

The Performance of Sovereignty Institution and the Development of Human Society: A Critique on the Measurement Method in Civilization Comparison

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Abstract: With the development of quantitative economic history, the critique on the estimation of GDP of those economies in historic comparison has been increasing gradually. As an effort to improve it, <the Measurement of Civilization> written by Ian Morris draws lots of attentions from scholars for his concerning the Measurement of the ability of a society in changing the world. However, his efforts did not change the position of quantitative historian to a better one for his vague definition of civilization, the unsuitable index and the wrong objective of his civilization comparison. In this paper, based on the Epstein's work (2000) in which he recognized the sovereignty rather than just property right as the major cause of modern economic development, we suggest that the civilization is an institution of sovereignty to supply public goods, and the aim of measurement and comparison of civilizations is to evaluate the performance of the sovereignty institution to provide public goods. Based on this idea, we disagree with Morris to set the ability of a society in consuming energy and the ability in war as the index to measure civilization, and hold a prudent attitude to take the size of city to evaluate the efficiency of society in organizing people. In our points, to investigate into the cause of the society development in the past and the possibility of co-existence of the human civilizations in the future, we try to establish a group of index, including the population and its structure, the size of public economy, the structure of society, the variety of cultures and the duration of the institution sustaining, to evaluate the performance of sovereignty institution in supplying public goods.

Key Words: Civilization Comparison, Public Economy, State Governance

With the economic history drawing more attentions from economists, the quantitative historical research has been becoming a debated area: on the one hand, the quantitative analysis skills based on statistics has more and more influence on the economic historians and civilization comparison; on the other hand, the research method, based on the calculation of GDP per capita, used by the economists to evaluate the historical economic activities has been doubted by historians (Wu, 2014; Zhong, 2014). Indeed, most of the quantitative economic history based their research on the estimation of GDP for those historical economies (Clark, 2007); however, these works often draw some strange conclusions about human history from the perspective of modern market economy to observe those ancient economic activities (Polany, 2001; Chang, 2017; Hodgson, 1997), and then was criticized by economic historians for their cutting feet to fit the shoes (He, 2013; Song, 2014). Just for these debates on the quantitative history based on GDP, the work <The Measurement of Civilization> by Morris drawn lots of attentions from social scientists for its new try to evaluate the human history with some new indices.

There are seven parts in his book. In the first chapter, Morris explained the relationship between this book and the last book, <Why the West Rules----for Now?> especially, he stressed that this book provides a base of data and materials to support the conclusion in last book, and that why the research method based on the statistical measurement is a scientific one in social science. The second chapter focuses mainly on the methodology of this book, which discusses the context of statistic index, the principles of choosing the objectives to compare, and the way to collect data. The Measuring data comes from the relative position of a society between the starting point and the final point which was set as 250 by the modern society in 2000. And more, he chose the

society with some special culture and race as the objective to be compared, chose the 14000 BC as the starting point of analysis, even his book was named as <The Measurement of Civilization> and generally the human civilization was suggested only 6000 years about. To show the scientific and statistic characteristic of his book, Morris stressed that there is no mean to show justice by measuring civilization, it is just for confirming the conclusion in last book that the West is superior to the East. To arrive at this end, he included all the opposite of the East, or all non-Chinese cultures or societies into the West. From the Chapter III to Chapter VI, the author explained the meaning of each index and its way to set the index, collected data, then calculated the index of both societies in the West and in the East, according to the order of energy consuming, society organizing, war capacity, and information technology. However, in the process of collecting data, he just choose the luck area of the earth for convenience of performing, that is, the area between the $N20^{\circ}$ - $N35^{\circ}$ in the old world and the $S15^{\circ}$ - $N20^{\circ}$ in the new world. When performed the measurement and comparison, he just collect the data of those elites to calculate the index, not to try the entire data of all people to get a data per capita to calculate the index. Finally, in Chapter VII, he compared the result of his calculation in last four chapters between the West and the East, then pointed out some guidelines for the civilization development in the future.

In this book, Morris suggested correctly at the very beginning that it is no meaning to investigate the path of development if we cannot establish a basic theory model of historic development. It is also reasonable when he emphasized on that the comparison is just a debate if there is no data as the basis. Indeed, the quantitative analysis makes the discussion more focus and details (Morris, 2013, p2), and then makes it more meaningful. With the development of social science, we gradually know more about human being ourselves, one of the examples is that we are understanding our performance and its causes with the result of the quantitative research and the data which record human being's activities. Therefore, Morris is absolutely right in that it is necessary to measure the researched objective firstly if the quantitative research is a useful way. The book <The Measurement of Civilization> is just the outcome of the try by Morris to provide a base for quantitative research.

