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CONSTRUCTION OF TIME IN THE CRITIQUE OF PURE REASON

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TABLE OF CONTENTS

ABSTRACT

In the history of philosophy, time has been discussed for quite a long time. Sometimes its reality has been rejected and sometimes it has been discussed for if exist, how can it be. This thesis will firstly describe Isaac Newton's absolute and relative time, Gottfired Wilhelm Leibniz's relational and ideal time, and ultimately Immanuel Kant's a priori time. The matter of time attaches great importance, both ontologically and epistemologically. Kant makes the time a limit of knowledge. In addition to this, he excludes from the knowledge realm the speculative philosophy that traditional metaphysicians make on things that do not exist in time. The study has two main objectives; the first is to show Kant's difference from Leibniz's and Newton's views on the issue of time, and the second is to explain how Kant was constructed the time in the Critique of Pure Reason. We also tried to express how Kant was influenced by the two major theories of time, before him. It will be explained that Kant's time is not something that is in nature but as something given in the subject. The motion conditional conception of time, as something associated with motion for a long time is rejected here. What kind of things the finite and the infinite time are, what they mean in Kant's philosophy will be discussed.

ÖZET

Felsefe tarihinde zaman oldukça uzun bir süreden beri tartışılmıştır. Bazen onun gerçekliği reddedilmiş ve bazen ise var ise ne şekilde olduğu tartışılmıştır. Bu tez ile öncelikle Isaac Newton'un mutlak ve rölatif zamanı, Gottfried Wilhelm Leibniz'in ilişkisel ve ideal zamanı ve en nihayetinde Immanuel Kant'ın a priori zamanı anlatılacaktır. Zaman meselesi hem ontolojik hem de epistemolojik olarak oldukça büyük önem atfetmektedir. Kant mekan ile birlikte zamanı hem deneyimin hem de bilginin bir sınırı haline getirmektedir. Bunun sonucunda geleneksel metafiziğin zamanda bulunmayan şeyler üzerine yaptığı spekülatif felsefeyi bilginin alanından çıkartır. Bu çalışmanın temel iki hedefi bulunmaktadır; ilk olarak Kant'ın zaman meselesinde Leibniz'in ve Newton'un görüşlerinden farkı, ikinci olarak ise Kant'ın Saf Aklın Eleştirisi'nde zamanın ne şekilde kurulduğunun izahının yapılmasıdır. Kant'ın kendinden önce bulunan iki büyük zaman görüşünden ne şekilde etkilendiğini de ayrıca ifade etmeye çalıştık. Kant'ın zamanı doğada olan bir şey olarak değil ama öznede verili bir şey olarak ortaya koyduğu anlatılacaktır. Uzunca bir süre zamanın hareketi ile bağlantılı bir şey olarak, harekete bağlı kavranışı burada reddedilmiş olur. Sonlu ve sonsuz zamanın ne türden şeyler oldukları, Kant felsefesinde ne anlama geldikleri tartışılacaktır.

INTRODUCTION

Why the time has been a philosophical problem? There may be many different answers to this question. And the different answers we have given to this question will reveal different philosophical disciplines. By saying, for example, it is a substance of being, we give a specific answer to ontology. Many philosophers have included time problems more or less in their works and systems. This is a result of the desire to explain the relation that humanity has with nature. First, it was naturally asked what is time. And after that, the relation of humans with time is discussed. We can say that the issue of time has been discussed, through the problems such as whether time is in nature or nature is in time, and how it subsist. It is destiny for man to be interested in time because humans have a finite life. Time is running out and in this sense, man is interested in time, even indirectly or directly. We use time in many ways in daily life, we can even create a fictional time for ourselves. We complain about how short it is, we try to get it in our hands. In some cases, time means money (time is money, etc.) and therefore it is very valuable. We organize our days and future according to the time principle. Plans and programs attach importance, under condition being aware of the time. Life seems to have accelerated in every field today. This has made the time more important in the period we are living in. Time is therefore divided into parts and categorized. As a result, all the cycles of our days are almost clear before we experience them.

However, when we take a step back and look at all this, no matter how much we use the time in our daily lives, we see that our knowledge of time limited and uncertain. If we ask someone what time is, it will either freeze for a moment and have trouble answering, or will tell you that time is about duration, at least will tell time is something that is flowing. Naturally, these answers are neither sufficient nor satisfying. Because it says almost nothing about the nature of time. It seems that we know little about time, as it ultimately appears. On the other hand, we also said that many philosophers and thinkers talk and argue about time. However, it will be very difficult to say that there is a general definition of time or a generally accepted

common knowledge. In this study; there are different views of time, as can be seen in Gottfried Wilhelm Leibniz, Isaac Newton and Immanuel Kant. According to some time is number, according to some time is created principle and created from nothing, according to some the law of the movement, and to some others the announcement of death. Considering that there is no consensus about this issue in the history of philosophy and the lack of our knowledge apart from our daily life concerns, it will not be a waste of effort to make a research on the nature of time and to get a stronger opinion about it.

The concept of time in the history of philosophy; discussed both in the context of the issue of existence and the issue of knowledge. By turning the concept of time into a philosophical issue, certain ways of thinking have emerged. In this context, it may be considered to treat time as a straight line or to symbolize it circularly. These and other similar time conceptions provided a certain stability until Kant's first critique. It can be said that after Kant's first critique, the matter of time gained a completely different meaning. However, we planned a brief introduction to pre-Kant time views here. In this way, we think that the innovative and transformative effect of Kant's understanding of time can be better understood.

What is the time? First of all, does "time" have a reality? And if we accept that it is real; is time a substance, an accident, a concept, or a way of seeing that is immanent to us other than these? If we try to define the character of time symbolically; should we say it is a circular or straight line? Is time objective or subjective? Should time be treated as "a priori" or should it be treated as "a porsteriori"? Apart from all these, as we often use; what is past, present and future time and how can they subsist? What is the relation of man with time, how does it affect man? The aim here is to reveal the nature of time, which is targeted with questions about time. These questions are waiting to be answered to grasp the idea of time more surely. In the next sections, we will answer this questions in the context of Kant's views.

All these questions were given specific answers from different thinkers in the history of philosophy. As with any philosophical issue, ancient Greek can be

consulted for time. More precisely, we can say that the first discussions about this issue appear in Ancient Greek philosophers. One of the ancient Greek philosophers, Parmenides from Elea, produced thoughts on this subject, even if his main issue was not directly related to time. Parmenides gave one of the first metaphysical monuments in the history of philosophy. Although the original text is a long philosophical poem, but very little has survived to the present day. His philosophical poetry is based on being. Parmenides's ontological views suggest that something that does not exist cannot be expressed in language. Because, if this was the case, this thing, expressed in words, would have come from nothingness. However, such a situation is impossible for Parmenides. It seems impossible to talk about something that is not. "I shall not let you say or conceive, 'from not being', for it cannot be said or conceived that anything is not[1]."

Being basically can came either from being or nothing. This is absurd and contradictory when we consider the second situation, because nothing can exist and came from nothing in this situation. The idea of creating from nothing in ancient Greek thought is not a valid one. So in this case, 'being' means that it came from being, which indicates that being is one and the same thing. On the other hand, being has to move in space. But space is either exists or not exist. Since it is impossible to act in the nothing, then the being is moving in the being. So in this case, it does not move. "Being is ungenerated and imperishable, entire, unique, unmoved and perfect; it never was nor will be[2]." Parmenides apprehend the being, endless and eternal. In this sense we must say it is an infinite thing. On the other hand, he rejects past time and future time as states of time. Rejecting the possibility of the movement Parmenides, rejects the time used to be considered together with the motion in this ancient Greek tradition. In this sense, temporality seems to be only infinity, but this infinity should be evaluated[3] as "timelessness.[4]" Otherwise,

[1] Parmenides, *Fragmanlar Kişiliği, Doktrini, Alımlanması*, trans., Y. Gurur Sev (İstanbul: Pinhan Yayıncılık, 2019), 29
[2] Ibid., p. 29
[3] It should be noted that there are other comments. For these comments also see, Richard Sorabji-Time, Vreation and the Continuum on page 98 and the rest.
[4] R. Sorabji, *Time, Creation and the Continuum Theories in Antiquity and the Early Middle Ages*, (Chicago: The University of Chicago Press, 2006), 98

we would have to say, "Being is changing, that is moving." In the context of Parmenides ontological views, one can comment that he does not accept the reality of time.

For Plato, the matter of time becomes meaningful with his doctrine of ideas. For Plato's philosophy, it will not seem too much to say, that the effort to go beyond the skepticism of the sophists, to get rid of doubt and to achieve universal knowledge. However, going beyond this suspicion occurs in such a magnificent way that it emerges as an activity that spreads to all the main disciplines of philosophy. And even today it continues its effect. For Plato, and for many Ancient Greek philosophers, philosophical activity is often crowned by cosmogony[5]. He discussed how the universe appeared in a dialogue called *Timaios*. Plato also conveyed his view of how time was created in his dialogue called Timaios. It is with a brief mention; for Plato, "*eidos*", that is, as we use it today the idea is infinite in an immortal sense. So the infinite ideas are also unchangeable. The god Demiurgos, who was a creative force in Timaios, created the chaotic first matter by looking at these unchangeable and immortal beings (eidos). For an idea, can be said to be the model of material things. However, even though he tried to create the universe in a manner similar to these immortal and infinite ideals, "sampled living [eidos] was not fully compatible to universe[6]." So the creator God "ultimately decided to build a different kind of immortality, and when he created the sky, he revealed the form that was motionless, immortal and existed according to the proportion of numbers and which we call the time of immortality[7]." At this point, it turns out that time is something created. Time seems to be a created principle for Plato. So that "months, years, days, nights[8]" did not exist before time was created, in the sense we attributed to time. Plato's ideas have a timeless immortality in this

[5] In the history of thought, through the first theogony (birth of gods), the hierarchy of the gods and their order of birth were discussed. After that, thought rise to cosmogony (universe birth) and it deals with how the universe emerged in a certain system.
[6] Platon, *Timaios*, trans., Furkan Akderin (İstanbul: Say Yayınları, 2015), 46
[7] Ibid., p. 46
[8] Ibid., p. 46

sense and they are over on time. The Creator God created the universe, the planets[9], as a copy of this immortality of ideas.

It should be noted that; new elements join the philosophical activity after the Christian religion. Perhaps not necessarily close to the philosophical activity of ancient Greek culture, which maybe can be seen as a contrast to Greek, Christian thinkers are also interested in philosophy. They resorted to this to defend[10] the truth of the revelation and the word of one God. The *Confessions* of Augustinus can be considered both following his intent to defend in certain respects and as a thinker's revealing his own life. In the eleventh section of this book, Augustinus is concerned with the matter of time; he describes the relation between God and time, how God created time, and how man grasps the modes of time.

We can say that for Augustinus, time is a created principle. Just as Plato's ideas are before time, God before in time and is the absolute power that creates time. What makes Augustinus unique about time is his appherend past and future tense in terms of the present. The past is the time that is no longer now, the future is the time that is not yet now, we are talking about times that do not exist in this case. The present time does not remain the same, it passes constantly, otherwise it always remains the same, in a sense it would be endless and eternal. The existence of time is comprehensible, because this present time that is "flowing into the past[11]" is constantly towards ending. So we can only grasp the time with certain parts, we do not have the power to grasp the time as a whole. Time is related to life only in

[9] The circular shape of the motion of the planets was used to express the character of time for Plato. "These, rather, are forms of time that have come to be—time that imitates eternity and circles according to number." In ancient Greek thought, the infinite character of time is considered as a circular form. So much that the beginning and the end are one and the same. We can say this with the form of the relation between death and life in the Phaidon dialogue, which consists of speeches that took place just before execution of Socrates. Although death is an end in this sense, it is still a new beginning, it opens to life. But in these days, when life begin, it is lose its light permanently.

[10] Thinkers trying to defend Christian teaching, as we know as apologists. It can be said that in the early Christian period, a confusion dominating thought, in thought history. On the one hand, the Greek thought, which has lost its former glory, and its similar and the thought of Rome, which can be thought as a successor, on the other hand, is the thought of Christianity as a new religion emerging on the other. We can add to this chaotic structure the fall of the Roman Empire as the superpower of its period, and in a way, the place of this power filled with the Catholic Church. It has unique pains like every transition period.

[11] Augustinus, *İtiraflar*, trans., Çiğdem Dürüşken (İstanbul: Alfa Yayınları, 2019), 484

this state. Because of this present time, which passes and is towards the end, from a specific view is nothing more than life. So, how are the past and future comprehending in terms of the present time? A memory drawn from the past, a plan for the future, is obliged to the present. A memory comes to our minds in the present, a plan can be prepared in the present. Augustinus tries to create these two time frames in relation to the present time. Time can be said to have come to an end in terms of being created for Augustinus. There is only one God that is endless and eternal, he tells for God that "you are remain[12]." For Augustinus, who thinks that he is endlessly and eternally one God, time is in a finite position[13]. It has an end as well as a beginning. There is God at the beginning and there is God at the end. Before the beginning, there is God, after the end, there is God. So much so that God[14] exists all the time and even when there is no time. Since it cannot have eternity like God, time itself is finite and compelled to end. Everything is a finite comparison to God.

