

Historical perspective

-History is reflections of past, present and future-

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History is not a mere list of past events. It is historian who takes up and explains historical fact. Therefore, the fact cannot not be completely objective but contains some subjective element, contemporary historian's perspective. And it reflects historian's future vision too. Historical fact is an image that emerges in the reflection of past, present and future. Here is a philosophical thought to suggest a new perspective to see "active history".

1 History made by historians

Is historical fact knowable?

At dawn of July 2nd, 1582, Mitsuhide Akechi attacked his master, Nobunaga Oda, at Honnoji temple in Kyoto Shijo. Nobunaga who was only with a small number of guards decided to end his life by himself. Nobunaga's enterprise of unifying Japan was very close to completions at the time, and his death caused a great confusion in Japan's political situation. This event is called "Honnoji Incident". In the night, all of his generals were away from Keiki (the region where Kyoto capital is located), and Mitsuhide who had been ordered to proceed Shikoku found it an opportunity to take over and turned back to Kyoto. It is said that , getting informed Mitsuhide's revolt, Nobunaga only said "very well", and after some attempts to defend, he committed suicide in the burning temple.

But is all this true? The deeds of Nobunaga and Mitsuhide and Honnoji Incident are recorded in the biography of Nobunaga, *Shincho Koki*. But we shouldn't trust everything described in the biography, because it certainly contains some embroideries and interpretations by the author. The author must not have seen everything by himself. Even if there were any first-hand reports made by those who actually witnessed and experienced on the spot, in a confusion, there must have been some different versions. Not to mention, later writings about the incident must include author's intension, thus are much less trustworthy. As for Honnoji Incident, there exist

many documents today, such as a letter that a feudal lord wrote just before the incident. However, it is still a question that if we could really reproduce the true image of the incident from these materials. Because in written material, author's thought is always included.

In the present day, no one has met Nobunaga or Mitsuhide. In fact, it is impossible for us to know what Honnoji Incident was truly like. Excavation work at the location of Honnoji temple have found only a trace of fire. The incident itself does not exist anymore.

History is made up with many events. One event occurs as a result of another event. It doesn't stay still. It just comes and goes. It just passes by and never comes back again. So, we cannot see or hear historical event directly.

Past is a time that is already gone, and historical fact doesn't exist anymore. We never get absolute truth of the past. There is no way to know what past people had in mind. Their motivation, feeling, intention, purpose. All we can do is to imagine from the trace of the past. We can learn history only from traces such as record and someone's commentary. Just as physicists assume the existence of particles from the trajectory shown on the nuclear plate, historians have no other means to know about historical facts than assuming it from whatever material on hand. There is a bigger gap between historians and historical fact than between visitors and an artifact in the glass case at museum. Not allowed to touch the subject directly, is historian's destined course in their professional career.

Historical objects including records and testimonies existing today should tell historian something about the truth. However, even a testimony by someone who experienced the event by himself, cannot be free from such things as simple mistake, wrong memory, personal intention, self-centered interpretation, self-defense, and so forth, whether it was intended or not. Also, because one's sight is limited, a commentary always includes hearsays. It means it always contains some second hand information. Historical records and materials, too, often include accounts and interpretations that cannot be prove as truth. In this process, historical fact gradually changes its appearance.

As a proverb goes "a lie well stuck to is as good as the truth", inaccurate information, if it sounds likely and meets people's wish, is often believed and accepted as truth. If it accords with the public opinion, even wrong information gets public support and makes its way.

Evidence of the event would be found somewhere, but to make it the evidence to prove that the event happened the way it is thought to have, there needs a common

notion about the event. And this common notion is often something formed rather circumstantially in later time, not directly from the event. Even if we knew what Mitsuhide actually said, to believe it as an evidence of his treachery, there needs to be a notion that he cheated on Nobunaga. Without it, Mitsuhide's action would be seen as a mere logical move of samurai in Sengoku period.

History limits historical records

The meaning of the term "history" includes not only historical event but also to record it. We can learn about historical fact, through materials such as official document, biography, letter, diary, note, inscription, left by those who lived the time. But in many cases, how much of the contents in these materials is true is unknown, because written materials inevitably come with some mistakes and ambiguous parts. So, the historical fact reproduced from them, too, ends up being ambiguous.

Also, we need to be aware that materials available today are only a tiny part of enormous amounts of document ever recorded, most of them having been missing or lost. And in case there is no remaining record, the historical fact could be treated as if it never happened. So, records are the only way for historical fact to be recognized. Also, interestingly, it is history itself who decides if an event is to be recorded or not. Historical material represents history, and at the same time it is limited by history. History is represented by such limited records.