However, when he conducted the measurement and comparison, the way he utilized is a mistake one, in which, the goal and tool were mixed together to construct an index, then leads to a terrible outcome. It not only misleads the Western academic peer, but also enhances a negative influence on the scholars in those undeveloped areas. Similarly, the uncertainty of the measured objective, and the randomness in the utilizing index and statistic method damaged deeply the scientific nature of the quantitative research, and then makes his conclusion a cheat to readers or an ideology preference to those researchers, even though it seemly based on some statistic measurement. Clearly, this so-called quantitative research will result in some unexpected harmful consequences in social science. In this paper, we will exam his measurement system basing on the key principles of statistics, and the logic in social science, in order to improving the base of the quantitative research, and deepening the understanding on the nature of civilization and the relationship between different civilizations.

We will discuss his measurement of civilization from the four aspects: the method of measurement and statistics, the objective of measurement, measure index, and the aim of measuring civilization and the explanation of the result, then provide some points about civilization, measurement, and the development of civilization in the future.

I. A Basis of Comparison and Measurement: the logic of theory and the method of statistics

Both of the conflicts between different states and the populace of terrorism attacks in the modern world still showed us some new dilemmas of human civilization, even the economic development and the technology progress have arrived at a summit in the new century. Among the causes, the mistake of the policy made by some politicians definitely contribute an important part, however, the more important is the misled by the mainstream scholars in economics and politics who recognize the tools (GDP, war, and technology) as the aim (meet the challenge, deal with problems, and human welfare). Among the mainstream works, the quantitative and statistic method aiming at comparison have been seen as the scientific basis. But, just as stressed by Zhao (2015), the scientific method, especially the utilization of quantitative and statistic tools, need some preconditions which is not met in most situation, here the measurement of civilization is not an exception.

Astonishing enough, <The Measurement of Civilization> by Morris did not base its work on those preconditions when the measurement is processed, even its affect is so popular.

Firstly, the scientific nature of the quantitative research depends heavily upon a strict narrative logic, that is, the quantitative research have to be conducted basing on some quality research and the reliable data being collected, and then the reliable data comes from the scientific design of measurement index and the reliable process of data collecting. Because the index serves the aim of people to deal with their problems, the index system should vary according to the change of the time, the area and the problems faced by people. It is so regret that Morris almost did not discuss the theoretic base and did not change his measurement index according to the variation of the times and areas, even he made a measurement and comparison of civilizations during a long term and over a big space. Indeed, the constant index maybe is no problem when comparison is processed between two closed societies in which both of the challenge faced by people and the system set by them are similar. But, if the comparison goes over the transformation term, there will produce a disastrous outcome from the comparison when the constant index is used to measure the varied society. The measurement and comparison of civilization processed by Morris in his book just made this kind of mistake that the measurement index coming from the early modern society was used to discuss the ancient society, even up to 16000 years ago, basing on the principle of "one size fits all". How could he not conclude a ridiculous result from his measurement?

As all known, as a response to the challenge they met, the elites in history performed differently from the people in the modern ages who face some modern problems; therefore, there is no way to arrive at a valuable conclusion by using the same measurement index to analyze the different activities in the different times. The Professor Spiger (1999, 123) once pointed out the limitation of statistics when concerns the date and location of economic activities. He said that the sudden failure of the politic arithmetic showed the death of those economic thoughts which cannot catch up the change of economic situation. Even it is reasonable in academic area that Morris utilized the outcome of civilization measurement as a support to his points, therefore, there is still some problems when he chose the modern ability index to measure the ancient society and unadjusted.

Of course, Morris was quite frank about his problems. He emphasized frequently that the aim of his comparison is to confirm the advantage of the West. But, it is just the pre-set aim distort the scientific method of his index establishing and data collecting, which not only discount the

empirical nature (Chang, 2017) of his research, but also lead to the misunderstanding about the nature of the conflict in the modern society and in the relationship between countries. Especially, Morris wrongly stressed the significance of war in civilization, which just benefits a few elites, but overlooks the importance of cooperation and co-existence or caring the weak people as a social value for human being civilization or society. His practice either distort the academic research or mislead the policy making.

Secondly, there is a big logic contradictory in his theory, that is, his later discussion denied his point in the very beginning. For instance, Morris wrote (p6), the answer why the west rule the world was buried in the historical facts if the development of the west has been being superior to the other areas since the historic record. That is to say, to explain the nowadays superior of the west with the past superior, he assumed an unvaried world. However, if the world is constant, the conclusion that the nowadays west is superior is enough, no need to measure and exam the civilization in history, then concluded that the west dominated the world in all history. Moreover, about the comparison between the west and the east, Morris mentioned at the very beginning that the European intellectuals realized that they were taking over the world made them confused, on the one hand, then they tried to pay their attentions to understand the civilization, that means the west did not yet take over the world till the 18th century if his description is right; on the other hand, both of the conclusion in the end of the book and the point in the other pages in the book stressed it again and again that the nowadays superior of the European is because they heritage a good gene from the traditional cultures, that means, they try to confirm with the outcome of civilization measurement that the west have ruled the world or been superior to others for 14000 at least. In one place, he said the west took over the world in 1800; then he also said the west has been ruling the world so far in the other place. The contradictory description shows that the Euro-centralism and Morris take the research so randomly or not seriously, and shows their nervous emotion when they tried their best efforts to use the empirical research to achieve some ideological or political aims (Chang, 2017). More absurdly, Morris frequently stressed that the measured civilization is neutral-value concept which does not mean value, then he will do some scientific research, on the one hand; on the other hand, he utilized his measurement and comparison to conclude that the west has been being a good society or a better civilization than all others, so that, as a superior one, the west rules all the world is justice or reasonable. Is this a real scientific research?