According to another view, time is something related to motion. It is not a situation identical to motion, but it is something related to motion. Maybe we can attribute the thought of motion and time together to many different thinkers. However, as one of the oldest and perhaps the most basic thinkers of this, Aristotle appears in front of us. Indeed, according to Heidegger, "all subsequent scrutiny remained true to the definition of Aristotle's in principle[15]", many thinkers who came later thought regarding this idea. According to this view of Aristotle, time is nothing more than the number of motion and counting of this number. Aristotle is aware of the difficulty[16] of the subject when dealing with time. Because of this, it can be said that this is why it has created quite open to comments. For example, a question as to whether the time is objective or subjective can easily rise. Because

[12] Ibid., p. 483
[13] The finite character of time does not allow it to be expressed in a circular way as before. Time is now thought of as a straight line, with a beginning and an end in the context of life.
[14] In Chapter eleven of the Confessions, there are thoughts about what God did before he created the universe. There is no time for Augustinus before the universe was created.
[15] Martin Heidegger, *Varlık ve Zaman*, trans., Kaan Ökten (İstanbul: Alfa Yayınları, 2018), 618
[16] The reason we say this is because the ideas about time do not emerge suddenly, as many different thoughts are examined and passes through thresholds that may seem paradoxical in some way.

time is in a state that can be counted in terms of the number of motion and the presence of a person who counts seems to be necessary for this sense. On the other hand, the more important is the motion itself, from the necessity of the person counting. It seems the most logical thing to say that there is actually a double status here. Nevertheless, for Aristotle, the comprehension of time as "a number of motion (measurement) compared to before and after[17]" gives a strong emphasis on his objective structure. Another understanding of the question of time is that for Aristotle, unlike Augustinus, time is an infinite thing. Time is always exists, "because it belongs to something (motion) that is continuous[18]." In this sense, Aristotle's attribution of continuity to time can be interpreted as a reference to his infinity. For this the distinction of time between past, present and future gives us a clue. It is none other than the present, which separates the past and future from each other and acts as a continuous boundary between these two. So much so that a certain 'moment' starts and ends, forming the past and the future. When the moment begins, the next time will be the present, and when it ends, the present time will be the past. "Time (…) is always at the beginning[19] and at the end[20]." Even if there are points open to interpretation, the only thing that we can say precisely in Aristotle's understanding of time is that he sees time as related to motion and that he emerges as a number of motion. But it should not be forgotten that time is related to motion but not identical to it.

Along with modern philosophy and science, the question of time continues. Meanwhile, mechanical clocks began to become widespread to measure time. The shape of time gradually shows its effect on daily life. In the first chapter of our thesis, we have discussed two major time views from the modern period. By name the *absolute time* of Newton and *ideal time* of Leibniz. The main reason we consider these two views is that was present as two dominant views during Kant's student

[17] Aristoteles, *Fizik*, trans., Saffet Babür (İstanbul: Yapı Kredi Yayınları, 2019), 197
[18] Ibid., p. 197
[19] So time will not end, because it is always at the beginning. "(Ibid., p. 207-209) As an neccessary result of time as a present moment, time is always at the beginning and at the end, always at the end and at the beginning. Endless loop of time as a moment that begins and ends continuously.
[20] Ibid., p. 207

years. Addingly, we will see that Kant was influenced by these views in certain aspects. He even tried to bring together some views of these two thinkers from time to time. In this study, we also made a comparison of Newton's and Leibniz's views of the time.

With the second chapter, we started to explain the time view of Kant. Even though Kant was influenced by these two thinkers we mentioned, he created a unique view of time. Its main view is that time is dependent on subject. There is no time removed from the experience. Time exists in the subject, it is given to subject. In this regard, the first section is about time as a priori.

There is a problem of how time will emerge as finite magnitudes. We have discussed Kant's answer to this problem in the second section. How a finite time can exist also raises other questions. Therefore, we focused on these problems in the ongoing sections.

When Kant sees time as given, it is also infinitely given. However, in certain respects it is in danger of contradicting Kant's knowledge system. It is necessary to explain how this infinite time exists. So in the third section, this problem of infinite time is explained. And in the fourth section that continues, how the infinite time is given to the subject is discussed. In doing so, Heidegger's comments were also used.

In the fifth section, Kant's criticism against absolute and ideal time views is discussed. It has been tried to reveal at which points Kant has determined a similar direction and at which points it is disconnected from these two views of the time. I would like to add that a similar study in Turkish literature can be found very little. With this section, especially in terms of time, Kant's detachment from his two major time views has been cited.

Finally, in the last section, the transcendental possibility of the experience is discussed over through Kant's triple synthesis. Heidegger's comments on the issue were also used. Triple synthesis is often addressed in the context of temporal characters. In this regard, there is an interpretation of the first synthesis and the

present tense. Subsequently, there is the interpretation of the past tense with the second synthesis.

CHAPTER 1: TWO MAJOR TIME THEORIES IN EARLY MODERN PERIOD

1.1. Absolute and Relative Time

In the discussion about the nature of time, the discussions in the 17th century philosophy are very important. This century's view of space and time has often been thought to explain or explain it with motion, and precise definitions and theories have been put forward, both considering; scientific usefulness and sensitive to philosophical sensibilities. And, Newton's space and time theory was a paradigm that even was effective until very recently. However, with the *Relativity Theory* developed by Einstein, Newton's space time views began to lose its effect.

From a certain point of view, Newton's scientific theory of time actually contains a metaphysical dimension. Because it does not express a structure that can be reached with experience. In this respect, considering Einstein's theory of relativity, Newton's time theory seems to be nonscientific, overdue and unobservable theory[21].Additionally, time relativity was also able to be tested. But on the other hand, it should be noted that Newton's theory is very advantageous and useful. That is why it has been dominant for such a long time. For this theory to be displaced in the scientific field, it will be necessary to wait for Einstein to come. But it is worth noting that Newton's views not only about time, but his system in general has been a paradigm for a long time. In other words, the laws of gravity and motion should be considered in this way.

Newton's theory of absolute space and absolute time seems to be far from scientific at the moment. With Einstein's Theory of Relativity, we can say that it has been displaced in a sense. It should also be said that, in favor of Newton, it is beginning[22] to be questioned, even if it is not meant to displace the theory of

[21] R. Disalle, "Newton's philosophical analyses of space and time," *Cambridge Companion To, Newton* (2004): 33

[22] For more detailed information see also; Michael Friedman - Foundations of Space-Time Thoeries: Relativistic Physics and Philosophy of Science, John Earman - World Enough and Space-Time: Absolute Versus Relational Theories of Space and Time

relativity. However, comparing the absolute time concept with Einstein's relative time concept is not at least for now our purpose.

Newton made his definitions about *absolute time* in his famous work *Mathematical Principles of Natural Philosophy*. And it should be added that quite loud voice criticisms against Newton emerged with the publication of Principia. It was particularly criticized by Christiaan Huygens and Gottfried Wilhelm Leibniz. When we look at Newton's views on time today, a discourse is often developed, especially considering Leibniz's[23] criticism. In fact, in a sense, these two views can be treated as two opposite views of the time. But Newton's opposition to space and time is not Leibniz, at least when he wrote Principia. It is Descartes, where Leibniz also criticizes him in certain situations.

Descartes views on the motion in particular seem to have been the driving force for Newton. Descartes also has in addition to the motion that everyone understands, in addition to such as moving from one place to another, he also has a view of motion that it calls philosophical sense. "Motion in a philosophical sense[24]" deals with "bodies contiguous to the body which is moving[25]." Descartes kept the move farther away without a simple displacement. Descartes states, "I have also added that the transference is effected from the vicinity of those bodies contiguous to it into the vicinity of others, and not from one place to another[26]." Descartes handled the movement from one place to another together with its relation to the objects around the moving object. Such a definition raises certain interesting problems. It reveals a situation that contradicts Newton's dynamic laws in mind.

According to Descartes's motion law; if a constant of contiguous bodies are not taken in such a way as to have serious discipline and continuity, everything will be problematic. How can a fixed network of contiguous bodies relations be taken

[23] Here, Einstein also has to be taken into consideration naturally.
[24] R. Disalle, "Newton's philosophical analyses of space and time," *Cambridge Companion To, Newton* (2004): 37
[25] Rene Descartes, *Principles of Philosophy*, trans., V.R. Miller ve R.P. Miller (Dordrecht: Kluwer Academic Publishers, 1982), 52
[26] Ibid., p. 52

as a reference when bodies can change constantly? Besides, if different bodies are taken as an unstable reference point, contradictions about movement arise. For example, when I travel to a city in a car, I am moving in terms of changing the city, but I am not moving as long as I am contiguous to the objects in the car. How can I change the city if I am not moving?

If we consider the movement Descartes describes on a larger scale, on a planetary scale, it would be more meaningful to understand why he made such a definition. On the planetary scale, the contiguity relations of objects, in this case the planets, continue in accordance with a perfect discipline and continuity. So while a planet moves, it moves with the planets around it. In other words, if the displacement and movement are considered to be a disconnection with the objects located next to, it will be as the movement has not been disrupted on the planetary scale, because the connection[27] never rupture. Because when a planet is displaced, the planets with which it relates also change.

The movement of the sun creates a vortex among the planets. And so it creates a movement between the planets included in the solar system. The route of the planets has now occurred and the hierarchical relations between the sun and any planet are also the same on the planet and its satellite. What Descartes said about the movement of the planets we briefly describe here is referred to as the *Vortex Theory*. Descartes clearly states his intention by saying "I deny the motion of the Earth more carefully than Copernicus and more truthfully than Tycho[28]." I would like to draw attention to the "motion of the Earth" part. Because Descartes is particularly concerned with the movement of the planets. These theories about movement are well suited to problems on a smaller scale. But the real attention is directed to the movement of the planets. But the important thing is to introduce a universal law of motion regardless of the sizes.

We have already mentioned the problem that has arisen regarding an inside planet motion. However, when considered as interplanetary relations, this definition

[27] For now...
[28] Ibif., p. 91

does not seem to be problematic. However, another force determines these relations, rather than this definition of motion, which Descartes reveals the relations and which differs from the general view. Descartes is missing a force underlying the movement of the sun, which is nothing but gravity. Apart from this problem, Descartes motion law already contains Newton's dynamic laws. In other words, these two achieve the same result in explaining what is exist. However, it is essential to make certain additions to the system to be used while describing what is exist for Newton.

To better grasp Newton's view, before comparing it with Leibniz, it is worth noting that, he developed his views as a reaction to this Descartes's law of motion. At the very beginning of Newton Principia, he gives certain definitions. First of all, it reveals his intentions for certain uses:

> Time, space, place, and motion are very familiar to everyone, it must be noted that these quantities are popularly conceived solely with reference to the objects of sense perception. And this is the source of certain preconceptions; to eliminate them it is useful to distinguish these quantities into absolute and relative, true and apparent, mathematical and common.[29]

Newton's intends to shelve a sense of time, space, and motion raised through perception. More precisely, it is to put these insights on the shelf, completely based on perception. Therefore, Newton is separated space, time and motion in two ways; based on perception objects and not based on perception objects. But how can a time or space, which we separate *absolutely* and *relatively*, be observed? Only relative motion, relative duration/time[30] is observable. So an understanding of time that is considered as absolute cannot be explained in experience. Newton is not looking for certain proof for an absolute time and space definitions. He does not feel the need to show it in experience, and also it cannot be shown already. And, with the phrase "useful", it seems to prioritize the usefulness rather than the proof.

[29] Isaac Newton, *The Principia Mathematical Principles of Natural Philosophy*, trans., Bernard Cohen ve Anne Whitman (Los Angelos: University of California Press, 1999), 408

[30] Relative time or duration means seconds, minutes, hours, days, months, years, etc. units of measure.

He intends to make a definition and explain the motion, space and time in a mathematical way. Some criticisms of Leibniz can already be said to be meaningless or dysfunctional for Newton. Because he does not seek proof from the beginning[31]. Scientifically, "usefulness" to work is more prominent. Newton, just like Euclid, makes certain definitions, and just as a certain geometry rises according to these definitions, he also raises physics. Obviously, if the axiom or definitions that Euclid initially introduced changes, the content of the geometry he has established based on this will also change. The same is true for Newton[32]. The absolute time definition is in a functional[33] position even if it cannot be demonstrated in experience. Some uses may be seen to be somewhat legitimate to some extent, provided that the things that we do not have experience them within science have taken into account the usefulness and calculations that they should be there. This of course can remain as a question mark, a discussion point. Because the legitimacy of doing science on something that cannot be experienced is open to questioning. On the other hand, it is also necessary to give Newton the credit. Because even if he does not want to prove, the absolute time view was effective, when Principia was published in 1687 and until the year of 1905, which year remembered as the magical year when Einstein published a series of articles. After that time, when Einstein put forward the general theory of relativity and when this theory has completed, absolute time started to lose its full effect. After Einstein put forward his theory, it was still not fully accepted until proven by the experiment. The experiment process was carried out by astronomers in a rather painful process. For the validity of Einstein's theory, photographs should be taken during the solar eclipse. In this way, it should be observed that the space bending and the lights coming from the stars behind the sun are exposed to a certain refraction with this bending. However, after certain misfortunes[34] by the calculations of astronomers,

[31] By this we mean, proof as to demonstrate in experience.
[32] Of course, it is valid provided that the main differences between the two sciences are in parentheses.
[33] With absolute time, the flow of moments with complete equality ensures a perfect uniformity. This is a principle that will always serve as a limit for relative time.
[34] A series of unfortunate events erupted, such as the weather was cloudy and the start of World War.

the solar eclipse could be observed and it was revealed that the light came bending from the space around the sun. The new paradigm is now clear.

Newton clearly intended to distinction these concepts, such as space, time and motion, from the content of meaning they are known for common and which are known to everyone. Because he simply did not fully trust such content. From his unpublished notes, somewhere in the public sense for time and space, he said they "take these measures to be the things measured, for example days, months, and years to be times, and (either positions) in relation to surrounding bodies, (or the internal surfaces of surrounding bodies,) to be places[35]." As we have stated, Newton wants to avoid a perceived view of time. And with this we can also think that Aristotle's time view, the number of motions has already rejected. So what is Newton's definition of time? Newton's time definition is actually quite simple.

> Absolute, true, and mathematical time, in and of itself and of its own nature, without reference to anything external, flows uniformly and by another name is called duration. Relative, apparent, and common time is any sensible and external measure a (precise or imprecise) of duration by means of motion; such a measure—for example, an hour, a day, a month, a year—is commonly used instead of true time.[36]

What is meant by the absolute time[37] flows equal? "When Newton says that absolute time "flows equably," he is not to be parsed as saying that time flows and that it flows equably[38]." In this way, with a layer in which the flow takes place, two separate times considered will be assumed. So this is like time exists and flowing in another existing layer. This will be a situation that does not coincide with absolute time. Because in terms of absolute time definition, it has a self independent

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[35] J. E. Mcguire, "Newton on Place, Time, and God: An Unpublished Source," *The British Journal for the History of Science* 11, no.2 (July 1978): 117

[36] Isaac Newton, *The Principia Mathematical Principles of Natural Philosophy*, trans., Bernard Cohen ve Anne Whitman (Los Angelos: University of California Press, 1999), 408

[37] Time and Place are common affections of all things without which nothing whatsoever can exist. Time and Place in themselves do not fall under the senses. To exist in time and place does not argue imperfection, since this is the common nature of all things. See also J. E. Mcguire, Newton on Place, Time, and God: An Unpublished Source

[38] J. Earman, *World Enough and Space-Time Abolute versus Relational Theories of Space and Time*, (Massachusetts: The MIT Press, 1989), 7

character that does not depend on anything external. What is marked by flow equably is not an "ontological" situation, but a character of its own nature of time, this shows its "structure[39]." Such flows equally time, cannot measure even by the most innovative technological equipment.