For example, in archeological study, stone and metal objects are commonly discovered, but organic objects are rare. And because of this, it is possible that our knowledge about pre-historic time could be biased. Even in recorded time, ancient Rome, for instance, the ruin of Pompei was luckily preserved under the ash of Mt. Vesuvio, but almost all the valuable manuscripts in the great library of Alexandria had been lost during Caesar's conquest and in other occasions. If it had been the manuscripts in Alexandria that had survived, our knowledge about ancient Roma would have been greatly different from that we have today. Some historical materials are destined to be preserved and some to be lost in the course of history, and, naturally, the appearance of reproduced history is heavily affected by the survived materials. We never be able to guess what will be lost or survive, because it happens in most part by chance. The image of history we have today could be far from it really was.

Generally speaking, in documents they recorded only things they think would deserve. So, they reflect subjective view. They focus only on big events such as war and insurgence, and don't care much about daily things. For example, in Chinese history book, we often find accounts of nomads who attacked China and battles against them,

but the fact was seldom mentioned that there was also active trading relationship between them. Because of this, if we describe nomads only with accounts from Chinese records, the image will be very wrong, emphasizing only nomad's aggressive side. Same thing would happen if we try to describe modern society only with main articles from newspaper.

In addition, as a matter of fact, many false histories have been recorded throughout ancient, medieval and pre-modern world. Even today, we hear about false property certificate or fake family tree. Whether they were made intentionally or not, these documents have element of personal claim or self-justification in it. History is not always guaranteed by written records. Record is relics of history. Remaining record doesn't show us the whole picture of history. History and record of it don't match neatly each other.

Selection and interpretation of fact

Although history consists of numerous facts, historian cannot mention all of them. So, in order to make a comprehensive image of certain period or event, they pick up only necessary elements from the sea of facts and ignore the rest. It means that the history that we learn today, though based on truth, was made by historian who make the selection. How the selection is made affects how the history appears. Often historian present a different image of a period and event from others, or give it an opposite judgement. Also, historical materials have already passed thorough this selection. Even a record by someone involved in the event and who saw it happening right in front of them, selection of fact by them occurs. From the pile of such materials, historians pick up appropriate ones to produce their own history.

In this case, historian first chooses a subject, then fix a range to cover, and select appropriate materials to write about it. It is just like an insect on a leaf looking not the whole plant but only at the point it is eating. We see only things that are visible and we are interested too. In the same way, historian pays a great attention to certain things but tend to ignore things that he thinks not so important. Here, unconscious selection is occurring caused by the limitation of sight.

There is another unconscious selection caused by the degree of focus. Microscope enables us to see the microworld but it narrows our sight and we don't get broad view. Similarly, when historian is taking short-sighted view, he can't grasp the whole image of historical event. That means he is automatically limiting information. And if he takes a broad view, like a painter stepping back to see the whole canvas, he would lose details instead.

Historian discriminates important information and not important ones, following his own measure. In this selection his subjective view inevitably interferes. Also, the place where he looks for suitable material is chosen by historian. As we see here, the choice of information source is entirely left to historian too. And he chooses them with his own notion and historical view and sometimes even with ideology.

Newspaper companies do the same, evaluating topics to make up their pages. This is the reason why different newspaper often put different news on the top page. It certainly affects reader's impression on the news. It is well known that the same news could be treated totally differently in democratic countries and in socialist countries. History is treated exactly in the same way. Past event is taken up by historian who gives it a meaning and tell people about it. That is what historians do. Fact alone doesn't tell anything.

History is not just a chronical list of incidents or a pile of encyclopedic knowledge. Historian sorts and rearrange information in a logical flow. In this process, the historian's own interpretation is certainly involved in this process, and when this work is used by other historian, further subjective editing is to be added. This continuous editing of history occurs routinely, and like children's telephone message game, after some centuries the impression we get from the history could be totally different from that of the original. It is common for a historical fact adopts mythical quality over years.

Historian tries to reproduce the image of a past event that he hasn't been involved by deducing fact with remaining information. Therefore, the reproduced fact is not a simple description told by someone who saw the event taking place, but a deduction by the historian. Discovered object at archeological site means nothing by itself. What makes the object a valuable evidence is a story in which it plays an important role. And how this just excavated piece of human bone is explained depends on the story. It could have been buried in funeral, sacrifice to the god, dead warrior, etc. Also, behind the story are readers and writers too. Their interests are taken in consideration in the process of developing the story. History has audience. So, their interest, too, could be the reason for adding editing to history.

As they say "Dead men don't tell a tale", we can say whatever we like about the past that doesn't exist anymore. Dead people can't complain, and living people actually make up a lot of stories about them, and often history is deformed, changed and re-written on purpose. Benedetto Croce allegedly described such histories as poetic, debating, materialistic or consequential, meaning simply fake.