Thirdly, there are lots of misuses in Morris' concepts, such as he use the result of the war to evaluate the advantage of a civilization, use the success of a European state to show the superior of the whole West. Factually, to evaluate the civilization and the progress with the result of the war, is a method only used by the intellectual in the enlightening times of 19th century Europe. Just like the author mentioned before, even though the paper "Progress: Its Laws and Cause" written by Herbert Spencer in 1857 was very influential in that time, it did not conclude any reasonable or appreciable law for the development of human society. In that paper, what Spencer stressed frequently is just the theory of war and the logic that the winner become the king, which try to construct a reasonable support for the Opera War initiated by the UK. But, the crime fact that the Britain once sell drug under the umbrella of the government cannot be changed, that is not the civilization or progress, even they won that war like the Chenghis Khan occupied many places over Europe and Asia. One more, even the UK succeeded, it is neither the success of the Europe, nor the success of the human being, because the high life level of the Britain people based on the

cost of the death and the poor of those Asian, African and American people who were not defined as the civilized human being. The effort by Morris and the emphasis by those European scholars in the 19th century maybe confirm a law in the behavioristics: the stress and the more researches in literatures just come from the lack in the reality, or the hot topic show its urgency of the need in real society. In other word, the superior of the West society as a civilization model which Morris made his best efforts to confirm never exist in real history, but the worrisome of the European scholars who cared about the situation of the civilization of the West society did exist.

The real historical fact is that the rise of the Europe in the 19th century neither led the increase of the income per capita (Clark, 2007) nor the improvement of the international relationship in Europe, what it resulted in is that the conflicts among Europeans in Europe was transferred into those European conflicts outside of Europe or those conflicts between the Europeans and other people based on the improvement of transportation, the cost is the disappearance of many other local races and other civilizations. In other word, as the first modern civilization, the progress of the Britain in improving the relationship between human groups, especially in improving the relationship with outside groups, is not better than the Egyptian 3500 years ago or the Chinese 2500 years ago, except for the increase of the ability to move themselves or to kill others. Therefore, to measure a statistic data to support the conclusion that the west always is superior to the East, Morris have to choose the area carefully to collect data and then to run a partial analysis. That is the reason why the lucky area was chose by him as the west, then define the successful society in this area as the west.

Fourthly, to achieve the goal he set it previously, Morris even violated the basic principles in statistics, such as the random principle of sample collecting. It is clear that the goal of Morris is just to supply some scientific or statistic materials to support the conclusion that the winner of the war is civilized. To arrive at the end, he was unwilling to measure all the Western areas, and unwilling to measure all people in the Western area, but just to choose some successful people or elites in the West to measure and to calculate. To find some support for his measuring behavior, he cited Norman Davis' word to stress that everyone can casually choose or define the measured objective or the scale according to his goal. Just for this, to come to the conclusion that the west is superior to the east, Morris use the concept "Rivals to the west in the past" as the east, the opposite side, which he try to measure and compare with the west.

However, if we use the term "Rivals to the west", the supposed entity, it will be difficult to define the measured society for its subjective nature. Moreover, "Rivals to the west" is not just subjective, but also a conception in the modern times, not a historical conception in his long run analysis. A reasonable guess is that there is no any East Asian society in ancient times willingly tried to rival to the west, and that the west, that is, the Greece or the Middle East area never thought the East Asia was their rival then. If they really wanted to find a rival, it definitely located on the coastal area of the Mediterranean in Africa or that of the Europe, or maybe like Iran or India located in the near Asia, never those located in the remote East Asia.

In fact, before the steam ship running water transportation in 16th century, both of the Qin-Han Empire, and the great powers in the coastal area of the Mediterranean, never want to rival with the opposite at the other side of the world. Only until 19th or 20th century, there appeared some willingness in those minds of capitalists in the Europe to compete with the East Asia for some business reasons. Then, it is obvious that there is no logic basis to choose "Rivals to the west" as the compared society for the long term, 16000 years to measure and to compare.

Norman Davies said that we can choose the entity to measure and to compare according to our aim is right, however, unfortunately, what Morris did is to use the partial fact as the whole to support his conclusion or comparison about which is the superior one for human being as the whole in the future as a general theory.