The flow of time ‘without reference to anything external’ is to say that it flows independently of any external object or principle. Absolute time is independent of objects and their positions. What Newton calls relative time is precisely something that changes according to objects, has a margin of error and depends on perception. It is clear that Newton distinguished his absolute time, with the duration which he says "is commonly used instead of true time". Duration is the product of perception, and even though it can lead to imperfect results, we make our measurements using this view of time. Because absolute time cannot be measured.

Time seems to depend on neither the object nor the subject. Absolute time has its own independent mode of existence. However, it is necessary to add this; then time should exist before the nature or the universe. Because it exists independently of nature, namely subject and object. In fact, such a proposition is almost absurd, because if we think of time as the fundamental part of the universe, if what we call the universe is a liveliness and motion, then time principally should really be before the universe but must with the universe. If absolute time is considered, if it were with the universe or later universe, it would originate from the object or subject. However, as it is seen, absolute time does not have such a structure because it does not have an external effect. Such a thing may mean loading an ontological character on it. Newton himself expands the subject in the chapters he added in the second edition of Principia, defining such an absolute time by saying the ‘‘emanent effect of God.[40]’’ By being a perfect being, God exists all the time, not at a certain time. In this sense for Newton, the guarantee of having time before the universe is nothing other than God. Whether or not an ontological character is

[39] Ibid., p. 7
[40] Philip Turetzky, *Time*, (Oxfordshire: Routledge, 1998), 72

loaded in this way, this is the case at least as Newton thought of it. Newton thinks that anything without time does not can be found. If God will also be in time, it must be at entire times and every time. However, this does not mean being subjected, because time derives with God. The independent structure of time also refers to the temporal character of God. Of course, Leibniz will oppose such a situation.

1.2. Substance Metaphysics of Leibniz

The theory that seems to be a rival to the Absolute Time theory is Leibniz's *relational* and *ideal* time view. As another major time view in the 17th century, we can show this understanding of time. To understand Leibniz's view of time, it is necessary to thoroughly know his philosophical views. But to be honest, penetrating Leibniz's philosophy has some unique challenges. Works such as *Monadology* and *New Essays on Human Understanding*[41] (Nouveaux Essais sur l'entendement humain) in which he expresses his views, especially Monadology is like a summary of his philosophy[42]. When these sources are used directly, it may be difficult to understand and digest this philosophy. On the other hand, in order to follow the philosophical development of Leibniz, it is necessary to look at its major articles and correspondence. This, at least at first, looks like a maze. That is why it is very difficult to penetrate the Leibniz philosophy. And it should be added that; there are some differences in interpretation in detail on Leibniz's views, even in the context of our subject, that is in the context of time. Even if there is basically no difference interpretetion on Leibniz's time views, in detail there is some different interpretetions are exist. Names such as Bertrand Russell and Gilles Deleuze interpreted it, for example Hide Ishigoro and J. E. McGuire made original comments on the matter of time. Especially Bertrand Russell's comments on

[41] Written for as a critique to John Locke's famous work of An Essay Concerning Human Understanding.
[42] We mean philosophical views especially in the field of metaphysics.

Leibniz in, *A Critical Exposition of the Philosophy of Leibniz* have gained great importance. And Deleuze made comments on Leibniz in *The Fold: Leibniz and the Baroque* and *Five Lectures on Leibniz* (which was later published in his lectures). Considering the small number of works interpreting Leibniz in our language, these books are extremely valuable. However, within the scope of this thesis, it will not be possible to make a deep inquire about the differences of interpretation on the issue of time.

Before moving on to the ideal time, it is useful to describe the *monad* theory, which Leibniz treated as simple substances. Like Newton, Leibniz also criticizes Descartes philosophy. These criticisms are essentially multifaceted, but the point we will focus on now is the matter of substance. Descartes handles the substance in two ways. In absolute mean God is on one side, and other side *relative substances*; which is on the one side as a thinker there is the *soul* and on the other side as an extension there is the *body*. As we have stated, the essence of object is extension, and the essence of the soul is thinking. In this sense, Descartes relative substances are excluded from each other. Since these two are mutually exclusive[43], what kind of relation they have is waiting to be explained. Because although body and soul are mutually exclusive, they are together. Since they are together, this gap needs to be closed, but in what way? The problem that Spinoza found here is nothing other than this gap. If it is literally something that does not need anything other than itself to exist is a substance, then nobody other than God can be substance. The soul or body appears to be subject to God. So the relative essences in Descartes are subject to a single substance in Spinoza, in other words, these two are *attributes*[44] of substance. In this sense, Spinoza eliminates Descartes substance dualism as attributes[45] of one substance. If we think of Leibniz at this point, we can say that he took the single substance of Spinoza and cut it into infinitely small pieces.

[43] Because for Descartes; while there is no extension in the soul as the essence of the body, there is no thinking in the body that is the essence of the soul.
[44] Attributum: Extensio and Cogitatio
[45] A similar theme will be found in the Absolute understanding of Schelling in German Idealism. Neither subject nor object but as a ground Absolute itself.

Considering, can't there be a number of elements in the universe that we cannot fully regard as belonging to either the soul or the extension? Such as faint or sleep, when the perceptions of the soul are closed can be examples for this. In this case, contrary to Descartes acceptance, it is possible to capture some thoughtless moments in the soul. On the other hand, when we think about the object, it appears as perceptionless, passive and dead. The passive thing that is not in action is no different from the dead. Such a scene is just like a cemetery, but on the other hand there is motion in the universe. So how can I see the matter as something dead? In Latin, the word *corpus*[46] is used for both body and object and sometimes dead[47] bodies. So what I mean is that the matter / body (body as an object) is in a sense considered dead things. However, if we intend to explain nature as a living thing with motion, it would be wrong to portray it as a dead thing and to attribute only the extension to the object. Following this idea, Leibniz overcomes Descartes substance dualism with the monad theory, that is, with the conscious substance theory that does not take up extension. In his article *On the Correction of Metaphysics and the Concept of Substance*, Leibniz discussed the issue. This is a fairly short article that conveys his own opinions. Here, he says, for Descartes, "nor did he have any sound understanding of the union of soul and body[48]."

Isn't there a resistance force in everything in nature, that is in the matter? The object not only attributed to the extension, but a force, the force to be put into life[49], can be attributed as a quality. So much so that with such a force, life spread itself to nature, it will reproduce it. Especially conceived by the 17th century philosophers, we often encounter the concept of *conatus*[50] in the context of this concept of force. Conatus is a concept that can be found in Descartes, Hobbes, Spinoza and Leibniz. And even so, Leibniz poses questions to Hobbes about how Hobbes used the conatus concept in a letter (July 1670). Conatus is like an effort to

[46] Corpse word came from this origin.
[47] And sometimes cadaver used for this situation.
[48] Gottfired Wilhelm Leibniz, *Philosophical Papers and Latters*, trans., L. E. Loemker (Dordrecht: Kluwer Academic Publishers, 1989), 433
[49] See also, Spinoza – Ethica, section 3- proposition 6
[50] Conatus means effort or strtive.

survive, a kind of spread force. Considering the resource I use for Leibniz, this concept; first appears with his questions in his letter with Thomas Hobbes, and then comes back again in Leibniz's letters to the British and French Academy of Sciences. Up to this point, conatus is about physics and movement. In another article it is finally referred to as a function of the concept of substance. Here Leibniz wants to briefly explain his concept of substance, and says:

> I will say for the present that the concept of forces or powers, which the Germans call Kraft and the French ta force, and for whose explanation I have set up a distinct science of dynamics, brings the strongest light to bear upon our understanding of the true concept of substance. Active force differs from the mere power familiar to the Schools, for the active power or faculty of the Scholastics is nothing but a close [propinqua] possibility of acting, which needs an external excitation or a stimulus, as it were, to be transferred into action. Active force, in contrast, contains a certain act or entelechy and is thus midway between the faculty of acting and the act itself and involves a conatus.[51]

With active power and conatus that will bring the strongest light to illuminate our understanding and how will we better understand the substance? Leibniz criticizes the active power in need of an external influence in scholastic thinking. In contrast, he says, his concept of active power acts due to his inner strength. What is called the conatus is nothing but this inner power. So conatus signifies self-acting in the sense of an effort. Even though he has not yet put his name as the monad, Leibniz is so obvious about the matter of substance. He already divided the substance into corporeal and spiritual. He talks about this distinction right after our quote. "I say that this power of acting inheres in all substance and that some action always arises from it, so that the corporeal substance itself does not, any more than spiritual substance, ever cease to act[52]." While explaining the movement of the corporeal substance such as the motion of the spiritual substance, he considered the active action power that included this conatus. And the power of

[51] Gottfired Wilhelm Leibniz, *Philosophical Papers and Latters*, trans., L. E. Loemker (Dordrecht: Kluwer Academic Publishers, 1989), 433
[52] Ibid., p. 433

acting is to be found in the essence of all substances. Everything spiritual or material is in an effort according to this principle. The matter of substance has started to develop gradually. If he said the substance had an extension, it would in a sense have thematic similarities with the atom. However, Leibniz introduced simple monads that do not have an extension. Monadology consists of the advancement of articles that support each other. And although it is actually very intense, for a very short text. And the first five articles briefly describe how monads are.

> The monad which we are to discuss here is nothing but a simple substance which enters into compounds. Simple means without parts. There must be simple substances, since there are compounds, for the compounded is but a collection or an aggregate of simples. But where there are no parts, it is impossible to have either extension, or figure, or divisibility. The monads are the true atoms of nature; in a word, they 'are the elements of things. We need fear no dissolution in them, and there is no conceivable way in which a simple substance can be destroyed naturally. For the same reason there is no way in which a simple substance can have a natural beginning, since it cannot be formed by composition.[53]

The basic descriptive features of Leibniz's monads are as above. However, the monad theory goes in a much more complex direction. There is now an almost traditional statement about the monads; monads do not have windows. Monads do not have a structure, that they can affect or affected in any way. In other words, whatever is in the monad arises from it. Also, monads are different from each other, they are not the same. In fact, this structure of the monad is a reference to the question of individualization, which is another topic of discussion in philosophy. Referred to as *haecceitas* in Latin and '*thisness*' in English, this problem has been discussed since Aristotle. In a some way different monads ultimately will become different things. Leibniz does not think that two entities are completely similar in nature.

Even though they are different, monads should have certain similarities in their nature. Because monads do not have windows, with pre established harmony

[53] Ibid., p. 643

act according to a certain principle. Different monads are process in different ways, acting according to the pre established harmony order. Since monads are windowless, such a pre established harmony principle is required. Otherwise, monads will move messy. Leibniz says that compound substances are formed by the combination of simple substances. Since windowless monads would not know how to move, this combination would be impossible without pre established harmony. Thus, the relations between different monads, for example different monads that make up the body and soul, is answered to a certain extent. Each monad has both *perception*[54] (Article 14 of Monadology) and *appetition*[55] (Article 15 of Monadology). The perception of a monad essentially determines its perfection. The clearer and distinct the perception, the monad is the better. It is useful to add; for Leibniz there are infinite degrees of magnitude in perception. Those whose perception is infinitely small have dark perceptions and momentary perceptions. On the other hand, some perceptions are clear and selective, and also have memory, which as perceptions that Leibniz sees more appropriate to call *spirit*[56] (Article 19 of Monadology) than others. Since the monads do not have external influence, they only perceive themselves. All monads perceive themselves, but in these perceptions they represent the universe. In monads, there seems to be an internal universe, and they have a micro version of the universe. In ancient Greek mythology has a character, *Argos Panoptis*. Its most prominent feature is that he has more than two eyes. In some stories, he has three eyes, some in ten, and some in hundred. And Argos sees everything around him. Monads see individually, just like Argos's eyes, while some eyes see much better, while others see it darker. Just as Argos sees everything, monads also see the universe. This is eye sees itself and through this sees an entire universe. Since there are higher and lesser degrees in perception, how well monads see and represent the universe in this vision is variable[57]. It should be

[54] Ibid., p. 644
[55] Ibid., p. 644
[56] Ibid., p. 644
[57] We can think of a distant object or a view to different degrees to two people. In some way the object or landscape is completely visible, but there are differences in the sensitivity to perceive the details of the object or landscape. While one can perceive and represent details more clearly, the other perceives and represents less.

added, therefore, that each monad represents the universe while perceiving itself, and the more perfect in this representation, the more perfect the monad itself. So there are degrees of excellence in monads. However, this does not indicate that one monad is the cause of another, or something like a hierarchy in monads. Monads only act according to their nature. Monads are efforts, even if it seems to be more appropriate to call those who have memory, as souls, in the body/matter. As we have already stated, there is active power inherent in every substance. With this power, the substances take action with their inner nature, their own efforts. Perhaps it would have been necessary to add the body next to the object here, but since each object has substances, each of them already expresses liveliness for Leibniz. So there is no difference between body and object in this sense. In this way, both a substance dualism and the question of how to relate to nature have been eliminated. Monads are the invisible forces behind the visible.

We said that there is an infinite big perception or an infinite small perception, in perception. Human perception is present here as *apperception*[58]. On the other hand, however, there is the perception of God, that is, the infinite or the greatest, the most perfect perception. It exist also the smallest, most incomplete perception. The interesting thing is that, given that there are infinite number of monads, there are infinite number of perceptions. The only thing that this tells us is that the perceptions of the monads that are found one after the other, in perception do not make any difference. It means no difference can be seen in perception side to side monads. To the extent that there is no doubt about God's existence[59] for Leibniz, the beginning and end of the infinite series of perceptions are obvious. Although within the philosophy of Leibniz, we can show God as the most perfect perception, but what can we show for the most incomplete perception? This point can be discussed.

[58] A perception of perception itself.
[59] There is proofs of God in a certain part of monadology, and other articles in Leibniz have similar proofs. Given this, we cannot say that he is skeptical about it.