It's true that since the 19th century, historical study showed a great progress with

positivism which encourages historians to devote themselves only in seeking for the truth and tell only the true history. It was believed that the truth of the past is obtained by accepting historical facts literary and writing them down without any preconceptions. However, historical fact is someone's commentary on an event from the very first place, which has been told by people for generations until today. So, the notion of absolute truth existing today sounds a bit too naive.

19th century famous German historian, Leopold von Ranke, who was one of the leading positivists, believed that it is possible to obtain a pure image of the past by strictly verifying historical material, and he persisted on his ideal that was to let the fact tells its story and to drop all the writer's egos. However, even Ranke's own work is now considered to have failed to be free from the general view on European history in the 19th century and his own principle as Royalist. Like this, the positivist principle on history that the truth of the past can be obtained through verifying historical material, is doubtful.

No matter how hard one reads it open-mindedly, making himself invisible, historical materials won't show the image of truth like a mirror. As a rule, all of them have in it, perversion, deformation or adaptation, whether or not. Verification of its authenticity and reliability is necessary as positivists insist, but it is historian after all who decides how far it should be done. Historian comes up with various interpretations from historical material based on their views on history. One material could be read in many different ways. Historical fact is born from these interpretations and views. It is historian, not material itself, who decides value and meaning of the material.

In fact, history is not telling us about the past. Because the selection of fact is done based on the present-day standard, so, in different times with different values, what is important changes. The selection is always done in accordance with the interest of people of the time. History is a record of people's interest at a certain time and it will be re-written in the time coming next. Historical writing is moving along with history. History excels historical writing.

2 Encounter of subject and object

Universal aspect in history

In historical study, based on historical fact, unique aspects of each event are described. Like in philosophy, lining up only general information doesn't make history. To present an image with its distinctive character is important. But just piling up

detailed information is not enough to establish a historical view. To tell history means to tell a universal sense through an event, even a small one. For example, when telling the story of Honnoji Incident thoroughly from the social background to facts collected from various materials, naturally universal aspects are found such as coincidence or decision making, or reasoning or social change. Even in the most personal and specific historical writing, some universal views are included. Writings without universal aspect are mere reading materials for knowledge seekers. Historical study needs to go beyond it.

Historian extracts a general element of historical fact by making hypothesis with traces of incident found among many records and sorting those collected information. And historian's view is involved in this process. He is required to describe individual matters and also universal views in their writing. Historical writing needs some general criticisms included, being honest and objective to what the material tells us. Only when it is generalized, the writing can be a historical material that we can learn something from. Highly regarded historical writings do not only provide readers with detailed information of the time but also with the essence of human nature. Such writings as Thucydides' writings on history, Carl Burckhardt's *The Civilization of the Renaissance in Italy*, Johan Huizinga's *The Autumn of the Middle Ages* are considered master piece, because of its universal quality.

As Croce points out, universal perception and individual perception are not separable. Because universality manifests in individuality. The role of historical study is to find universal aspect in an event that occurred with no visible context, or to find a general character from something that seems unique. Individuality is the very place to find universality.

History and Causality

When extracting universal aspect from individual matters, or general aspect from uniqueness, historian categorizes related matters as the first step. Putting all the related events in order, and translates it to an explanation. In other word, historical explanation is made by connecting up related events in a logical order. The most challenging part of this is to find a line of causality among numerous events happening in different scales and to grasp a meaning in it. It is true that causality is a method commonly used in science to understand a subject. If historical study was science, it is science that deals with historical matters with causality.

Historical event occurs at the point where many causes meet. Historical world consists of both timely and spaciouly infinite chain of individual matters and possible

causalities are also infinite. There, countless causes of any type get connected and form a new causality, and causality itself connects to other causality. Because of this, in reality, it is impossible to mention all the related matters to explain the cause of an event, even though explaining all the causes and relations of every historical incident is the ultimate goal of historical study. So, in historical study infinite causality is ignored, and an occurrence of historical event is explained by arranging only important causes in a logical order.

Even after compromising the range of description to avoid to get lost in infinite system of history, the subject he is dealing with are complex and elusive. For a historical event to occur, there are various reasons. The reason comes both from outside and inside, close and far. There is no fixed rule on how far the historian goes to seek for the origin of an event, and which reason he regards as the direct cause of the event is up to him.

If he sets the origin too near, it wouldn't be enough to explain the whole event, on the other hand, if it is set too far, the causality would be too weak. For example, to explain Nobunaga's death at Honnoji, it would not be sufficient to say it was because he didn't have enough troops for defense. But if it is the weakening grip of Muromachi government after Onin war, it seems to be missing the core idea of the incident. Today, many historians seem to be content by taking up reasons that are in the middle range.