Fifth, the fact what Morris tried to confirm does not exist, which makes his support no sense to his book <Why the West Rules-For Now>. When he want to confirm the assumption with his measurement that why the west rules-for now, he have to answer the question firstly: what is the meaning of “the west rule”. Does it mean there are more people under the rule of the west? Or the ratio of the west account for the World GDP is higher than other part? Or the number the west wins the wars in history is more than its rivals? Or even the scale of the western culture or religion is bigger than others? Of course, he also need to concern the term of ruling at the same time. For example, how long the west rule can be said longer? And why can this kind of rule by the west be called a civilization?

In the 31st page of this book, Morris defined “the west” as “developed society” according to his theory in the second chapter of <why the West Rules-For Now>, that is, the area originated from the Middle East, and centered in the western of Euro-Asian continent, but expanding to around areas. He thought, it will be consistence or common sense about the conclusion the West rules the world so far if he define the west as “the developed society”, and the part of the west. However, he did not realize that his definition will make his measurement and comparison meaningless (the conclusion has been defined), and make it impossible to find the causes of economic development or civilization evolution. Clearly, it is a self-evidence that he defines the west as “the group of developed society” at begin, then concludes that the west is superior with the measurement and comparison. Just like mentioned by Osborne, “the rule always is civilized” because they can write the history, make the index of civilization and define civilization. However, what we really wonder is what is the meaning of this kind of research for academy, for human being, and for the development of civilization in the future.

Finally, the method Morris used to collect data is also problematic. Factually, the conclusion from the quantitative analysis and comparison heavily depends upon the statistical principle to collect data according to some basic methods and processes, such as the way of choosing samples, if we cannot get the whole fact. In other words, when discussed the per capita income or energy consumption per capita in the Ancient Greece or Roma, there should be a narrative estimation about the number of the people of the society, then to discuss how to choose randomly the sample of the people in that society to collect their income or energy consumption. However, what Morris did is to collect the data from the citizens lived in Roman City, or even just some officials recorded in governmental files (Morris, p67). As to the populace lived in the countryside outside of Roman, especially those lived in those remote areas, like Egypt or Spain, they are never concerned by Morris when he collected data and measured the index of the civilization of the west, not to say the data of those slaves. But, according to the work of Scheidel (2015), the inhabitants of the city of Roma got more than half of the civilian benefits to subsidize their lives from the whole public finance with less than one tenth population, and the officials got more than five times income than the peer in Han China. How can we use the data from the officials in Roma city to stand for the Roman civilization?

Indeed, Morris conferred that his only aim of measuring civilization is to find materials to support his another book. To do this, he choose “the society” to be the analyzed entity basing on

the work of Gupta and Ferguson, and he defined “the society” with race or nation, not the institutions or citizens. Because of this, he even criticized some calculators of historical GDP for they tried to concern the whole citizens of the Roman Empire, which lowered the number of the civilization index, made the western elites feel not too good.

It is clear that, in Morris’ mind, those people lived in the occupied areas just should be responsible for supplying food for Roman citizens, but not involved in the consumption of energy or the distribution of income; on the other hand, the ruler as a conquer, just enjoyed the income and the consumption of energy, but not need to produce food or energy. Just from this kind of calculation and measurement, the civilization of the west holds the absolute advantages over the other society in the index. In fact, it should be higher, even higher than the later age of the Industrial Revolution in UK, if we just collect those senate members’ data, or the data of the emperor’s family. However, it is not a right way to provide some basis for those quantitative analysis or comparative research, I guess.

In one word, to get a better data, to arrive at his expected conclusion, Morris just choose the key area and the elites’ data to calculate and to measure (Morris, p72-75, p88), overlooking the existence of the poor people in the west. Then, the result comes from his choice and his definition before his measurement and calculation because he concern only the rulers’ life or income. However, is it a real civilization if the poor and weak people in the western society in history was overlooked? Finally, we back to the definition: the rulers are civilized because they are rulers or they won the wars!

One more thing is that the income per capita or the energy consumption per capita should be kept in a similar level for all people in the world as a general law for the existence of the Malthusian Trap before the Industrial Revolution, the situation that some people got more or higher index definitely means the other people got a less. Therefore, the calculation of the income and consumption per capita is meaningless and not a way to analyze civilization in history. Just for this, Osborne (2006, 109) once asked what is the significance of the calculation of the elites’ income in the Roman City for the discussion on the general law of civilization if millions of people were sold as slaves in the markets of the Roma Empire, and the other millions of people lived in a disorder society. Whether or not the so-called research is just an argument in a circle like “we are civilized because we are ruler, then we are rulers because we are civilized”?