Leibniz in the substance matter, made clarification about the motion. We mentioned earlier that Leibniz said, "I say that this power of acting inheres in all substance and that some action always arises from it.[60]" In this sense, the reason for the motion is along with the effort in the substance itself. So what does motion mean? How should the motion be evaluated? For now, let's just consider the motion as something being activated. But when something else comes into action, there are two mutual movements and activity. In short, relations with the movement will emerge. As we will see later, relations will play a fundamental role in the matter of time.

1.3. Relational and Ideal Time

The thing about Leibniz's time views that is closed to interpretation and discussion is that it is relational and ideal. Time does not have a physical presence. This relational time is nothing but a giving temporal order to the phenomenon. In this sense, it is also ideal in terms of time relational. It is a principle that I have extracted and abstracted from the relations of things. In other words, it does not have a physical structure, but it is also not separate from things that we see as relations, it is ideal for it.

Leibniz rejects Newton's understanding of absolute time. This theory has certain problems for him. One of the basic principles of Leibniz is the *sufficient reason* principle. This principle is about whether anything is as it is, not this or that, but it is itself. So if something happened, it must have a sufficient reason. Leibniz attributed this principle to the same importance as the principle of non-contradiction. It rejects absolute time with sufficient reason principle. The absolute time had its own independent existence and was with God's emanent effect. If time had such an absolute, how could things exist with accordance to sufficent reason principle? Because with absolute time, things have to happen at any time, not at a

[60] Ibid., p. 433

certain time. In order to comply with the principle of sufficient reason, it is necessary to exist in a certain moment, in a certain way, at chosen one time. Moreover, when God created the universe, if time is absolute, it means that God has used any time. "Since empty absolute times are exactly alike there cannot possibly be any reason for God to create the universe at any particular absolute time.[61]" In the matter of the creation of the universe, one or another time must differ from each other in a certain sense, so that God can create the universe at the moment that is apparent, for a particular reason. Have a reason to choose that moment. However, there can be no such thing between moments at absolute time because it flows equally. In other words, it does not contain any difference, there is an absolute equality between one moment and another.

On the other hand, Leibniz also opposes Locke's view of time. Leibniz read Locke's *An Essay Concerning Human Understanding* in 1703, and a year later came up with New Essays on Human Understanding. John Locke says "the distance between the appearances is duration[62]" of successive two ideas or series of ideas. Although the issue of time seems to be unknown at first glance, it is thought that it will be more understandable and clear if with "the sources of all our knowledge, that is, sensation and reflection.[63]" Since Locke thinks that knowledge is based on experience in the context of his philosophy, he says time emerges from the perception of time. Otherwise, he would have to derive it from a completely different field, which would have been to contradict his philosophical foundation. Therefore, Locke says " time is duration set out by measures.[64]" Once the soul has achieved a duration idea, creates an order to measure different times. The point where Locke and Newton meet can be shown through the argument that " a good measure of time must divide its whole duration into equal periods[65]" (Locke, 2013,

[61] Philip Turetzky, *Time*, (Oxfordshire: Routledge, 1998), 80
[62] John Locke, *İnsan Anlığı Üzerine Bir Deneme*, trans., Vehbi Hacıkadiroğlu (İstanbul: Kabalcı Yayıncılık, 2013), 157
[63] Ibid., p. 156
[64] Ibid., p. 161
[65] Ibid., p. 161

p. 161). As you will remember, Newton's absolute time flows perfectly 'equally'. A similar structure emerges in Locke's argument. However, Leibniz clearly opposes:

> A train of perceptions arouses the idea of duration in us, but it does not create it. Our perceptions never provide a sufficiently constant and regular train to correspond to the passage of time, which is a simple and uniform continuum like a straight line. (…)As I have just said, time and space indicate possibilities beyond any that might be supposed to be actual. Time and space are of the nature of eternal truths, which equally concern the possible and the actual[66].

Leibniz believes that sources of perception will not provide a proper and sufficient series for the formation of duration. In this regard, it seems impossible to create the idea of duration. There is no duration in perception that can correspond to the uniform progress of time. The most interesting thing in the quote is that Leibniz tells his own understanding of time and basically difficult to understand this view. Because it is understood that time seems to have been thought by Leibniz in two ways. An interesting situation stands out here, time is both related to the possibilities beyond the actual, and equally to the possible and the actual. In the short dialogue called *Philarete and Ariste*[67], a text that Leibniz opposes Melabranche, we can find the material we need to overcome the difficulty in the matter of time. Here, Leibniz states that "duration and extension are attributes of things, but time and space are taken by us to be something outside of things and serve to measure them.[68]" What is clear here is that Leibniz takes duration as the time of the phenomenon and also thinks of a time other than that. The temporality of the phenomenal, that is, the actual, is related to the duration. However, on the other hand, considering the previous quote, time is ideally present as the nature of God. As such, two kinds of time emerged. Divine time, what Leibniz calls the nature of eternal truth, and an actual time to measure time as qualities of things. It is also

[66] Gottfired Wilhelm Leibniz, *New Essays in Human Understanding*, trans. P. Remnant ve J. Bennett (Glasgow: Cmabridge University Press, 1996), 153-4

[67] In the dialogue, Theodore appears as Melabranche. Right after Theodore left, Ariste goes to visit his old friend Philarete. And Ariste tells Philarete what Theodore told him (that is, Melabranche). And together they discuss these issues. Philarete expresses Leibniz's views.

[68] Gottfired Wilhelm Leibniz, *Philosophical Papers and Latters*, trans., L. E. Loemker (Dordrecht: Kluwer Academic Publishers, 1989), 621-2

possible to see that they have agreed with Newton in certain details, even if they have fundamental differences with Newton. Newton also said in his unpublished notes and in Principia that time was misunderstood with general opinion. Time is not a measured thing. Likewise, Leibniz does not take the time, as the things measured. What Newton calls relative time appears in Leibniz as duration.

What does the nature of God mean or a time separate from that nature? As we started talking about time in Leibniz, we mentioned the relationality and ideality of time. Its relationality gives its phenomenal context, while its ideality gives its divine context. The relationality of time will be in the actual universe, that is, in phenomena. However, it is worth mentioning immediately; phenomena can be reduced to the monad. There are monads as the substance of things. Time is the relation of before and after two or more events. But since we deny that time is a physical thing, we cannot say that there is time between this prior and post. So no time passes between the two events. Time consists of abstraction of the network of relations I have established between events. Relational time should not be perceived as a time in terms of the physical entity.

Leibniz in his correspondence[69] with Clarke, in his fifth letter to Clarke, explains how human is achieving a notion of space. This explanation of Leibniz contains a good example that can determine how we think about relational space and time:

> The ratio or proportion between two lines Land M may be conceived three several ways: as a ratio of the greater L to the lesser M, as a ratio of the lesser M to the greater L, and, lastly, as something abstracted from both, that is, the ratio between L and M without considering which is the antecedent or which the consequent, which the subject and which the object. (…) In the first way of considering them, L the greater, in the second, M the lesser, is the subject of that accident which philosophers call 'relation'. But which of them will be the subject in the third way

[69] This correspondence is made with Samuel Clarke, who is known to defend the views of Leibniz's rival Sir Isaac Newton on most issues. So, on the one hand, Clarke advocates Newton's views, on the other hand Leibniz criticizes Newton's views and who put forward his own views. In these correspondence, space and time are discussed, among the many other things.

> of considering them? It cannot be said that both of them, Land M together, are the subject of such an accident (…)which is contrary to the notion of accidents. Therefore we must say that this relation, in this third way of considering it, is indeed out of the subjects; but being neither a substance nor an accident, it must be a mere ideal thing, the consideration of which is nevertheless useful.[70]

If we leave aside the ratio between the two things and look at this with priority and posteriority, time notion can be derived through the relation between two things. If a certain event A before a specific event B, in the context of the relations versions shown by Leibniz; in the first style A is before, and in the second style B is later, but in the third style, what I abstracted from these two is nothing but priority and posteriority. In other words, it is nothing more than the notion of time as the law of succession. We can also get the notion of space in this same way.

We have to get an ideal time by abstracting the relations. However, when it is thought, it may seem that there is a problem or a contradiction in Leibniz. That is, Leibniz says that while criticizing Locke's views of duration and time, a duration or time cannot be created from perception elements. But hasn't he done the same thing here now? Isn't it abstracting the relation between the two phenomenal things, very similar to Locke's argument; which is "having thus got the idea of duration, the next thing natural for the mind to do, (...) find a measure (...) from different lengths of duration.[71]"? Indeed, there is a great similarity. At this point, however, it is time to open up the issue of time as the nature of eternal truth, which we have not yet had the opportunity to overwrite. And it should not be forgotten that Leibniz used this time character, he called it the nature of this eternal truth, in the same place as Locke's criticism.

Leibniz thought of the possible worlds besides the actual world. So the world we are in now is the actual yes, but there could be an infinite number of other

[70] Ibid., p. 704
[71] John Locke, *İnsan Anlığı Üzerine Bir Deneme*, trans., Vehbi Hacıkadiroğlu (İstanbul: Kabalcı Yayıncılık, 2013), 161

worlds. God has chosen the best, the best among these worlds. But how is this possible? I raise this question in the context of Leibniz metaphysics.

In the formation of a universe, monads that will be its substance are of course the most important. However, if our analogy is reasonable here, many possible universes must work with different parts. Otherwise, if the pieces were the same, the universe would be the same. If possible universes are to be meaningful, different universes must have infinite possibilities. If there were an infinite number of replications of the same universe, that is, there was no difference, we would not have achieved anything other than the infinite repetition of the same. Each possible universe must have a unique code, a monadic series. Monads may have too many perceptions. However, when it comes to the present universe, monadic perceptions should only represent this same universe. And all these monads must represent the same universe. Despite the infinite number of possible universes, the monadic arrangement of the actual universe that is in this way.

Besides, I want to give a very important quote from Leibniz. "But if there were no creatures, space and time would be only in the ideas of God.[72]" Even in a situation where there is no living being and even the universe, time exists for Leibniz in the mind of God, in God's ideas. Where no living thing exists, there is neither a relation between priority and posteriority nor a created mind to abstract it. So what is expressed as the nature of eternal truth should be nothing but God's possession of space and time in mind.

There is an ideal time in relations, but there is also a time in God's mind. We said that the time in the mind of God would be if this universe was not available. And also, "space and time, that is - relate not only to what actually is but also to anything that could be put in its place.[73]" If what is happening and what can replace it is considered on the scale of the universe, time is not only about this universe, but also about all possible universes. Similarly, while criticizing Locke's concept of

[72] Gottfired Wilhelm Leibniz, Philosophical Papers and Latters, trans., L. E. Loemker (Dordrecht: Kluwer Academic Publishers, 1989), 690
[73] Ibid., p. 583

time, did Leibniz not say "equally concern the possible and the actual" for time? The issue, which we could not fully grasp there, now seems to have settled down. The purest ideality of the time in Leibniz metaphysics should not be anything else.

The time in God's mind or the time that can belong to each of the possible universes is ideal. And in this way, the problem with the abstacted ideal time, which is mentioned in the third form of the relation, is eliminated. Yes, this time has been achieved through the abstraction of phenomena, and it seemed problematic when considered with the objection to Locke, until the time in God's mind and the time of possible universes came into play.

CHAPTER 2: CONSTRUCTION OF TIME IN THE CRITIQUE OF PURE REASON

2.1. As Fundamental Argument A Priori Time

It is possible to reduce the history of philosophy to the interpretation variations of the experience itself, especially within the framework of the question of knowledge. However, it should not be misunderstood, that the matter opens such a way and that it spreads for centuries. Experience always touches epistemological and ontological disciplines. The simplest way to deal with this issue is to do it by thinking over the terms that we constantly encounter in the history of philosophy. In this regard, experience; ontologically, it is considered as the one who experiences and what is experienced frequently, and in epistemological terms, the consistency of what is experienced in the mind. Epistemological truth is often explained as a complete representation of the experienced in the who experienced it, or the exact correspondence of the representations in the mind. Conversely to this situations, are exiled from the field of truth. for example, if there is a representation in the mind, although it is not experienced. It is not an epistemological situation.

Does what appear on the subject really appear as it is? It has an important place in Kant's philosophy; the concepts he calls *phenomenon* and *noumenon* have been put forward in the light of this question. If the object appears to us is not as it is in itself but as it is be made from us, our knowledge of the object has certain limits. In this context, Kant thinks that we can never know what the object/thing in itself. It exists in itself as something that exceeds the limit of our knowledge. What is within the boundary of our knowledge is a phenomenon, that is, an object as it is made by ours.

So why is the object in its own state unknown? If it is necessary to answer simply; because we do not have access to this object in its own right. The subject never stands passively in experience. On the contrary, the subject is an active power. That is, it cannot see the object as it is. The subject only can see/perceive the object

in the context of his own activity. The object appearing does not come to mind as it is. Space and time forms based on the subject itself are attached to the object. Through the receptivity the object brought by the sensation, space and time forms are attached and shaped by intuition. In a sense, the matter of the object comes from the outside, but the form comes from our mind. As we have already mentioned, this object, which I experienced, is called a phenomenon since it has nothing in itself.

When we returned to the very beginning of the issue, we talked about the experience, and the terms experiencer and what is experienced in relation to it. We have passed a very brief summary of Kant's views on this matter without ignoring the context of its usefulness to our study. In this case, Kant says that knowledge can only be possible with the phenomenon. We do not have access to what is a noumena. Since Kant says that the matter of knowledge in the *Critique of Pure Reason* will be based on the phenomena, he first shows the possibility of synthetic a priori judgments. Because it is possible by referring to experience which is synthetic propositions. After conducting such a preliminary study of possible scientific knowledge, passes to the matter of space and time. This brings us to the heart of the section called Transcendental Aesthetics.

Everything that comes from the experience about the object, like "hardness, color[74]" etc. and when we isolate all empirical qualities, in the subject still remains something about the object, and these things are nothing but space and time. In this way, space and time, which are in the middle as the forms remaining in the object, which Kant calls "*pure forms*[75]", which the form of the intuition, are revealed. 'Color' or 'hardness' can result from experience, but pure forms that allow us to represent the object cannot originate from experience. "Time is not an empirical concept that is somehow drawn from an experience.[76]" Kant's main argument about

[74] Immanuel Kant, Critique of Pure Reason, trans., Paul Guyer and Allen W. Wood (Cambridge: Cambridge Unisersity Press, 2002), A 21, B 35. After this quote, references to the Critique of Pure Reason are only tradational A and B series will be given with reference.
[75] A 21, B 36
[76] A 30, B46

space and time is that they are a priori. This provides such a foundation that everything is built on this root in Kant's Critique of Pure Reason.