The decision that from what angle to see the event and how much certainty to give to the reasoning are all left to historians. Although their mission is to pursue the truth of historical event, each historian has freedom of choice, so their view on history has a vital effect on their work. They have their own measures to define the causality of an event. The cause of historical event totally depends on historian's view. Some historians take psychological approach onto people involved and others focus on social and economic circumstance. Certain material could be a cause or cultural explanation also possible. Historian can find many causes for a matter of event and thus create many different stories. History is made by historians.

When historian suggests the causality of a historical event, the readers would naturally believe that it had happened that way. Indeed, he describes the event as if it was the only result in the circumstance at the time. But it is only a hindsight and there is no way for us whether there were other possibilities or not. Historian is in the position of knowing the result of something happened in past, and he just looks for a possible reason that explains the result. Something occurs as a result of a cause, but in historical study, this course is traced the other way round, starting from the result toward the cause. So, wherever it ends up is the cause of an event. In a way, a result

produces its cause. Without a result, historians can't find a cause.

Actual history has many possibilities of turning to different directions at any moment. There is no law to produce a regular result. The method of explaining historical event with causality is based on hindsight knowledge, and it is only an observation from outside, being away from an action. Since history principally moves without reason nor clue as to which direction to go, it is always uncertain if a historical action was taken as explained with logical causality by historian afterward. In some cases, historical event loses its charm the moment it is given a logical explanation. Although we habitually think that one thing is caused by something that happened before it, when we see a historical action from inside, it doesn't necessarily to be always logical.

For the person who is making an action, the future is uncertain and unpredictable. Causality doesn't work in a coincidental and unpredictable world. To make causality effective in such place, all the coincidental elements have to be removed from history. Also, it would make it impossible to describe unique aspect of each event, which will spoil historical study itself. When coincidence is taken into consideration, the attempt to sort the chain of historical events with causality has to fail.

History produces many results from many causes. So, it is useless to try to reduce history into a simple cause. An historical event cannot be explained with one simple reason. That means to ignore all the other possibilities of both its causes and results. There is on one-on-one matching in history.

Because of this, historians, when they explain a big subject, tend to suggest some causes as an explanation. For example, historians explain the cause for the WW1 with causally consisting of three events; development and falling down of Imperialism, rising tension in Balkan peninsula and the assassination of the Austrian prince. However, because a chain of events has always a chance to be cut by unexpected event, even when suggesting more than two causes in explanation, there could be found no definite causality.

Hypothesis and historical view

Standing away from the actual historical event, historian can look at it with no physical limitation and he even has a privilege to control the time and place concerning to the event. Because they already know what result the event would cause and even what those who involved didn't know, he can think about the matter with things that were temporally and spatially apart.

However, history is a dynamic system of entangled great many happenings that react

against each other to produce new event one after another. So, strictly speaking, to explain one event, all the related events need to be explained. Therefore, maybe historian has advantages, but in reality, it is impossible to draw a perfect description of a historical event.

Historian sorts out the complicated ingredient of historical facts with such method as causality, picks up meaningful facts from which he selects only logically explainable part and puts it into a mold. Historian simplifies history in this way, and the outcome is a temporally and spatially reduced version of it. So, obviously there is a huge gap between the true history and the history described by historian. Just like representing a beautiful woman with skeleton, abstract image like this is very different from reality.

When historian reproduces a historical event from whatever material available today; manuscripts, inscriptions or archeological discoveries, they first need to develop hypothesis. And based on the hypothesis, they extract appropriate evidences out of random facts in materials. In other word, the choice of evidence depends on the hypothesis he has in his head. Historical study cannot stand without hypothesis. Historical writing is made by rearranging facts picked up along with hypothesis. Simplification and abstraction of history, too, are done following hypothesis. Of course, when errors are found, the hypothesis will be revised. But still historical study is processed following a hypothesis made by historians in the beginning.

In fact, when historian goes into the sea of material to look for a fact, he already has sort of pre-hypothesis, an assumption of what they want to prove. Old manuscripts or other materials itself are just objects. They don't respond us unless we work on them with the assumption. To find a truth, one must have a guideline.

Historian makes his academic writings through the process of evaluating facts based on a certain perspective and rearranging them. He establishes historical perception by fitting the subject into his historical view, just as painter creates a painting, appropriating ideas from other paintings or abstracting them. There are thousands of paintings of rose painted in completely different ways by various artists. Since historians, too, arrange history based on their views, the same subject could be described in different ways.

In this respect, historian depends on their view on the world and life in describing history. This is why historical writing is defined by the author's historical view at the bottom. Their historical view produces writings and ultimately produces historical fact. If so, depending on how it is described, Honnoji incident happened not only once but many times.

Uncertainty principle of history

A historian is facing a pile of historical materials which consist of random records, objects and relics. These things are not history by itself but mere sediments of it. Nothing perfect there, so one can make up meaning out of it. What meaning to scoop up from this pile depends on discretion. Historian's perspective defines the look of outcome.

