reach this conclusion.

Why do people yearn for eternity? You can scoff with disdain and say: This is just an illusion. But hallucinations cannot explain everything. They originate from real things: mentally ill people hallucinate that they are kings from the south because there are real people in the world who are kings from the south.

In nature, we see that innate instincts have objective things as their objects of satisfaction. A newborn baby has the instinct to suck milk. Does he have an "illusion" that he has a suckable nipple? There are countless examples of instincts in the animal kingdom that are based on external facts. So, how can people's yearning for eternity be illusory?

If you are an atheist, or you do not have firm confirmation of the Creator of the universe, you can at least say: Man's yearning for eternity is a common fact, and this natural tendency should be possible to realize, for otherwise there would have been a great disharmony in the universe, unprecedented in all of nature.

I personally am a theist and I am confident that I can prove the existence of God with good reasons. Of course, there is no way to develop a detailed argument for the existence of God here. A person who has used reason to confirm the existence of an infinitely intelligent Creator can go

on to infer that an infinitely intelligent Creator would not render a basic innate desire meaningless. Since people pursue boundless truth, goodness, beauty and eternal happiness, then this eternal happiness should be possible to achieve.

Due to the existence and wisdom of the Creator, as well as human nature's dissatisfaction and yearning for eternal happiness. I thought that we could get a more reasonable argument for the immortality of the soul. Kant's "infinite progress" also explains the fact that people yearn for truth, goodness, beauty and eternity. Since man cannot satisfy the above tendency in his limited life span, the Creator should give him other possibilities to satisfy this "infinite hunger": that is, to prevent his life from ending due to physical death. In other words, only if the soul does not die can people satisfy their desire for eternal happiness.

Fr. Louis Ha summarized Thaddeus Hang's remarks on eternity as follows: [Thaddeus Hang talked about people's yearning for eternity. Regarding that "eternity", Eliade just mentioned that we are pursuing that eternity now, and Thaddeus Hang said that this yearning for eternity will definitely be achieved. His conclusion is that after our physical death, we can continue to hope for eternal happiness.]

### **Bernard Shaw › 1856-1950**

Back To Methuselah, Part I - In the Beginning

ADAM. Oh yes, some of them, of course. But only some. I will clear them away tomorrow.

THE SERPENT [laughs]!!!

ADAM. That is a funny noise to make. I like it.

EVE. I do not. Why do you make it again?

THE SERPENT. Adam has invented something new. He has invented tomorrow. You will invent things every day now that the burden of immortality is lifted from you.

EVE. Immortality? What is that?

THE SERPENT. My new word for having to live for ever.

EVE. The serpent has made a beautiful word for being. Living.

ADAM. Make me a beautiful word for doing things tomorrow; for that surely is a great and blessed invention.

THE SERPENT. Procrastination.

EVE. That is a sweet word. I wish I had a serpent's tongue.

THE SERPENT. That may come too. Everything is possible.

ADAM [springing up in sudden terror] Oh!

EVE. What is the matter now?

ADAM. My rest! My escape from life!

THE SERPENT. Death. That is the word.

ADAM. There is a terrible danger in this procrastination.

EVE. What danger?

ADAM. If I put off death until tomorrow, I shall never die. There is no such day as tomorrow, and never can be.

THE SERPENT. I am very subtle; but Man is deeper in his thought than I am. The woman knows that there is no such thing as nothing; the man knows that there is no such day as tomorrow. I do well to worship them.

Fr. Louis Ha summarized Bernard Shaw's description of life and death as follows: [In Bernard Shaw's play, there is a section about Adam and Eve. It is a very interesting play, Fr. Ha said that everyone can go and watch it. The snake said that Adam invented "tomorrow", and Eve said that the snake invented the term "existence". Then, death is to escape from this existence. The snake said that to live or to die, to lose life is to die. Adam said so smartly, since I can invent "tomorrow", I will push this death to "tomorrow", then I will never die. I will die tomorrow, but not today. Since I live in today every moment, I will never die every moment. This is a view of Bernard Shaw, a scholar. "Sacred time" comes from the dazzling flashes of life. People are very happy when they see it, so they have eternal hope. Those who cannot see this "sacred time" will doubt those who do, and they will accept the end of life helplessly or obediently.]

**Fr. Louis Ha's arrangements for answering students' questions**

Fr. Louis Ha gave us a thorough explanation of each topic, and the students also had many questions which they wanted to ask. However, due to time constraints, Fr. Ha cannot answer questions in the class. So, Fr. Ha will consider having a Q&A meeting after the course is completed around the end of August. If you have any questions, you can send them to the group leaders or directly to Maryam. Then, Fr. Ha will be able to answer them one by one.

**Disclaimer:**

*This is an unofficial translation of the study note prepared for helping the students who do not understand the Chinese writing. The accuracy of all content shall be subject to the original lecture in Cantonese by Fr. Louis Ha Keloan.*