II. The Discussion on the Objective to be compared and measured: the Concept and Nature of Civilization

Since the western civilization met the east civilization, the scholars have showed lots of attentions in the comparison between them, but it is not everyone to process their comparison basing on a reasonable theory. We think that there is no any scientific quantitative analysis, if we cannot understand correctly the nature of things before any quantitative analysis. Therefore, as a precondition of statistical analysis, we should define the concept of measured objective before the measurement being processed. Just for without the definition before measurement, most of comparisons lead to a crazy conclusion, like “one night is longer than one mile” or “Birds are not superior as animals”. (Zhao, 2009)

Unfortunately, Morris went along a similar wrong way when he wrote his book. Even though the title of book is <The Measurement of Civilization>, there is no any definition of civilization. The only opportunity we can read “civilization” is in the title of chapter as “The Origin of the

West Civilization”. The real objective in the book to be measured and to be analyzed is the ability of the social development. On the 5th page, the ability of the social development was defined as “a measurement of the ability that a society organization obtained or changed something in the world”, so we just guess, what did Morris really want to measure as civilization is the level of society development. But, what is the real meaning of the ability in the definition the level of society development? The answer is the ability to obtain or to change something, that is, the civilization is the ability to change or obtain something, as to how they obtain or change the world, never be concerned by him. In other word, the justice or the legality of the action is out of his sight. And this is not Morris’ mistake accidentally, but his intentional design. Indeed, it is his willingness to include wars into the index system of civilization when he measure civilizations later. Maybe for this, Morris has been stressing his value-neutrality to measure civilization, but unwilling to confer that civilization is a good word to describe the situation of human society. However, on the one hand, the Morris’ measurement with the value-neutral served for the non-neutral goal---support for the last book <why the west rule the world>; on the other hand, after the measurement and comparison, especially when Morris got a high index for the west civilization, he started threw out the mask of the value-neutrality, then started to discuss the general value of the west civilization and the tutor position of the west civilization, and stressed the advantages of the west civilization and the logic basis of the west-rule the world basing on these measurement. In reality, but, such a way of concluding, especially the way that Morris use the ability in war and in consuming energy to measure civilizations, and use the measurement index to confirm the legality of the west-rule-the-world, make it easy to result in the spread of the terrorists who favor the military way and the logic of “the winner being the king”.

Factually, the Chinese scholars (Xu, 2017, 248) realized it very earlier when the First World War over, that the so-called west civilization is imperfect because it just stresses on materialism and nationalism basing on the ability in war, and that it is a retreat of human civilization for its base on some laws of animal survival struggle. However, different from the similar situation in the Spring-Autumn and Wars China when and where the wars and disorder were critiqued radically by those scholars as uncivilized actions, the European conquer and fighting each other were appreciated as a good thing or even a civilized action for the misuse of the biology evolution theory in the social science, that is, the Social Darwinism. Some recent works (Song and Pan, 2016; Wilson, 2012; Harari, 2014) mentioned us that the birth and development of human civilization just come from the sociality of human being as the outcome of collective action, and the moral norms as the base of cooperation which in turn comes from the altruism nature of some elites in the social evolution.

Indeed, it is necessary to define the civilization before measuring and comparing it, even we will not want to care about the social value and justice of activities. Guanzi (an ancient Chinese philosopher in pre-Qin Dynasty) said: “to define the conception for real activities, to define the title according to the reality. The title and the reality influence each other. It will be well situation when the title is as same as the reality. It will be contradiction when the title is different from the reality. ” Indeed, the definition of the civilization, is not just the basis of measurement and comparison, but also the precondition of the existence and development of human society, and even the requirement of the coordination and the progress of human society. Factually, the title and the concept will provide a framework of morale for human activities, or they will supply a reasonable justice for the existence of states or governments. Probably, lots of mess faced by the

developed societies come from the lack of justice or the inconsistency between the title or the concept and the reality of the modern society, whatever in the international relationships or in the domestic areas, such as the title and reality of the democracy or freedom in developed countries. Therefore, it is necessary to define the civilization before our measurement and comparison.

However, before defining the civilization, we have to answer a terminological question: is civilization an objective existence? Or just an idea in human mind? If the civilization is just an image in human mind, it is impossible to measure, then any comparison of civilizations probably is a misunderstanding of concept. Professor Zhao (2015) in sociology pointed out: “Many important concepts and problems in social science have no sense for itself”, but “the ways the people with different ideology deal with problems, and every way is just a mixture of misunderstanding and facts, so very complicated”. “The pitiful, but unavoidable situation is that the mainstream idea in academy go follow to the mainstream idea in society, or even to be a helper or attached of the powers”, or just lowered to the pure debate about ideas or points. In the very beginning of his book, Morris emphasized that the quantitative research is just to avoid the conceptual debate, and try to use data to improve the academic research. However, unluckily, on the one hand, Morris frequently stress that the measurement is just a neutral tool for research; he finally still trapped in the old path to debate for ideology or concept, on the other and. In other word, to contribute some support for the west rules, Morris show us his obvious preference in ideology and his efforts to support the mainstream idea in society, then trashed himself to a “helper or attached of the great west powers”.