Circle Limit IV by M.C. Escher who is famous for illusionistic graphic works, is an image which looks like either angels or devils dancing in a circle. It is one diagram that shows two different images. When we see angels, devils disappear in the background, and when devils are visible angels go invisible. They never come visible together in the diagram. History, too, so to speak, is like angels and devils in the Escher's diagram, a layer of multiple images. It could be observed both as angel and devil. Many of historical disputes have been caused by this nature.

In quantum physics, electrons and lights are perceived as both wave and particle in the micro world, and in the state of two different nature co-existing, phenomenon can be explained in two ways. To resolve this confusion and get a static image of the micro world, one has to focus on one side. Whether seeing it wave or particle depends on the observer.

In the same way, historical facts come up or fade out depending on how historian sees them. A fact does not exist from the beginning but it is something emerging when historian observes from his viewpoint. In this regard, the perception of history is only hypothetical.

The scientific positivist approach in the 19th century is also a hypothetical perception on the subject. Positivism is based on the scientific rationalism in the modern era that believes independently existing solid fact. But, since history is by nature always absurd and inconsistent, if it is seen through rationalistic view, it would be severely reduced to mere flat description. Still, it is uncertain if history is being changed by historian.

As Thomas Kuhn argued in his *The Structure of Scientific Revolutions*, even in the modern natural science a paradigm shift occurs in the view of the nature that dramatically changes how people see the nature, and by which the nature itself is affected all together. For example, while Ptolemy's geocentrism was believed, all the solar activities were explained in this theory. In fact, the explanation on the orbit of planets based on geocentrism was highly developed. But the introduction of sun-centrism by Copernicus, having proved to be able to explain celestial movement a lot more easily, caused a revolutionary change in the human's perception of the world. The

shift from geocentrism to sun-centrism was a shift of perception of celestial movement. The same thing could happen in history by a paradigm, or in other word, a view point, that historians hold. And paradigm of history itself change its form over time.

In the micro world described by quantum physics, the location and momentum of a particle cannot be precisely measured because the act of observation itself affects the status of particles. This is a phenomenon called the uncertainty principle of quantum physics. When an act of observation affects the subject being observed, the result appears only as a response to the observer. Without observer, there never be a response. A response always contains the observer. Both observe and being observed exist only in their relationship.

This kind of interference of observer to the subject also occurs in history, so it could be said that history and modern physics have similar aspects. History, like the nature, shows different faces in accordance with the method the observer takes. History, too, change its appearance depending on from which perspective it is seen. New technologies in science that broaden our understanding such as air photography, radiocarbon dating, pollen analysis and tree-ring chronology would be good examples of how observer's approach affects the subject. The deeper the observer go into history, just like the nature, the broader aspects it would reveal. Historians and historical facts cannot be separated. It is historian's hypothesis that makes facts either visible and invisible.

Writer and their writings cannot be separated. Historical writings consist of facts found in historical materials and the thought of its writers. Furthermore, inside each fact, too, folded the author and his discovery. History is made by facts and writings folding together. Historical facts don't exist by themselves but are to be reproduced in historical writing.

Historical fact is after all writings by historian. There is no completely objective fact. Like the future, past is also undecisive and uncertain. In the writing done by historians inevitably include the subjective view of the author. Because absolute facts don't exist, historian's standing point is quite unstable. In the 19th century, positivists tried the method to find objective truth and then draw up the image of the time they elicited from the fact. But now that a fact is not reliable by itself, positivist approach is not appropriate anymore.

Inseparability of subject and object

When we look at a mirror, we always see our reflected face as well as the mirror. It shows that subject and object are inseparable. For example, when we see Escher's

Circle Limit IV, our view looking at the images of dancing angels and devils is subject, and the painting that contains images angels and devils folding together is object. Here, the subject and the object must be connected because if it is angel or devil depicted on the painting is unclear, it is decided by how we see it. Phenomenon appears at the point where subjects and objects are related. Events and historical facts appear in the same way. Therefore, historical study has to be based on this non-dualistic concept of subject and object. In modern theory of knowledge, the basic assumption was that the subject and the object, a person who takes an act to know and the thing that is to be known, were totally separated, and the former is in no position to interfere the latter in any way. But this logic wouldn't be useable any more, if a wide range of academic subjects from physics to history have to follow the concept of subject-object non-durability. Existence and perception are firmly connected. Existing means being perceived. Without perception, nothing could be confirmed as existing.

Leopold von Ranke who established modern historical study insisted that historians must keep fairness and should never bring their own views when reading historical materials, and himself followed this principle strictly. True, Ranke tried to make his historical writing as pure as possible, removing whatever personal elements from it. However, there is a question if the outcome was truly objective. It is, of course, important and basic in historical study to read a material without preconception and to stay close to the thoughts and feelings of people of the time. But we don't even know if it is possible at all.