Kant considers space and time not in the objects, but as forms of the intuition, things we see in these two. In other words, all our experience takes place according to the form of space and time. That's why space and time exist as a priori. Space and time are nothing but forms that are considered to be simultaneity and succession. Kant says that the time form cannot have a certain shape. However, we still represent it as a straight line that extends to infinity. The most important thing that Kant emphasizes here is that "infer from the properties of this line to all the properties of time.[77]" From this point of view, we can say that experience is unthinkable without successive character. It will also be possible to say that it is a priori as of this character of time.

No object can be thought of without the form of space and time. The important thing here is to think that these two forms are essentially like plugins. Or we can think like glasses. Through these glasses and according to these glasses we can see things. And with these glasses, entire nature can construct in the subject. Especially when it comes to space, any ground or anywhere comes to mind. However, the mentioned space form is nothing like this. A space that covers any space, but not any space, is what should be considered as pure form. In other words, it should be considered first ideally, not as objective reality. Likewise, in this context, time can be likened to this. When it comes to time, things like flowing, minutes and hours come to mind. However, these should be called duration rather than time. "Time is not something that would subsist for itself or attach to things as an objective determination.[78]" Ultimately, an important question arises; can we say that objects have successiveness and simultaneousness in themselves?

What does it mean to give space and time form to the object? As we mentioned earlier, the character of simultaneity and succession for space and time has been defined. Succession is like a flow. We thought that time also somehow

[77] A 33, B50
[78] A 32, B49

always flowed. In this case, the character of time is related to successive states of objects. Here, Kant seems almost like a partner with Leibniz. But these two thinkers distinguish an important difference. When we say Kant's successive states of the object, we make an invitation to error. There is no such thing as the spontaneous successive of the object. Two events acquire this status if there is a subject experiencing it. In this sense, the state we express in the successive form of objects is nothing more than the subject's representing them according to the time character. In other words, it is the principle that the subject attributes to the state of the objects, not the object itself. Here I would like to add a quote from Maurice Merleau Ponty's *Phenomenology of Perception*:

> We say that time passes or flows by. We speak of the course of time. The water that i see rolling by was made ready a few days ago in the mountains, with the melting of the glacier; it is now in front of me and makes its way towards the sea into which it will finally discharge itself. If time similat to a river, it flows from the past towards the present and the future. The present is the consequense of the past, and the future of the present. But this often repeated metaphor is in reality extremly confused. For, looking at the things themselves, the melting of the snows and what results from this are not successive events, or rather the very notion of event has no place in the objective world. When i say that the day before yesterday the glacier produced the water which is passing at this moment, i am tacitly assuming the existence of a witness tied to a certain spot in the world and i am comparing his successive views.[79] (Merleau-Ponty, 2017, s. 550)

The answers to the questions we have presented before, can there be successiveness in the objects themselves and what it means to give the time form to object, answered now. Maybe I quoted a thinker far beyond Kant's time yes but I think he summarizes the situation very well. Now to return to the real question, why is the time a priori; it should be said that time is a priori since this successive character mentioned is not from the object but from the subject. There seems to be a hidden link between succession and now. If successiveness is not possible, how can we

[79] Maurice Merleau-Ponty, *Algının Fenomenolojisi*, trans., Emine Sarıkartal ve Eylem Hacımuratoğlu (İstanbul: İthaki Yayınları, 2016), 550

think 'now'? Now exists by disappearing in general. What gives to 'now' this unique character, of the cannot be anything but than succession. Any now is meaningless without assuming the character of succession. Experience turns into chaos. Because the subject is lost in the chaos of a series of events that cannot produce meaning. Let's say that the successive character disappears completely. How can we distinguish which now is now? Considering that before and after become meaningless, a rational flow in the experience of the subject is now impossible. What we are talking about now is a micro identical to the successive character. I have to say a micro-identity because successiveness can be considered unlimited, since it is a time character and we consider time itself unlimited. After saying that we can think of time as an infinite line, Kant said, "that the parts of the former [author's addition: the line] are simultaneous but those of the latter [author's addition: time itself] always exist successively[80]. But for what right can I say that for now? The present itself is a continuous[81] circulation of succession, the continuity of disappearing and reappearing. In this 'now' this disappearance and reappearing is the successiveness character. In this regard we have ascribed the identity to now and successiveness.

Considering what has been said above, if the time form itself was not found on the ground as a priori, it could not perceive "simultaneity" or "succession.[82]" It could not be perceivable with a better expression. For these two situations to occur, time must be found in advance and must be given. With this, the argument that time should be a priori is well grounded now. Because otherwise it becomes impossible for things that happen simultaneously in the experience or what happens in succession to make sense.

Let us consider the succession situation that we insistently emphasize while dealing with this issue. What can be said to consolidate the successive character? Time is often expressed, with it is flowing or passing. A flowing time occurs with

[80] A 33, B 50
[81] With its continuity, an infinity or unlimited is not expressed. It is a reference to the absence of empty time with an expression.
[82] A 30, B 46

the succession of certain moments. Therefore a temporal determination is always connected with successiveness. It can be said that this has been the case since Aristotle and maybe even Heraclitus. For example, when Aristotle defines time as the number of movement, it means something that has changed within moments. In other words, the object that is fixed in a particular situation for a moment is fixed in another situation in another moment. Time always consists of successiveness, different moments that can be defined, otherwise time consisted of simultaneity. So it would always be the same time. Time has to be grounded successive at all situations, even if it is dependent objective or subjective make no difference. Because otherwise an entire experience has to be stuck at the same time. If we think in terms of objects, we have to deny movement. Because we always need an object that has gone through different states in two successive moments, and only in two successive moments, to achieve a certain motion. If we think in terms of the subject, if the subject could only represent one and the same time in his temporal representation, he/she would always have the same moment. In this sense, it would be neccessity to live the same moment for the subject who is stuck in a single temporal moment. The basic assurance of the feeling that the subject is experiencing different moments in consciousness cannot be anything else more than succession. "It has only one dimension: different times are not simultaneous, but successive[83] (Kant, 1998, p. 162)." Otherwise, we can imagine that even though Kant himself does not use such a term, we can also express that we cannot have memory. Because a single moment is is just like frozen. So it is necessary to say that regardless of whether the temporal state is relative to the object or subject, it has a certain successiveness. However, as we have seen above, temporal representation as a succession is a principle originating from the subject, in a Kantian way, it is a form.

Consequently, time exists in this case not as derived from any empirical situation, but as a priori form. Time belongs to intuition as a form, is at the root of all experience. And in this sense, time is a priori condition of all appearances.

[83] A31, B 47

2.2. On the Derive of Finite Times

For Kant, the most important thing about time so far is that it is a priori and is the form of succession. So different times are not simultaneous. So, what is the origin of these different times? The order of the time we think or feel we live in[84] is a separate matter. And in general, the time character and how a finite time or different times are possible is a separate matter. The first thing we say is the production point of the present time. And now it is necessary to add that this is produced in the subject. The second is about how a different/finite time is possible. It seems to be necessary to separate these two from each other in principle. Because when the second is answered, the first is not answered. For now, we can say that Kant later gave the establishment of the present time with the triple synthesis. For the second, it becomes impossible to derive it out of the experience by saying that time is not an empirical thing. Therefore, since it is necessary to leave the experience aside, we have to return to ourselves and derive these different times from "ego". To clarify this issue, it is necessary to say besides time is a priori, that it is infinite/unlimited a priori, which we have already expressed for the original time. Because if a subject had time a priori finite, any different time interval that we could consider would have a certain boundary size in this sense. But still, when we think of a temporal interval, no matter how large this interval is, we can think of a larger interval than this temporal interval we think. We can simply enlarge it by adding a plus time size to it. We can assume that this process can go on infinity. If the original representation of time had a certain finite, I would never have done it. Regarding this we see that Kant said this, in the Prolegomena text:

> We can require that a line should be drawn to infinity (in indefinitum), or that a series of changes (like spaces traversed through motion) should be continued to infinity, presupposes a representation of space and of time that can only inhere in

[84] It should be added that this thought is an error. Because in empirical reality, it has to rely on a time assumption in nature. Whereas, Kant denies that there is a time in themselves, in nature. If such a situation is in the Kant system, it can only have a certain meaning with since if I make myself the object of myself, I will be add myself succession according to the time form. In such a case, time is already dependent subject, not an object.

> intuition, that is, insofar as the latter is not in itself bounded by anything; for this could never be concluded from concepts.[85] (Kant, 2000, s. 34)

An important expression in this excerpt is "can only inhere in intuition". So this unlimited will do not work in other situations. We will examine this issue in more detail. With this statement, Kant wants to state that the infinity of space and time will mean nothing else. A similar statement is available in the Transcendental Aesthetics section of the Critique; "the infinitude of time signifies nothing more than that every determinate magnitude of time is only possible through limitations of a single time grounding it.[86]" In this case, the original time representation is infinite. As shows that the a priori time given to 'I' is infinitely, different times are obtained by taking a certain interval from this time, and by “limiting” it, is a better expression. The origin of different times is none other than this infinite time. However, what this infinite/unlimited time means should be investigated. Because if infinite time is taken as a size, problems will arise. The infinite time attributed to this subject is inexperienced and in this sense, it also carries the risk of contradiction with Kant's own system. However, as we will see later, what Kant expresses as infinite or unlimited time is not a degree of magnitude.

2.2.1. Legitimacy of The Problem of Infinite Time

In the previous sections of the text, we made the explanation of how a finite time would be possible. In addition to what has been said, Kant has other sensitivities when deriving such a finite time. If it is necessary to open it, it is a principal reason that the part cannot give the whole, a matter that can lead to contradiction, if it is accepted. In addition, Kant does not think that time, finite time can be derived from a concept. “Different times are only parts of one and the same time. (...) Further, the proposition that different times cannot be simultaneous

[85] Immanuel Kant, *Gelecekte Bilim Olarak Ortaya Çıkabilecek Her Metafiziğe Prolegomena*, trans, İonna Kuçuradi ve Yusuf Örnek (Ankara: Türkiye Felsefe Kurumu, 2000), 34
[86] A 31, B 48

cannot be derived from a general concept.[87]" It cannot be derived from the concept because the proposition itself is a synthetic proposition. In other words, it cannot be based solely on the concept and there must be something belonging to the experience. There may be different reasons for Kant to handle the issue in such a way. For example, we can say that for Kant, want to depart sharply, from views of time thinkers of classical metaphysics. We will examine this in detail in the next section. For now, what I mean is that Kant wants to derive time not from concept or anything, but from an infinite and unlimited time. But the real problem arises here.

If we recall that Kant likens the time to an infinite straight line, a certain magnitude taken on this line, the magnitude between certain points will be different/finite time. Although it seems like there is no problem at first glance, we can an inference that can lead to certain problems. Now if we intend to derive a finite time from an infinite time in this way, we must also grasp how to think of infinite time. It is unclear what exactly a time considered as an infinite line means. However I must add, there are also clues too. Kant says for the infinite time that "signifies nothing more than that every determinate magnitude of time is only possible through limitations of a single time grounding it.[88]" We will consider this point later. For now, let's just say that this statement is a limiting expression, it expresses just what it is not, but not expressed what it is. It is necessary to consider the relation between an infinite time and finite time. Considering Kant's expression, finite time belongs to infinite time, it is like part of it. Because finite time is derived from infinite time. However, the question that arises here is; how can I represent infinite time to myself?

For example, if we need to take another square in a square in geometry, shouldn't we must know the square that is the larger? If we need to take another line from a straight line, the same question can rise in here too. We need to know, because I have to determine its limits, to extract a smaller square or line from it, in

[87] A 31-32, B 47-48
[88] A 32, B 48

this way we can represent it to ourselves. Considering that we do not take into account or know the boundaries of the square, for example, a smaller square that should be taken in a square of ABCD edges can completely miss the ABCD edges. Perhaps it is partly within the ABCD, but partly outside the edges. Shouldn't we be aware of its limits of infinite time in terms of time? Getting finite parts from an infinite time brings problems. Because we have to look for the limit of the unlimited and this is a nonsense task.

In contrast, an objection can be raised by saying infinite time is such a tremendous size that we do not need to know its limit to get parts from it. Just like being in a sea or ocean, and for that we don't have to know or set its limits. But there is something that separates the sea or the ocean from infinite time; namely experience. We have a chance to experience the sea easily. In the question of infinite time, it seems, as if we are closing our eyes and dreaming of the sea. Let's consider infinite time as a square or straight line, how can we claim that these are those things without knowing the limits of the square or line? Such a situation is as absurd as calling an empty space a square. So how can we claim that the infinite time we don't know its limits is truly infinite? To claim such a thing is absurd, as can be understood from the example of the square. In this case, the infinite is such an enormous size that I don't have to know its limits to get a part of it objection is not valid. Because in this case, am I really getting a part from an infinite time, I never know exactly. A similar criticism was directed to Kant over the distinction between noumenon and phenomenon. Simply noumenon is by no means the object of experience and is unknowable, but the origin of the phenomenon lies in this noumenon in a sense. Thinking I, who creates time and space, creates the phenomenon with the data obtained from the intuition. Since it is denied to know what noumenon is, how can it be said that it really exists? Within this framework, criticism has increased in a similar structure.

If all these things are taken into account, it is necessary to answer how to think of infinity and infinite time and how we represent it. When we try to think of

infinity, our mind always reaches a limit. We cannot even imagine[89] it, because our imagination is based on physical rules. And no matter how different everything we imagine, it has a structure that does not contain infinity. Because we have to always have a certain position in the dream, and in this sense we are bound by physical laws. Although we can relaxed these laws in a dream. In this case, when we look back, it turns out that the infinity cannot be represented as an infinite time. Indeed, it should be said that it would not be infinite if it could already be represented, because I can always represent a larger size from what represented. With what right, can I say this infinity and infinite time is given to me, whilst I cannot represent it? Kant has paralyzed traditional metaphysics with the Critique of Pure Reason, a work that emerged after a silence that lasted about ten years. There is an interesting definition that exists for Kant's philosophy, namely ""all-crushing." This shouldn't be a coincidence. In traditional metaphysics, reason tries to reach infinity in a sense. Classical metaphysical concepts such as God, spirit and substance are in a way related to eternal. Kant says that we cannot have knowledge of such concepts in terms of their impossibility in experience.