Factually, just like Osborne (2006, 5) mentioned that the civilized world in Buckle times is not only a self-defined one, but also a way to legalize the illegal action (such as suppress, invasion). In their process of legalization, suppress is recognized as the same word with civilize, the loot in colony became a legal definition of property right, and the arrangement that let the losers to pay the military cost of invaders was written frankly in international treaty. Osborne also pointed out that, under this kind of concept or ideology, the distinction between the civilized and the uncivilized, the definition of the border of civilized society, became the debates about the idea or concept of civilization. Then, it will become a subjective feeling about ourselves: that is, we are Western or Christian, then we are civilized. If so, it is very possible that the nation is not a state, even not a society or culture, but some extent a bloody unit or a benefit unit. For example, once the world war happens, the past “ours”, Germany, Italian and Spanish, will probably become “them” or uncivilized enemy according to the need of debates.

In fact, no matter the French in 18th century or the Greece in the Ancient times, when they used the term “civilization”, both of them tried to suggest a same meaning, that is, they are civilized, then they are superiors in moral and the legally rulers. The standard whether they are moral or not is the relationship with or the way to deal with outsiders, especially with their enemy or others. Only if the enemy is considered as insiders of the society, we can say that the war is over and the civilization or the civil governance starts. Similarly, in the Ancient Roman times, even they use the culture to indicate their characteristic of civilized or superior, the meaning of culture is also the ethic of the actions or the legality of the rule. That is, the winners or the rulers with ethic will be polite to deal with those losers, or to rule losers peacefully. However, it is very regretful that, they never did so in practice as the exact meaning of the culture intents. During their ruling, they always brought the culture to the uncivilized people with forces and keep the order with forces (Osborne, 2006, 4). More unfortunately, just because of the inconsistency between the

title of culture and their practice, that the European in modern times or in 19th century, appreciated their modern civilization with the logic of war, and legalized their illegal activities with an academic research, led to the confusion of Fukuzawa Yukichi (2014, 1953) in <A Brief Discussion on Civilization>: “We call the European states as ‘the civilized states’ right now, is just a temporary arrangement, there are still many imperfections if we investigate it carefully. For example, wars are the worst thing in the world, but the European are good at and prefer to engaging wars.” More ironically, the uncivilized people in sight of the Ancient Roman is just the ancestors of the Western European. And those western European, just like the Roman criticized, never deal with their enemy or those competitors politely, but always killed them directly. Till the modern times when the new world was discovered by the Western European, and the power to dominate ideology was changed to the Western European, they, the uncivilized people in the sight of Roman, got the chance to call themselves “civilized” by mix themselves with the Southern European together, and to legalize their occupation and Segregation in colony as civilization or to define the war as civilization like Morris did.

Similarly, the understanding of the ancient Chinese about civilization started from the concept too, they also called themselves “civilized” by meaning the good people with ethic. However, from very earlier ages, Chinese had begun to try to understand the civilization objectively and to institutionalize it, in order to achieving the consistence between performance and knowledge. Mengcus said: “If and only if the public economic activities are finished, we dare to conduct those private economic actions; that is why we are different from those uncivilized.” Clearly enough, in Mengcus’ mind, the civilized people means that they perform the public economic activities ahead of the private economic issues; on the contrast, they are the uncivilized people when they pursue the private benefit firstly ahead of those public ones. As to the civilization, Zhang (2004) pointed out that: “The most important culture is the institution in the ancient civilization, and the ethic and wisdom of the creators and followers of civilization.” Sheng (1999) also wrote: “From the perspective of economics, the characteristics of civilization are as following: 1) it prefers to cooperation; 2) it calculates the benefits and costs according to multi-games.” It is clear that the Chinese scholars realized that only the system and/or institutions are the nature of civilizations. Similarly, Osborne (2006, 4-5) made it clear that the Roman civilization is not for its victory in wars, but for the order and the civil governance after wars. Therefore, they were more civilized than German, who killed their enemy directly after wars; however, they were uncivilized than the Ancient Chinese people who include all people into a same system of public economy impartially, Tianxia.

Therefore, we suggest that the hub of human civilization is the mode of cooperation in a basic society, state, its center is the public economic institution to support the human cooperation relationship. Just as the historian, Harari (2017, 119,122) pointed out: “The key we can conquer the world is the ability of human in uniting many people together. Right now, we rule the world completely, not because the individual human is clever than wolf, or has skillful hands, but because that in the earth only human can cooperate skillfully in a huge scale.” Or in other words, only human willingly shared the externality of public goods with outsiders as a free-lunch when the public economy is the major mode in which human being can survive as a group animal in the ancient times. However, “if the reason why the human rule the world is just for the ability of human in cooperating skillfully in a huge society”, “it is hard to say that the individual person should be respected.” In other word, for the human civilization, the individualism, which is the

entity of market competition, is not important in the mode of economic theory as neo-classicalists stressed; to the opposite, the real basis of human civilization is the public economic institution, which heavily depends upon collectivism as a logic base and the analysis tool.