When the 19th century Positivism was flourished, historians were under influence of the subject-object dualism and believed that with self-suppressing attitude in reading they could achieve the perfectly objective truth. But, as the 20th century thinkers such as Croce pointed out, also in historical study, subject and object cannot be separated. There exists no objective fact separated from historian's hypothesis.

Some simple facts may be found in historical material, but they don't make history by themselves. What makes history are explanations between facts. Historians try to introduce objective and clear image of the past. But it is always an issue that if it is really possible to make an objective explanation. Because one's writing is something inevitably affected by one's thought. There is no such thing as completely objective history.

In the first place, historical documents itself had been written based on the point of view of the author who lived in the past. The author writes only what he thinks important, so there is no way of avoiding bias. What is more, there are technical regulations in publishing and also it would be hard to control their own preconceptions.

Therefore, one would never be sure that if the document is really objective one. In order to know a fact, historian seeks for evidence in appropriate historical materials, but the evidence is only a reflection of the historian who is never able to become completely objective.

And additional bias occurs when historian quotes something mentioned the document. Just as the original author, the historian gets affected from the environment he is living in. So even if the document is written in completely objective attitude, it has to go through a filter of bias when it is presented. Facts are often taken up and used in different context. It means one fact could have been handed down for centuries through incessant editings and reshaping. Of course, there are intentions or personal views involved here. History is told with two subjective views, of author and historian, get intertwined.

Because it is modern historian who sees and writes about past events, the way he sees it is influenced by the common sense of today. He lives in the modern society and have their own circumstances and beliefs. And it is so difficult for one to be completely free from this bind that how hard they try to stick to positivism principle in digging up historical facts from existing materials, whether he realizes or not, subjectivity slips in. Personal opinions or ideology, too, can affect historical writing. Historian's self-defense and private issues also could be reflected in writing. History gets deformed and manipulated by these things. Historians simply cannot stay away from their own environment.

Even if historian tries to write history as it was, getting over personal discrimination, still the mark of hypothesis and his viewpoint, which are subjective elements, would be left. When writing without any hypothesis, simply the writing becomes a hypothesis. The 19th century fact-oriented objectivism itself was a hypothesis, and the historical writing produced under the principle might have been just developed versions of the hypothesis created by mixing it with logical causalities. History exists only in someone's description, and each historian makes different description. History is a description of events of the past, in other word a story, which is someone's view. History is not in a fact but it is found inside of historian.

History exist as many as the number of historians. To describe a time or an era, what to focus on is left to historians, and naturally, the outcomes will be very different. The more honest the historian is, the more often he wonders about uncertainty of facts. In that case, the explanation is less clear, sometimes with more than two explanations suggested. Also, one historian can change his view over years through his life experience, making revision on an explanation he made in early years. Indeed, history

has always been revised. Something considered very important once could easily be forgotten. As the time goes, values change and historical writings change too.

Especially in the time of war or revolution, history is spectacularly transformed. We cannot deny subjectivity aspect in history.

As E. H. Carr wrote in his *What Is History*, historical fact tells us a story only when we ask them to. We see blue sky when we look up the sky. Same way, historical fact comes to exist when subject and object meet. In historical writing, subject and object are inseparable.

Applying the method of historical study to natural science

It is not only in historical study that subject and object are inseparable. Natural science is also based on the same principle, and it is observed that phenomenon occurs in relation with the act of observation. Both in history and natural science, our action causes changes in the subject. In these two fields, uncertainty principle based on the relation between observer and subject holds.

Both scientists and historians start their research from making hypothesis. Necessary data and the conclusion are derived from the hypothesis. The hypothesis suggests necessary experiment to be carried out in the lab. Without hypothesis, working process will be quite uncertain. It resembles to the process of historian collecting materials based on their hypothesis. Collected data and materials are to be rearranged following the implication of the hypothesis. Natural scientists interact with the nature with hypothesis to get response, or natural phenomena, that comes, like a masterly elicited confession, appropriately to the hypothesis. But the process of proving the hypothesis from experimental data is not simple. In matching the experiment result with the hypothesis, scientist can ignore undesirable data or manipulate it. Historians do the same. How history looks depends on how historian sees it.

Of course, they would revise their assumption if the result was very different from what expected. And another experiment would take place based on the revised hypothesis. Here we see a cycle of verification process which goes and back in between hypothesis and facts. The same cycle of working process is found also in historical study. Historian, too, establishes a historical perception following the same process. He interprets historical sources in the basis of his hypothesis to match them. Revising the first assumption is very much a part this process. And although revision could cause criticisms from other scientists or historians who have different views, it is a necessary step of progress toward a new discovery for both natural science and history. Following this process, natural science and historical study make improvement in the course of

human history.