Even if infinite time was literally known, it is necessary to explain what kind of infinity it is. What nature does it have? We often face problems when dealing with infinity. Understanding the nature of the infinite[90] is a huge matter. For example, let's consider a set of odd numbers; one, three, five, seven, and we can extend that forever. Similarly, let's consider the set of even numbers; two, four, six, eight it can be also extended and forever. On the other hand, let's consider the set of numbers directly, neither odd nor even; it can be extended one, two, three, four and forever. How can we say which infinity is more infinite when three such sets are extended forever? Even if we take odd numbers and even numbers are equal at first glance, the set of numbers that we can think of as a combination of the two must be a larger size than the previous ones. But on the other hand, I call them

[89] I am not talking about the faculty Kant called imagination. I am talking about simply dreaming, as it is mostly used in everyday language. We will discuss later the relation of imagination with infinity.

[90] Ivan Soll, *Hegel'in Felsefesine Eleştirel Bir Giriş*, trans., Tufan Karaağaç (İstanbul: Ayrıntı Yayınları, 2019), 121

infinite, and they are all infinite. It will not be surprising to face similar difficulties in the task of thinking infinity. Finally, while we legitimize our question of infinite time, let's end this section by giving a clue on how to solve this problem. Of course I am saying this as an interpretation, that Kant makes lobotomy on the metaphysical bonds of the infinite. And so he brought the solution, to eliminate these questions we asked in the way of thinking infinity.

2.2.2 On the Nature of Infinite Time

It is certain that an infinite time cannot be known literally. Kant's instructions on this matter are clear and precise. Later on, he again addressed this issue in the Critique of the Power of Judgment. Before I begin the episode, I must point out that I never intend to cross the line that Kant has revealed for the infinite structure of time. So ultimately we will agree with what Kant says about this. I intend to elaborate on this issue, which he only mentioned quite briefly in the Transcendental Aesthetics section. The main function of the question we asked in the previous section is for this. We will also take advantage of Heidegger's comment on this issue in *Phenomenological Interpretation of Kant's Critique of Pure Reason* while elaborating on this issue.

At the end of the Transcendental Aesthetics section, there is a brief explanation of the intuition type of humans in the General Explanations section. Here Kant calls human intuition as *intiuitus derivativus* (derivative intiution). Another kind of intuition is called *intuitus originarius* (original intuiton). Another name is *sensible intuiton* and *intellectual intiution*, that is respectively, sensory and mental intuition. Sensible intuition itself "dependent on the existence of the object.[91]" It cannot realize sensing only on its own. Only the type of intuition that is based on it exists only in the "original being.[92]" What we will understand here is that since our intuition is based on sensation and is limited in perception, I can never

[91] B 72
[92] B 72

perceive infinite time. When said so, it may seem like a mistake is made, because time is already added to the object by subject a priori. However, what I want to say is that we cannot perceive anything infinite in any way in the experience.

Even if we do not experience infinity, we may shudder and be amazed in front it. Kant mentions this in the *Critique of the Power of Judgment*. However, here Kant's concept corresponding to infinity is "*sublime*". So what is sublime is what is infinite. Kant mentions *mathematically* and *dynamically* in two ways. While the size of the object extension is mathematics sublime, dynamic sublime is forces in nature (lightning, storm, etc.). On the other hand, however, "sublime is cannot something that is given in objects as such.[93]" Sublime should be considered as "absolute great[94]" (absolute magnitude). Ordinary magnitude is the product of a network of relations, but absolute magnitude, however, is something else entirely. "That is sublime in comparison with which everything else is small.[95]" Absolute magnitude, which is the sublime, cannot be compared with any size measure since it is considered as infinite. For this reason, something that is essentially sublime is "not to be sought in the things of nature but only in our ideas.[96]"

Imagination moves forward to infinity. However, it never can fully pass it. Even though the things we encounter in nature are not sublime, the subject gets a shudder with this activity of imagination. Because finds itself in front of immeasurable perfection. Let's assume that what pushed the imagination to do this is something deadly, like a storm. In this case, the storm itself is not the sublime or anything. In a sense, when we experience it, understanding is going over its limit, and it encounters the limit which cannot pass through, a shudder rise through encounter to reason ideas. "Just because there is in our imagination a striving to advance to the infinite, while in our reason there lies a claim to absolute totality.[97]"

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[93] Ernst Cassirer, *Kant'ın Yaşamı ve Öğretisi*, trans., Doğan Özlem (İstanbul: İnkılap Kitabevi Yayınları, 1996), 351
[94] Immanuel Kant, *Critique of the Power of Judgment*, trans., Paul Guyer ve Eric Matthews (Cambridge: Cambridge Unisersity Press, 2002), 131
[95] Ibid., p. 134
[96] Ibid., p. 134
[97] Ibid., p. 134

The important thing for us is that sublime cannot be found in the object. Even if it is assumed that such a situation, the subject's sensation should be different. "Even to be able to think the given infinite without contradiction requires a faculty in the human mind that is itself supersensible.[98]" The Critique of the Power of Judgment basically addresses another issue[99]. However, it is still valuable here in our investigation of infinity, as it provides us with some arguments from Kant's own hand. How legitimate it can be considered to use it. However, as can be seen, there is no difference in the interpretations of infinity between the first and last criticism.

Now the issue has become clear. The first thing to say is that we cannot perceive infinity. Secondly, we cannot fully pass it with imagination. In the face of the questions we have already mentioned, if we want to save the construct of time, we have to deal with infinite time differently. Infinite time should not be treated like a magnitude. It should be said that finite times are obtained by taking the pieces from infinite time, but the total of all these finite times will never give the infinite time. Because infinite time is not a degree of magnitude. We know that Kant says about sublime, "it is a magnitude that is equal only to itself[100]." So it would be a mistake to think of the infinite time, in terms of finite time. It seems necessary to say that infinite time is not a quantitative magnitude.

Infinite time should be treated as a possibility rather than a magnitude. So what is this possibility? It is nothing more than the possibility of temporality itself. Heidegger uses the expression "which is as important as it is difficult[101]" for this infinite character of the time. Because it is not an expression of infinity in the usual sense. Consider the following expression for space besides time, "space is

[98] Ibid., p. 138
[99] It must be said that the sublime is related to awareness related to our moral nature. However, getting into the details of this issue seems to be an impossible task here. But I would still like to close this subject by adding, "sublimity is not contained in anything in nature, but only in our mind, insofar as we can become conscious of being superior to nature within us and thus also to nature outside us (p. 147)."
[100] Ibid., p. 134
[101] Martin Heidegger, *Phenomenological Interpretation of Kant's Critique of Pure Reason*, trans., Parvis Emad ve Kenneth Maly (Bloomington: Indiana University Press, 1997), 82

represented as an infinite given magnitude.[102]" Problems arise when 'infinite magnitude', or 'absolute magnitude' (for sublime), taken like just this or that magnitude. This is not the ordinary magnitudes we are talking about, but it is the possibility ground for ordinary magnitudes. "magnitude indicates largeness, that which provides the ground in general for whatever is specifically so and so big, as its possibility.[103]" In fact, there is one and only time, and because of this time we are constantly adding succession to objects in experience. If we remember that time is successive; infinite time is the basis for the possibility that this successiveness can be large or small in any way. So what I mean is that infinite time cannot be reached, but our temporal limit is also unlimited in a sense. When we think of a succession, can we definitely think that it ends, in this or that size? Let us think of a large or small range as we wish, but we still have the possibility and freedom to think of the bigger and the smaller.

Heidegger explains the words that Kant uses for the term magnitude. "In Kantian terminology, magnitude points to something like großheit. Kant uses the Latin expression quantum.[104]" Heidegger states that the use of the term quantum in the sense that something has its share will lead to error. "Kant uses quantum and not quantity.[105]" As terminological, Kant does not use a term such as quantity. Because it does not seem to want to load a meaning that it implies. However, it is naturally impossible to say exactly how Kant thinks. Heidegger's comment is in this direction. By citing from Kant's other text, Heidegger reinforces the meaning of quantum. "The quantum wherein all quantities can exclusively be determined is... space and time.[106]" The ground of any magnitude is marked by the term quantum. In this sense, time as a quantum does not mean anything else.

As a comment, we have already said that Kant does lobotomy the classical metaphysical bonds of the infinite. The reason for this is the fact he is using that the

[102] A 25, B 39
[103] Martin Heidegger, *Phenomenological Interpretation of Kant's Critique of Pure Reason*, trans., Parvis Emad ve Kenneth Maly (Bloomington: Indiana University Press, 1997), 84
[104] Ibid., p. 82
[105] Ibid., p. 82
[106] Ibid., p. 82

concept of infinite, other than its meaning. The reason we make this interpretation is that although infinite time indicates an infinity, infinite time will never be reached. Infinity is found in time, but only as a possibility of other temporal magnitudes. There is a very interesting situation here, although intuition has an unlimited time, never an unlimited time is felt. Due to this inability to feel, the infinite content has been emptied. However, it still forms the basis of finite times. For Kant, a term such as drawing the limit of knowledge is generally used. The reason expressed in this is that the mind can only have knowledge in the field of phenomenon. In this sense, we cannot have knowledge of concepts such as substance or God. For a philosopher who brought all these thoughts into philosophy and dominantly changed the metaphysics before him, it would be a ridiculous interpretation to think that he said that an infinite time could be experienced.

In this way, we have explained in what sense an infinite time is infinite and with this sense it is the ground of finite times. In the next section, we will compare Kant's time view with Leibniz and Newton's time views. When I talk about Kant's views about time, I would like to state that we have kept some parts in this comparison in order not to repeat especially. For this reason, we are content with a priori as the main argument in the matter of time, and the relation between finite and infinite time. What is time transcendental ideal is among the things to be mentioned in the next section.

2.3. Critique of Absolute and Ideal Time

We can consider Kant's thought as pre-critique period, critique period and post-critique period. He wrote articles in areas such as geography, physics and metaphysics in the pre-critique period. The period known as the critique period covers the period between 1781 and 1790, when three critiques were written. In the post-critique period, we can say that there are mostly ethical and political writings. In this pre-critique period, which we consider as early writings of Kant, certain texts

are left behind if texts written outside philosophy are distinguished. With these texts, we will try to follow Kant's break with Leibniz tradition gradually.

Although Kant is dependent on Leibniz tradition in metaphysics, we can say that it depends on Newton in physics and natural philosophy. In this sense, even if Kant is not considered as a break from Newton, he will try to develop a thought to complete what he sees in him, what he sees in science in general. This is none other than a metaphysical origin that will illuminate the sciences. In this sense, Kant can be evaluated close to Aristotle's metaphysical view, metaphysics as a first science…

Also we intend to take a brief glance at the intellectual climate of the period in which Kant's philosophical development coincided. It will not be surprising to find the foundations that led Kant to his critique period here. For this reason, it is important to express the general discussions and the polarization of thought during this period.

As we have stated in the first part, even though there are certain connections in thought between Leibniz and Newton, some fundamental differences exist. Naturally, these two great thinkers have had major followers. Leibniz's tradition was followed by Christian Wolf especially in Kant's youth. In addition, the Newtonian tradition can be said to have been defended by Pierre Louis Maupertuis and Leonhard Euler in Germany.

While Kant was still a student, the influence of his teacher Martin Knutzen[107] on the development of his thought life was great. Knutzen was philosophically bound to the Leibniz-Wolf tradition, but in the field of physics he was a supporter of the Newtonian tradition. In the early development of Kant, we can say that he knew Leibniz's and Newton's thoughts closely. We can show Wolff as the most important German philosopher between Kant and Leibniz. And before Kant dominates German philosophy, it is necessary to acknowledge that the Leibniz-Wolff school had a huge impact on German thinkers. Newton thought

[107] Paul Guyer, *Kant*, (Oxfordshire: Routledge, 2006), 17

expanded rapidly even if he was subjected to certain criticism all over the continent. Maupertuis from France is invited to the Berlin Royal Academy, founded by Frederick the Great. The Academy was opened with the aim of further recognition of the French Enlightenment on Prussian territory. As the president of the Academy Maupertuis, he defended the Newtonian tradition. Also Wolff has an interesting career. Maintaining Leibniz's philosophy, Wolff begins to rise first in his academic career. But Wolff, who was later accused of atheism, was sent from Prussian lands. Much later, Fichte will face a similar situation. Wolf carried out a polemic[108] on the opposition between Leibniz and Newton systems with an article he personally wrote in the official journal of the Royal Academy of St. Petersburg. A similar polemic was later arise by Euler[109] with a discussion on Monadology.

The texts created by Kant in the pre-critique period are not only philosophical but also scientific texts. In this sense, some of his writings have been included in the philosophical category and some of his writings in science. Of particular interest to these articles is the *Concerning The Ultimate Ground of The Differentiation of Directions in Space*. We can say that since the first writings of Kant, he was trying to combine Leibniz metaphysics and Newtonian physics in a certain sense, in other words, to make these two shed light on each other. Although Kant accepted Newton's philosophy of nature, he wanted to support it with a metaphysical foundation. In addition to his efforts to make metaphysics the philosophy of nature as a supporter of physics, he also made efforts to adapt the Newtonian method of physics to metaphysics in certain ways.

We have stated that Kant's teacher knows both Newton and Leibniz. Also experts thinks, Kant is probably read Leibniz-Clarke correspondence, although it is not certain. At that time, this correspondence was translated into German by Wolff and published with a foreword he added. If also the conflicts and polemics between Leibniz and Newton traditions at that time were taken into account, we can assume

[108] Michael Friedman, *Kant and the Exact Sciences*, (Massachusetts: Harvard University Press, 1998), 3
[109] Ibid., p. 4

that Kant had read this text when he was still young. In other words, when Kant was a student, he learned the thoughts of these two names in philosophy and science and witnessed certain discussions of his followers. On the other hand, even if Kant followed these two thinkers in a certain sense for a certain period of time, after a silence that lasted almost ten years, he has fully revealed his philosophical line with the Critique of Pure Reason. However in our matter, namely in time matter, Kant breaks off his connections with these two thinkers. On the other hand, however, it has some certain similarities.