It is just because of this, “in the early stage of human society development, the happening of the first union is significant. It is the earliest civilization of human, and a process of rationality promotion.” (Zhang, 2004, 83) That is, union is the starting point of civilization as a way to end or control wars. As a sociologist, Zhang (2004,172) emphasized: “The ancient civilization is a bigger and better social public union which forms by uniting lots of small or middle size societies together.” In other words, civilization is an outcome of institution establishing by those elites, is a structural system to adjust relationships inside of society after union. The later bureaucratic system established in Qin-Han Dynasty and the Civil-Exams system started in Sui-Tang Dynasty strengthened the coordination (harmony) idea of public economics in the mind of Chinese elites, which made it gradually the hub of the east civilization to rule the Tianxia (world) with the mode of civil or cultural way. The experience of the Chinese civilization showed us that, even every dynasty follows the strategy of war and force during its birth; however, once it succeeded in war, it would construct a public economic system with the Confucian idea about ruling and the civilization model of coexistence in one world by controlling the utilization of forces. The Japanese scholar, Fukuzawa (1953), also realized the institutional significance of civilization, he wrote: “Civilization comes from the Latin word ‘civilidas’, that means state. It means the formation of state, which is opposite to the state of savors lone.”

In fact, many scholars realized that the civilization mode is a public economic system. More important, as a system, the civilization is an objective entity or institution whose performance can be measured, or only as the public economic system, the civilization is the base of measurement. Indeed, if the civilization is not just a theoretical concept, but a human social system, then its performance and its effects on different groups can be measured and compared, whatever the west civilization or the east civilization.

Because the public economic system is a mechanism of public goods exchange between suppliers and demanders, which involves in the benefit relationships among different groups during the process of the establishment of the western society and the evolution of the modern civilization, the cost and the benefit of public goods linked with the people outside of the western elites have to be discussed in the quantitative analysis, even the cost of lost life during the civilization establishing also have to be included and concerned. Only if we concern all costs and benefits of all related people during the birth of civilization, it is possible to understand the nature of civilization completely, and it will be possible to correctly analyze the interest relationship among those different groups in the west civilization. Therefore, in the early modern European, it is a totally misunderstanding to call the noble’s mode a civilization when the nobles’ only profession is killing human people in wars. This misunderstanding made the winners to overlook the meaning of civilization as a kind of peace or a public economic system in the Greece and Roman Ages. Similarly, the contribution of the public economic institutions in the modern Britain civilization were omitted by historians, the war or the rule, factually a bug in the modern civilization, was seen as the flag of the civilization.

Therefore, we argue that the worst thing is not the uncivilized activities conducted by Europeans in America, but the contemporary scholars appreciated the savage activities as “civilization”. Especially, not just lots of scholars recognized the loot in wars by Europeans as the

legal origin of the property right and the justice model of sovereignty, but the scholars, like Morris, tried their best effort to set the ability of society in looting or conducting savage activities as the index of civilization. The most oppressive situation is that, in the works of the Euro-centralists, the frank robbery activities have been taken to be the proof to support the moral superior of those European elites, and that the colony loot activities have been defined as the sign of civilization and the origin of property right. Just like the British scholar, Osborne pointed out, in the sight of those historians with a mismanaged mind, only European people and Christian people are the civilized people, whatever they did or done. However, if the standard of civilization judgement is just religion or race, where is its generality? How to spread it to all the world as a model? How to reduce the rebellion of those weak people or the terrorism from those conquered areas by using this idea of civilization? He pointed out further that, just for the influence of the war-like ideology on the civilized society, the modern world is trapping into an evil-cycle of fighting each other to deal with the political debates or the benefit conflicts.

As to the negative impact of the war-like culture on the human civilization, China is a pretty good case. Xiong (2012) pointed out, the western people invaded China with the weapon developed from the Chinese's invention, the so-called "west civilization" brought a feeling of being insulted, which in turn resulted in a retreat or a savagely developing trend of the eastern civilization that once was a civilization appreciating peace and harmony ideology in the ancient times. So that, the famous scholar in the early modern China, Qichao Liang, once "taught Chinese had to 'be savage people again' if they really want to compete with the western people". And there are some scholars in modern China tried to reinterpret the history of Qin's conquering on other six states, which meets the psychological demand of some Chinese who were influenced by the west civilization theory, but conflicts with the nature of the Chinese civilization. In other words, the wrong civilization theory or ideology of the western scholars has exerted a badly influence on the Chinese scholars and even populace because of their victory in invading China in the early modern times.

In the review of the history of civilizations and wars in the world, we know that, the winners in the Ancient China or Ancient Greece, maybe could not make it clear the border line of their benefit, but they never or seldom recognize directly the black as white, or define the civilization or good thing with war in their literatures. However, the un-logic actions done by the recent social scientists in the Europe and the North America make us doubt about their rationality. Factually, it is the theory that considered the frank colony war as a justice and legal action, and the theory that all winners can be kings, led to the continuing breaking out of two world wars in Europe in 20th century, and made Germany an "uncivilized country" because of its defeat. Similarly, the misleading and misunderstanding in theory and the misalignment in policy decision, led to the current situation: even the surprising growth of the GDP per capita for all people in the world makes the production exceed the basic need of all people in 21th century, the international relationship is still tense and the risk of wars never disappear for the struggle of survival, moreover; an uncivilized and misery fact is the coexist of the millions of hungry people and the billions of luxury weapons.