It is not that natural science always aims at finding the natural law. In comparison with philosophy, for example, it focuses on specific or unique subjects in many ways like historical study. On the other hand, in historical study, they are not only recording individual events but also hoping for extracting something general like humanity or the atmosphere of the time. The aim of natural science and historical study is to extract universal aspect in individual phenomenon. In this regard, they share a common principle.

The laws established in science are not necessarily absolute rules but rather formulas that help explain some simplified phenomenon in a particular area. When they are applied in other area or used to grasp more complex phenomenon, they would be found useless instantly. Natural laws, too, mere hypothesis that suggest tendencies of nature in a limited area. In today's natural science, it is already impossible for us to discover a universal law as Newton did in his time.

Discovery of Natural law was expected the possibility of predicting future, but it has already been proved that it isn't a case when it comes to weather forecast, earthquake, human evolution or matters in space. In this point, natural science seems to be coming closer to historical study. Natural science made a dramatical leap throughout the 100 years of the 20th century with the introduction of relativity theory, quantum physics, self-organizing theory and chaos theory, which made the behavior of the nature be seen in the context of relativity, probability and uncertainty, and even came to be considered something undecisive and irreversible. We cannot apply such qualities as absoluteness, assuredness, decisiveness and reversibility even to natural science anymore. Natural science is becoming even closer to historical study.

Such things as experiment, verification or repeatability are not absolute requirements in science. In the type of science that covers great length of time or distance such as paleontology, evolution theory, geology, planetary science or cosmology, scientists have no chance to experiment nor reproduce, not to mention to see things actually happening. They have no means to confirm what they assumed. Their basic themes are things like nature and human history, but all they can do is to assume the process of the development of the subject and its structure from whatever trace left today. Its condition of research is very similar to that of historical study. In fact, the method of research in geology that studies the history of earth from underground layer and in paleontology studying the history of evolution of living things from distribution of fossil, are quite similar to historical research that develops images of the past by arranging historical facts in logical order. Moreover, today's evolutionary cosmology

that utilizes relativity theory or quantum physics took up the history of space as their subject and marginalized mechanistic view on space which is based on Newtonian viewpoint.

To look at the nature is to look at the history of the nature. Natural scientists have to see nature from historical perspective. Space, life, material, whatever the subject is, it has to be understood as something with historical background. All of them are self-organizing systems that consist complex elements within and develop with the inner elements working to each other. They change and evolve over years, developing own uniqueness. Natural scientific study itself has to move on toward reformation from just being as it is now. If our perception of the nature is becoming more historical and studying process is becoming more similar, we would have to apply more methods from historical study to natural science in search of natural laws, not scientific methods to history as it has been common.

What we call science is rather a history of science, and science itself has been changing, making its own history. Natural science does not improve with new data or by coming up with theories. Just like history being rewritten dramatically at times of revolution or social insurgence, the change in science, too, occurs when the paradigm shift occurs.

Kuhn pointed out that science too is restricted by a paradigm shared in scientist's community. When a new paradigm is found applicable to solve problems or irregularities to which the old paradigm couldn't give a simple answer, a replacement of scientific paradigms, scientific revolution, occurs. After the revolution, as more scientists facilitate the new paradigm to explain various phenomenon, it gets gradually bigger reputation and become worshipped in the community. But, as shown in history, revolution is a cause to induce a paradigm shift.

3 Past, present and future reflecting each other

Past reflects present and future.

Standing at present, historians can see more easily over the past than those who lived in the time. Because of this, when they interpret fact he finds in a source, the interpretation tends to be based on the result of the event that he already knows. So, naturally, it reflects the present situation. Whether it is the ancient history or the medieval time or premodern time, our looking over those times is pulled the present. To understand what happened in the past properly, we have to interpret it from the

present view. What historian does is to reconstruct a fact of the past and interpret it so that modern people can understand and reconsider the significance of the fact. It is a process to discover new links of the past. Historian gives a new meaning to an event of the past by rearranging it and connects it to the present.

As E. H. Carr said, before studying history, we need to know about the author who wrote it. Before we think about an historical event, we have to find out by whom and with what thought was the fact interpreted. Historian is not necessarily always seeing things with fairness, but in many cases with his own point of view. Each of historians have different value, so the quality of what they write naturally varies. We often find that there are many writings about the same event from very different views. Historian's personal quality such as social status begins to interfere when he begins to look for materials for his writing. His birth place, education, title, experience, and etc. Such aspects make a big difference in how he sees history.

They are, too, living in the current of time and strongly influenced by the air of the time. In the 19th century, when Europe was rapidly expanding worldwide, most of historians in Europe wrote about history based on their belief of Europe's ever-lasting development. But soon after the decline of Europe became clear after the WW1, new thought based on circulation theory of history was set up by Oswald Spengler or Arnold Toynbe. Here we can see that historical view itself is bound to actual history. It is natural that historian's writing is influenced by circumstances.