Time interpretation of Kant's philosophy; is neither compatible with Leibniz's time interpretation nor with Newton's time interpretation. However, to add, although there are fundamental radical differences, they exist at the same points they are similar. The point where he opposes these two thoughts is; "they assume that time is a feature of things as they are in themselves, independently of our capacities to grasp them.[110]" Kant states that he overcame two different challenges arising from these positions, pointing to the traditions found before him (by name, the Newtonian tradition as "mathematical researchers of nature" and the "nature metaphysicists[111]"). After explaining his own understanding of time in the Transcendental Aesthetics section, he especially mentions these two traditions. Kant says: "on our theory of the true constitution of these two original forms of sensibility both difficulties are remedied.[112]" Kant deals with space and time originating from a priori and subject, and suggests that this "true constitution eliminates problems. We will go into the details of this below. First of all, I intend to express how they basically separate, and then touch upon their similarities. However, it is worth noting that similarity does not imply the use of a concept or principle in exactly the same way. For example, the ideality that Leibniz attributes to time continues in Kant's time vision. However, with the transcendental ideal it continues in a completely different sense and manner.

[110] Philip Turetzky, *Time*, (Oxfordshire: Routledge, 1998), 85
[111] A 39-40, B 56-57
[112] A 41, B 58

Kant rejects Newtonian absolute and mathematical time. Because how this absolute time will relate to events and objects in nature is a mystery. If we remember, Newton has an absolute and relative time distinction. Relative time is variable as something that depends on motion. Absolute time has its own independent existence and flows in full equality. If it had been otherwise, it would have to be included in the relative time. Kant never accepts absolute time. The philosophical system established by Kant was established in order not to accept such a definition. Because of the reasons we mentioned earlier, such a time cannot be experienced in any way, and therefore it is impossible for us to produce knowledge about it. However, while Kant's time is a subject-oriented thing, in Newton, time has its own independent existence. "Kant will argue that should time be a thing in itself all appearances would be mere illusions. We will not be able to distinguish empirically real objects from our subjective states.[113]" Considering that space and time are not caused by the subject, considering the objective realities, problems arise.

> Because two infinite things that are neither substances nor anything really inhering in substances must nevertheless be something existing, indeed the necessary condition of the existence of all things, which also remain even if all existing things are removed; then one cannot well blame the good Berkeley if he demotes bodies to mere illusion.[114]

Even if objects disappear for Kant, the existence of a time corresponds to the structure of time. But this is so only because time already exists from the subject. So when we do not consider the subject, we also remove the time itself. This situation for Kant, not because time is a unique entity. Kant states that, on the one hand, similar to Leibniz's criticism to Newton, he explains why space and time are not necessarily dependent object or from their own independent structure, but dependent subject. Just before Kant says these things, he begins to question whether time has something in itself. He does not in any way mention the concept of absolute

[113] Philip Turetzky, *Time*, (Oxfordshire: Routledge, 1998), 88
[114] B 70-71

time. In other words, he expresses what happens, if his own infinite space and time not dependent on the subject, but dependent to object. However, this criticism seems to be still quite suitable for the absolute time. If space and time were infinitely involved in things, they would be found even if there were no objects, since they would never, ever disappear. If these existences are remembered that they have to be considered in space and time, it will be understandable what is meant by the fact that everything is a necessary condition. What is not in space and time is not the object of possible experience. Despite the fact that there are two infinities as a necessary condition and time is in objects, when we think that time is eliminated over the finitude of objects, the concept of object are emptied. That's why Kant says that objects have become illusions.

As Leibniz also opposes, absolute time is not substance. Newton himself does not seem to regard it as a substance. Russell says for Newton, not about time matter but about as independent beings place; "admitted by Newton only because he was blind to its consequences.[115]" In a sense, we can express it for time. In the after the quote, Russell already mentions that Clarke is trying to make space and time the essence of God because he is aware of the consequences. So Newton did not see time as a substance, it would be wrong to assume that he had such sensitivity. However, if time is considered as self and infinite, the problems that Kant points to will arise. Kant also says for these problems; " they [Newton tradition] must assume two (space and time) eternal and infinite self-subsisting non-entities.[116]" Since absolute time does not depend on object and subject, it cannot be considered as existence, although it is said to be infinite. Such a situation is clearly a contradiction. On the other hand, Kant does not make substance philosophy, he only deals with this concept of speculative philosophy as a category. Substance situation not essentially a break from Newton, but it can be considered like symbolizes a break from Leibniz metaphysics.

[115] Bertrand Russell, *A Critical Exposition of the Philosophy of Leibniz*, (London: Routledge, 1992), 139
[116] A 39, B 56

If we remember, Newton had said that the time is not the things that are measured. For Kant time cannot be derived from experience, this is the same for Newton. However, as we mentioned earlier, Newton regards time as an independent entity. But Kant, attributes that argument to the subject, but not derived from experience. On the other hand, Kant's one and the same a priori time, and Newton's absolute mathematics time are similar in certain situations. Newton said that time was infinite, and when he said it, he also stated that time is emanent effect of God. In this sense, like Kant's time, Newton's time is infinite. Already he was frequently criticized for infinite time, because it is not a substance. Although they are similar, infinite time has different contents in these two thinkers. The ways of grasping the infinite time are also different in this regard. We have already mentioned Kant's understanding and Newton's understanding of infinite time. Also, for Kant, a temporality that can be said emanent effect of God has no meaning, because it cannot be known.

Kant's dispute with Leibniz first comes out of space. As mentioned in Prolegomena, exactly the same objects consisting of completely equal parts is incongruent. Kant speaks of equal parts taken from the south and north of the equator line. These two have a geometrically congruent. On the other hand, there is no such thing in nature. Kant gives simpler examples from everyday life. Kant says, "one hand's glove cannot be used on the other.[117]" He says all this in contrast to the fact that space and time are real things that are dealt with in relation to things in itself. The connection of this with Leibniz goes back even further to the article of Kant published in 1768, Concerning the Ultimate Ground of the Differentiation of Directions In Space. Here, Kant discovers that objects do not exist on their own. Rather, objects are in space where directions make a difference, but this space is not something derived from experience, only the structure of my own mind. However, Kant, who is disconnected from Leibniz in his understanding of space

[117] Immanuel Kant, *Gelecekte Bilim Olarak Ortaya Çıkabilecek Her Metafiziğe Prolegomena*, trans, İonna Kuçuradi ve Yusuf Örnek (Ankara: Türkiye Felsefe Kurumu, 2000), 35

and time, then uses that reasoning in this article against the dependence of space and time in them.

Kant says in the first article at the beginning of the Time section that “time is not an empirical concept that is somehow drawn from an experience.[118]” With this, at the very beginning, Leibniz's sense of time would be rejected. Leibniz was making time by abstracting from the relations of phenomena. Leibniz deduced time from the last of the three types of relations it showed through the L and M lines. The time that deduced from this relation was considered ideally. But for Kant, time cannot be handled in this way. Time is nothing more than the form of intuition as a priori. Kant agrees with Newton that time cannot be removed from the experience, and differs from Leibniz. This is not the successive relation that is not accepted by Kant, but it is the derivation of this succession from experience. Kant, as the character of the time, sees this succession as given in the subject as we often repeat. Time is not derived from experience, but is a ground for the experience. Also, what Leibniz said about the time in God's mind is also invalid for Kant. Because such a thing has no value as knowledge. This is the same thing as saying there is something. The main claim of Leibniz is that even if there is no object or even universe, space and time will be found as ideas in the mind of God. For Kant, "one can never represent that there is no space, though one can very well think that there are no objects to be encountered in it.[119]" In other words, Kant does not think, that when we eliminate objects and even when we think they are not exist, we eliminate the representations of space and time. When it comes to the time part, it uses a similar expression in this section as well; “time is therefore merely a subjective condition of our (human) intuition (...) and in itself, outside the subject, is nothing.[120]” Kant positively suggests that space and time are the intuition forms of the human reason and that these forms will be there even if we cannot think of

[118] A 31, B 46
[119] A 24, B 38
[120] A 35, B 51

objects. The ideas in God's mind have transformed into the intuition forms of the subject.

It seems, Leibniz's ideal time similar, Kant's time too "ideal". Kant has added this term to space and time, but assess them as transcendental ideal. Time has a double structure in the Kant philosophy; objectively real and transcendentally ideal. "With respect to appearances, time is real and judgments about time have objective validity. Yet with respect to things as they are apart from conditions of possible experience, time is merely an ideal condition of their possible cognition.[121]" Objectively reality does not create a problem. Because the mind always works with appearances, not with the thing in itself. In this regard, even when I say the objective reality of appearances, we do not point out of our minds. Transcendental ideal, always signifies the space and time in our minds that are about to be applied to the object. However, like as with Leibniz, there is no ideality removed from the experience. This is again an ideal originating from the mind's own structure. The transcendental concept, added to the front 'ideal' also emphasizes this.

2.4. Temporal Character of the Possibility of Experience and Triple Synthesis: The Production Ground of the Present

What has been said so far consists of what Kant told about time in the Transcendental Aesthetics section. However, the issue of time does not completely end in this section, and it appears in the Transcendental Logic section. This section is devoted to understanding in general. But addingly, also imagination is mentioned in some parts of section. Transcendental Logic in itself; It is divided into transcendental analytical and transcendental dialectical. Transcendental analytics explains what Kant calls transcendental logic against of general logic. However, Kant says that the general logic approach only the formal principles of

[121] Philip Turetzky, *Zaman*, trans., Mustafa Ç. Atmaca (İstanbul: Otonom Yayıncılık, 2020), 137

understanding, but the task of transcendental logic is to look at its content as well as its form. As these principles are not used as a canon but as an organon, they say that misuse of comprehension, "Schein", will arise. This type of use calls itself transcendental dialectics. And even Kant says, “it would be better to take this designation of "dialectic" as a critique of dialectical illusion.[122]"

These titles and chapters described above exceed both the subject and the horizon of our thesis. However, it is still impossible not to mention the triple synthesis of the possible experience in the matter of time. So while trying to open this issue to ourselves, it seems necessary to assign certain limits. In this regard, categories with pure concepts of understanding can be mentioned. However, it is impossible to talk about transcendental deduction, which is the most important and sensitive part of the categories. In fact, the positive and negative sides of this subject can be a thesis topic on its own with the effect of experience and knowledge. Discussed them after this assumption is the limit we draw to ourselves, which assumptions are with what right the categories will be applied to the experience and their being a priori.

In the second section of the On the Deduction of the Pure Concepts of the Understanding; namely in the On the A Priori Grounds For the Possibility of Experience, he tries to descend to the non empirical ground of possible experience, as the name suggests. Why is such a thing necessary and why is it included in the second part of the deduction? Kant says for categories, "it is already a sufficient deduction of them and justification of their objective validity if we can prove that by means of them alone an object can be thought.[123]" Categories are given in the understanding. Kant also wants to explain how this relation is possible, since the understanding is “a faculty of cognition that is to be related to objects.[124]" For this, he will try to show the transcendental origin of the possibility of experience. The empirical possibility of experience is nothing more than objects perceived by

[122] A 62, B 86
[123] A 96-97
[124] A 97

receptivity. So what is the transcendental ground? Kant calls this triple synthesis. We will examine the details later. Before proceeding to this, it was explained why this was included in the deduction section. A transcendental ground of the relation, established by the understanding with objects will be given in this section. In this context, this issue needs to be addressed. Our task in this section is to reveal the temporal character of the triple synthesis.

Triple synthesis is often addressed in a temporal perspective for those who interpret or explain the Kant's philosophy. There are justifiable reasons for this, as we will see soon. Before going on to this issue, I would like to briefly explain the parts of Kant's Transcendental Aesthetics section that time defines as inner sense. Because in the issue of triple synthesis, defining time as an inner sense is an important issue. While we were explaining Kant's time views before, we did not bring up every issue related to the time matter at once. For example, we did not process the time defined as transcendental ideal until the section where we will compare with Leibniz. Because we simply did not want to repeat too much. Therefore, we found it appropriate to open some definitions in the matter of time in later sections that may be related. In this regard, the handling of time as an inner sense will be discussed in this section.

What does time mean as the inner sense? This means "intuition of our self and our inner state.[125]" Space is defined as the outer sense and is related to things outside of us. It is the form of external things. In this sense, we can even think of our body according to the space form. But mind processes and the flow of consciousness can only be explained by the inner sense, not by this outer sense. In this respect, "space, as the pure form of all outer intuitions, is limited as an a priori condition merely to outer intuitions.[126]" However, time does not have such a limit as the form of the inner sense, it is the form of all appearances, whether external or not. Without the successive character I added to objects, we could never talk about change. There should be a successiveness rather than a simultaneousness, in

[125] A 33, B 49
[126] A 34, B 50

thought. Otherwise, even a series of numbers cannot be created in thought, for example. Because the mind would not be able to perceive successive continuity in this series of numbers. Then time is the form of "all representations" as the inner sense, both regarding our inner state and the objects outside of us.

We have stated that the triple synthesis is discussed with time. This is so because it defines a successive character. More precisely, it is the expression of our ability to be conscious of this successiveness. Kant said, "if every individual representation were entirely foreign to the other, as it were isolated and separated from it, then there would never arise anything like cognition.[127]" In a sense, there should be a connection between the previous represent and the next represent. In this sense, a temporal character, successive consciousness is required. While entering this matter, Kant has a reminder that we can call famous specific to this episode. This is a reminder of the time as an inner sense.

> Wherever our representations may arise, whether through the influence of external things or as the effect of inner causes, whether they have originated a priori or empirically as appearances - as modifications of the mind they nevertheless belong to inner sense, and as such all of our cognitions are in the end subjected to the formal condition of inner sense, namely time, as that in which they must all be ordered, connected, and brought into relations.[128]

It must be this quote, which allows the triple synthesis to be explained by associating it with time. As we mentioned earlier, time is the condition of all representations as an inner sense. By expressing this, Kant reveals this connection at the beginning of the first synthesis. Now, first of all, it should be remembered that this triple synthesis is the transcendental possibility of experience. But what does this mean? We said that the empirical possibility of experience is possible with objects. In this sense, intuition forms come into play. However, there is no activity of understanding yet in this process. In other words, objects should be considered before falling under the categories. If there is only the experience as being a

[127] A 97
[128] A 98- 99

receptivity, it is necessary to approach this without adding anything from understanding. For example, it cannot be said that “all people are mortal”. Because there is only a lot of people. This may seem a little strange and meaningless at first, because we often do not attempt to remove what the understanding adds to the experience. But what we will understand in the end is that we cannot say anything about the object. But this is so unless there is a deeply functioning structure as a priori and transcendentally in the possibility of experience. It is through the transcendental possibility of experience that we can distinguish the 'now's, we can carry what has been experienced before to the now, and we can be fully aware of them.

Triple synthesis, by names; "synthesis of apprehension in the intuition", "synthesis of reproduction in the imagination" and "synthesis of recognition in the concept[129]”. First, there is a manifold in experience only and such that, “if the mind did not distinguish the time in the succession of impressions on one another[130]”, this manifold would never even emerged. In other words, in order for there to be a manifold of representations, the succession of time must be assumed transcendentally. Kant states that in this first synthesis, this manifold was brought together. In order to get a meaningful experience, if we consider the example we have given before, in order to say that all people are mortal, we must pass through manifold of people as impressions are completely and after that ultimately put together. “Now in order for unity of intuition to come from this manifold (as, say, in the representation of space), it is necessary first to run through and then to take together this manifoldness, which action I call the synthesis of apprehension.[131]” Thus, firstly, a unity is obtained from the manifold of representations. In a sense, we can think of it as a photo frame. Let's face a crowd of people and people with hundreds of faces or thousands of people, with the camera we travel all over those faces and people. However, let's imagine that in the end we only focus our machine

[129] Hasan Bülent Gözkan, *Kant’ın Şemsiyesi Kant’ın Teorik Felsefesi Üzerine Yazılar*, (İstanbul: Yapı Kredi Yayınları, 2018), 56-7. Fort the Turkish mean I use this book.
[130] A 99
[131] A 99

on a face or a person and take it to our perspective. The manifold of human representation, which is first in experience, are united. With this, in judgment "all people are mortal", we obtain the 'human' as an object. But what is the temporal meaning of this? As we have often mentioned, we attributed a character of temporality to triple synthesis. In this first synthesis, time shows itself as the present time. A single photo frame is nothing more than a single moment. Heidegger explains this situation through the separation of time. If the succession in time is distinguished, "the mind must constantly and in advance say "now and now and now.[132]"" It means to differentiate the time, "distinguishing the now's[133]" to pass through the manifold of impressions and take them as a unity. So with the synthesis of the first synthesis of apprehension, we get the present in time. This first step is very important in the second synthesis.

Many objects encountered in the experience can appear in many different ways. Kant gives many examples of this, one of which is on the longest day there may exist fruits or may be covered with snow and ice. As can be understood now, an object is dealt with at different times. For this, always now's succession is required. So the first step of the synthesis is required. Kant questions the conditions under which empirical imagination can revive different states of the object obtained at different times. Indeed, the object may appear in different ways between nows. Objects can be encountered in one or another color, one or another size, and many more imaginable ways. We can think of the famous wax[134] example of Descartes's, the wax is solid for a moment and liquid for a moment. In the sensation itself, it just seems to point to two different objects. Now, even if it is under these different shapes, there must be a way for me to represent the object as that object I represent earlier. Without this path or principle, Kant says, "for without that our empirical

[132] Martin Heidegger, *Kant and the Problem of Metaphysics*, trans., James J. Churchill (Bloomington: Indiana University Press, 1965), 184
[133] Ibid., p. 185
[134] Rene Descartes, *Meditasyonlar Metafizik Üzerine Düşünceler*, trans., Çiğdem Dürüşken (İstanbul: Alfa Yayınları, 2017), 41

imagination would never get to do anything suitable to its capacity.[135]" And so we even could not be aware of imagination.

If there is one thing that is clear now, it is the imperative that these objects can be reproduced in experience. Because we can represent this or that object now compared to its previous versions. For now, there must be an "a priori ground of a necessary synthetic unity[136]" of the reproduction of this manifold of objects. What is meant by this is that the manifold of the object is brought together and this cannot be due to experience. Kant expresses that when our representations are "in the end come down to determinations of the inner sense[137]", the matter becomes clear. This is the second synthesis, that is, synthesis of reproduction in the imagination, similar process takes place. It is available as a priori as it cannot be derived from experience. Kant calls this synthesis the "grounds even the possibility of all experience.[138]"

In the movie *Memento* (2000), the character Leonard has an interesting disease. It cannot make long term transitions in its memory, it completely forgets the distant past. Since Leonard knows that he will forget the present in the future, he notes everything he experiences. If we put aside the reproduction in the imagination, our situation in experience will be quite similar to the character in this film. I would have forgotten an object I just represented now at another now. To explain Kant's own example, when I "draw a line in thought[139]", if I cannot keep all the manifold of this line at once, "the first parts of the line[140]" disappear in thought. In this sense, we cannot even be aware of what we are drawing. Through this second synthesis, the previously represented object can be brought into the mind even if we do not experience it later. And it is only with this synthesis that we can have a full experience of objects on the successive temporal plane.

[135] A 100
[136] A 101
[137] A 101
[138] A 101
[139] A 102
[140] A 102

The synthesis of apprehension in the intuition and the synthesis of reproduction in the imagination is inseparably combined. We can never switch to the second without the first synthesis. First needed a now, a first element is needed so far, and with this only an 'earlier' is possible. “In this way the present can be added to the past, the past preserved in the present, and both thought jointly.[141]” So what is the temporal meaning of this second synthesis? With the first synthesis, 'now' appeared. With this second synthesis, past time emerges. What has been experienced before is now "retention[142]", as Heidegger put it, and can still be moved to present again.

Here I want to draw attention to a similarity before proceeding to the third synthesis. A position similar to the two syntheses that Kant described was shared by Augustinus centuries ago. Augustinus said that only the present may exist at the time. And, however, the past was constantly being brought to present. However, even if there is a similarity, Augustinus believes that God created time as the basis of his view of time. In this way, they are separated with Kant. And further on, Augustinus thought about how these times we used in language could exist. However, Kant deduced these time characters by thinking how a meaningful experience could exist. It can be said that subjectivity in time is common to two philosophers with certain differences. This must of course be a separate research topic.

The third synthesis seems to be built on the full possibility of the first two syntheses mentioned. The longest narrated section among these three is also the synthesis of recognition in the concept. In fact, the essence of the matter is quite simple. Our self in the experience, is in a state of constant change. This seems to be affected by experience in its various states. However, on the other hand, isn't it necessary for an 'I' to be unaffected by experience and may even be a priori to experience? Kant enters the matter very quickly from the first sentence.

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[141] Ernst Cassirer, *Kant'ın Yaşamı ve Öğretisi*, trans., Doğan Özlem (İstanbul: İnkılap Kitabevi Yayınları, 1996), 209

[142] Martin Heidegger, *Kant and the Problem of Metaphysics*, trans., James J. Churchill (Bloomington: Indiana University Press, 1965), 186

> WIthout consciousness that that which we think is the very same as what we thought a moment before, all reproduction in the series of representations would be in vain. For it would be a new representation in our current state, which would not belong at all to the act through which it had been gradually generated, and its manifold would never constitute a whole, since it would lack the unity that only consciousness can obtain for it.[143]

The two syntheses previously must take place in one and the same consciousness. For example, let's imagine that we watch a large building, a pyramid very closely. Our perception can never perceive it as a whole, because we are very close to such a big thing. Therefore, our eyes observe the building, between its parts or floors. For example, we begin to observe the pyramid from right to left or from bottom to top. However, if the consciousness I was looking at right and the consciousness I was looking at left or below and above had changed during this look, there would be no point in what I had previously seen in time. It will be like looking at the pyramid's in the middle, wherever my vision is turned, the beginning of my gaze will also be there. So it is necessary to say that consciousness is one and the same consciousness while looking at this pyramid. "The word "concept" itself could already lead us to this remark.[144]" This is the indication of being conscious of the unity of the representation that is constantly reproduced. However, Kant often adds that this consciousness is "may often only be weak.[145]" The only underlying consciousness for me to realize this experience is. We don't realize it most of the time, we are so used to it that we have to think to realize how experience is possible for us to realize. And addingly, there is no experience for this consciousness. It can not be experienced for us but Kant assumes this consciousness.

Now, what does the synthesis of recognition in the concept mean temporally? The answer to this is essentially difficult. In fact, it may be more useful to remain silent about this part. Because, as in the first two syntheses, it seems that a temporal character does not occur. It is quite difficult to raise a temporality that

[143] A 103
[144] A 103
[145] A 103

can be easily removed from Kant's own words, as in the first two syntheses. It is mostly explained by the constant awareness of these temporal characters. There seems to be no temporal character here. Heidegger thinks this third synthesis indicates the future[146]. We do not intend to go into the details of Heidegger's comment here. It seems very difficult to clearly deduce a time character from Kant's own expressions. However, we can see that the synthesis of reproduction needs the synthesis of recognition in the concept. Perhaps this situation can give us a clue. Now imagination and reproduction would have been completely dysfunctional if it lacked a consciousness to unite them. We mentioned this above. So the most important feature of this consciousness is that it applies to both 'now' and 'not now'. When it is necessary to take oppose 'Now', only 'not now' can be taken rather than past or future. The third synthesis can be said to be the possibility of both now and not now. So is a situation similar to what we said for infinite time in aesthetics not valid here? Infinite time did not mean anything other than the possibility of finite times. Synthesis of recognition in the concept is like the possibility of not now and now with a single consciousness that it presents. It can be put forward by the synthesis of reproduction in the imagination, something that is not now. However, the validity of this depends on the synthesis of recognition in the concept.

[146] Martin Heidegger, *Kant and the Problem of Metaphysics*, trans., James J. Churchill (Bloomington: Indiana University Press, 1965), 191

CONCLUSION

Our aim in this study was to show how time was constructed in Kant's Critique of Pure Reason. I think that I have done this thoroughly by examining the Transcendental Aesthetics section and looking at the triple synthesis. But I have to mention that we are not looking at Kant's transcendental schema. The reason we don't look at this is because it is linked to categories. We did not process this issue because we thought it would be useful to enter the schema issue after the categories were fully opened and explained. We wanted to show how and where Kant's time views come from. In this sense, it was necessary to take a look at the time views of Leibniz and Newton. In the first part, we discussed this task. And, of course, we have compared Kantian time with the absolute and the ideal time. We tried to identify where there is continuity and where there is separation.

It must be said that Kant takes a separate place with all that he said about time. He set the limit of knowledge by turning space and time into the limit of knowledge. Aristotle's understanding of time was for example with movement. It was up to him to be the number of the movement. Augustinus, on the other hand, spoke of a time created by God ultimately, even though he caught a subjective side in time. In this context, time depends on another principle. Newton is actually removing this bond by completely removing time from nature. However, it is not clear how the absolute time will work in the experience. Leibniz takes time as an ideal abstracting by relations. He also ties the time to another principle by saying in the mind of God. But what does Kant's time depend on? Kant places the time in a completely different position by deriving the time from the subject. Time no longer emerges as something that adheres to other principles and principles as before. "Time no longer bows to anything that is happening in it; on the contrary, everything external it will bow to time. Even God himself is no more than a empty

time.[147]'' Time has become more inclusive rather than covered. In this way, we can say that our approach to time has undergone a fundamental transformation.

Kant's view of space and time, on the other hand, brings the limit of knowledge as we mentioned earlier. If the things that can be experienced are only phenomena, and if the phenomena exist according to space and time, the knowledge has its own limit. Thus, Kant breaks away from traditional metaphysics with his views of space and time. In fact, this would transform the philosophy after that. The interesting thing is that there are some preliminary assumptions that are sometimes seen as metaphysics in physics. In such a situation, it is often seen as legitimate as long as it is in the light of the progress of science. For example, as we have said many times, the absolute time impossible to experience.

Newtonian physics has done a pretty good job calculating the movements of the planets for a long time. However, even if it was very small, there were some faulty and somewhat inconsistent results. For example, the route of the Mercury planet could not be calculated correctly with Newtonian physics. In order to make this calculation correctly, Einstein's general theory of relativity was necessary.

The inability of the planet to calculate its accuracy must have attracted the attention of physicists. Newton was a very important figure for physicists and it would be a great honor to solve this problem that even he could not calculate with full accuracy. The solution to this, is to pass through not to think of space and time as absolute. Space and time are bending.

Einstein has shown that time will flow slower compare to speed if it is reached with a speed close to the speed of light in a certain direction with the special theory of relativity. The higher the speed, the slower the time. As we mentioned before, he says that space is also bending. And, in fact, it was observed and calculated by the astronomers.

[147] Gilles Deleuze, *Kant Üzerine Dört Ders*, trans., Talat Kılıç (İstanbul: Kabalcı Yayıncılık, 2015), 56

Given that the space is bending, a complete calculation of the motion of the planets becomes available. It seems difficult to grasp such a thing. But if we recall the example we gave earlier, the sun has an incredible mass, bending the space around it. What does it mean to bend? That seemed empty to us, not included in the sun but the area around it, just like collapses to some bottom. Therefore, the light from around is bended. Of course, since it is impossible to see the light coming from around the sun, only through a solar eclipse can it be proved when the stars behind the sun are visible.

With Einstein, space time and object gained a different meaning. So, what is the place of Kant's views of space and time in all this? Is it necessary to say that Kant's time views are wasted? Is it completely invalid now? Because, as can be seen, it turns out that with Einstein, the time has a reality in nature. It even seems to be related to speed. So we have to say that Kant was wrong by not taking space and time as real things[148]. But still does that mean that he was completely wrong?

Even if their realities in nature are accepted in the matter of space and time, shouldn't a mind perceive it in that format? So what I mean is, shouldn't successiveness and simultaneity be processed into consciousness despite all this? If a person is not experienced his experience according to this law, how can we derive a meaningful experience from it?

Probably it is unusual to ask so many questions in the conclusion section. I think that equal importance should be attached to the objective and subjective sides of the space and time problem. Because, as can be seen in the triple synthesis section, if I lost the object I retain at the previous moment as it passes to the next moment, it will be impossible to be aware of any time.

Now, we can say that the subjective aspect of the time issue has been described in some way by Kant. There may be objections or criticism. It can happen

[148] Theodor W. Adorno, *Kant's Critique of Pure Reason*, trans., Rodney Livingstone (California: Stanford University Press, 2001), 232

to those who fully refuse or develop. However, the only undeniable fact is that he has created an incredible way in philosophy with these comments.

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