In any historical writing, when it was written is always an issue. Or it could be said, perhaps, only the present people's point of view can make the description of past people alive. To deeply understand an historical event, we need something to compare. So, by applying our own experience to the event, we try to bring the past to the present and participate in the history. As Croce said, the entire history belongs to the present. To understand the past is to see it through with the present eyes. All the history is supported by today, and because past and present is connected, we can do such thing as learning from warlords in Sengoku period.

Great historians are always conscious about today as well as past. Historians are living in present. They see the past as if they travel to the past with time machine, so their perspectives are always from the present.

We understand the past in the light of the present, and understand the present in the light of the past. Through the mutual reflection between present and past, we understand both of them better. We are productions of the past, and the past is, too, produced by us. History creates historian, and history is created by historian. Human beings are bound to the past and, at the same time, bind it. As E. H. Carr said, history

is the ceaseless process of mutual action between historian and fact, and ever-lasting conversation between present and past.

The present is deeply connected to the future. Present is pushing into future minutes by minutes. We are living wondering how we should live toward the future, what the ideal society would be. We are not only looking at history but living in it. Reflection on history starts when we begin to wonder what we want the future to be like. To make decision for the future, the experience of the past can be used. Something useful for the future act is found in the past.

The origin of the method to divide history into three parts; the ancient time, the medieval time and the pre-modern time, was invented in the Renaissance period in Europe, and it was a production of people's strong interest toward the future. At the end medieval time, people wondering about the future and looking for the new way of life, found the life of ancient Greek. Humanists in Renaissance period sought for the new way of life, wisdom and their origin in ancient Greece. Bound in between two better times, the medieval time could be depicted as the dark age and instead the ancient time tend to be overly praised. Of course, this three-division-method doesn't represent true history, but it was a necessary tool for the people then. This method had been used throughout the Enlightenment period in the 18th century and still in use today that succeeded this period. We reflect history in the time of crisis. Revitalized past becomes present, and the new way to future opens up. Dividing methods of history are based on such dynamic movement of history.

History is a mirror

History is a reflection of past, present and future. Past flows into present, and present flows into future. Future is reflected in present and present is reflected in past. Past limits present, and present limits future. Future defines present, and present defines past. Present is a connecting point of past and future. An interest in future is connected to an interest in past at present.

Present becomes past immediately, and future becomes present immediately. Just like a boat in the river, present flows toward future. And as present moves minute by minute, also future and past keep changing. Just like outside scenery from the cockpit of a visual flying airplane, time pass by around us moving toward future very quickly, making new past behind us. We are moving renewing past history, and the seamless renewal of time represents the movement of time in present. That is where historians are standing.

As we move forward, new landscape opens up, and the perspective we see the past

changes. Moving forward, we encounter new problems and to find an answer, we look back the time. According to our question, past changes its appearance. It is because of this that the image of a certain time often differs from description to description. While time moves forward, new history is being born.

Moving toward future means getting further from past. When it's seen from near and from distant, naturally the description of the past changes. Near view is microscopic and distant view makes it look broader, as if looking it with insect's perspective or with bird's perspective. And it happens that something that was important when it was seen from near suddenly loses its significance in distant view, and something nobody ever noticed from distance suddenly becomes visible and important in close view. History is always in the course of making, and its quality is being changed all the time.

Descriptions of history makes history.

History is like a three-sided mirror. Past reflects present, and present reflects future. In the same way, future reflects present, and present reflects past. We live today learning from past for future. We can find ourselves in past, present and future, because history is a mirror. When we wonder which way to go in the time of crisis, we remember the past when we were in the same situation. And by seeing the memories through the mirror we understand the situation we are in now. And at the same time, we understand the past better. Having experiences of life one by one, we gradually learn of what people worried and suffered from, and with what wisdom they had to get over it in their life.

Like when we look into a mirror to see ourselves, to know history is to know ourselves. To know about past is to know oneself in present. We reflect ourselves to the mirror of past and see the image of ourselves among people of the past. Here, we find the true meaning of saying "History teaches". The deeper we learn history, the deeper wisdom of life we receive from it. To know about present and future, we learn from past.

Historical perspective doesn't mean either subject nor object. It forms where subject and object meet. When historian comes across a fact in a material, at this very moment, through this direct experience, historical viewpoint forms. Historical perspective establishes where present time meets past. And the meeting point of present and past moves toward future, and past follows it. Historical perspective establishes also where moving present and past. Fact is an experience. To reflect the past is to regenerate it in the experience in present. The reflection contains all, present, past, future. Present works on past, and past works on present. And they move toward future together in spiral, forming history incessantly. We perceive and, at the

same time, create history, and, creating history, we perceive it.