We suggest that it is not a model of civilization, but a destroyer of civilization, if the society just owns a powerful ability in war, just like the Great Qin Dynasty, the Yuan Dynasty, the Germany in the WWII, and the Napoleon France, but no necessary ability in domestic governance and foreign coordination, or no an efficient public economic system. Factually, in the pre-civilized

ages, all people in the world, especially those nomads, enjoyed the war-like culture for the survival struggle by hunting. For example, in War-state times China, Qin state promoted the war-like culture, and united the Chinese people together with force, however, Qin not only was not a typical civilization in China, but disappeared suddenly, because of the lack of the domestic coordinating mechanism and the ability in harmonious coexistence with others. Just like Chen (2015) pointed out that even the Qin with force defeated all others, but the ideology or the philosophy which has been influencing on China for more than 2000 years is Confucianism, which insists on the harmony and coordination among different groups of people to governance the world. And both the Zhou Dynasty before the Qin and the Han Dynasty after the Qin enjoyed a long term dynasty governance and became the basis of Chinese civilization because their public economic system supplied a domestic order and a defense for all people in their system of family, state, and Tianxia with a multi-level system of civil institutions (Xu, 2017,).

As a late comer of civilized society, however, the politicians and scholars in the west have been not able to understand correctly the nature of the modern civilization, especially not able to distinct the war as a tool of state making from the civilization itself, and not able to interpret the contradictory between the property right system as a protector of freedom and justice and the process of the property right being titled through an injustice looting war, so their theory cannot provide a solution to the conflicts in the real modern world. We agree with Osborne (2009,11-12) that, the winner of wars cannot simply define the winner's action as justice and defined their institution as civilization, and the winners cannot simply define the winner's occupation of property legality. This kind of civilization not only lack a reasonable logic basis, but will also lead to more wars and terrorism conflicts in the future in reality.

In fact, just because the western scholars could not define the nature of civilization theoretically, it is hard for them to distinguish the difference of Germany and Italy in the extent of civilization between the pre-WWII and the post-WWII, then resulted in the failure of the transformation of the modern civilization after WWII. Even up to right now, many so-called modern civilized states, still hold a wrong idea about civilization, the work of Morris not only fail to correct the trend or the mistake, but push it far away. As all known, the war-like German once destroyed the Roman civilization, and led the Europe into the Dark Middle Ages, however, the contemporary scholars did not get any lesson from the history, they just tried to define the war and loot as a civilization again with their domain in academic and media, then led the world into another Dark Ages in the 21th century.

We agree with Osborne that (150-1), all written history is almost the confirmation of the winners about their legality, the term "civilization" also comes from the need to confirm their legality. But, most of those winners' confirmations did construct a peaceful theory and system to benefit themselves, in order to maintaining the peaceful and beneficial public economic order with an institution, few of them continued to utilize and appreciate wars which leads to unstable order, like Morris did. In other word, even we confer that the ability in war is important in the very beginning of civilization evolution, and so the ability in war is the first condition for the birth or transformation of civilization, but the nature of civilization is not war, moreover the necessary condition to win a war in a long term is not the ability in war, but the ability in public financing (Tilly, 1999) which is a system by constructing, not a loot by fighting. Just for this, we think that the size or scale of civilization is the people being supplied public goods in a geographic space or area, in which different people with different religions or culture can enjoy the same public goods

peacefully.

One significance is that, just for the lack of theoretic basis, just because they did not realize the nature of civilization as a public economic system, the contemporary scholars, even though called themselves modern civilized people, cannot answer the query by others that the constitution is just to protect the elites' right (Epstein, 2000). Similarly, unknowing the public economic meaning of civilization, many scholars wrongly stress the significance of the national state in culture and race, disdaining the geographic characteristics of modern civilizations, especially overlooking the unbalanced distribution of public goods in developed countries among different cultural or racial groups. Comparing with the chartered liberty of nobilities and the ideology limitation of religions, the national state is a better civilization, but, as an ideal model or a basis of modern civilization, the national state is a very partial idea or unit of civilization to distribute public goods. It is even safe to say that the emphasis on national state by the early modern scholars in the beginning stage of the 20th century resulted in two world wars, and laid the logic foundation for the terrorism and refugees problems in 21st century. Similarly, the Trump's policy focusing on the national benefit or racial concern is just the outcome of the scholars' stress on national state or European civilization, like Morris did. Just as Osborne said, the appearance of national state marks the birth of the general civilization in early modern Europe beyond the nobles' benefits, on the one hand, but it also signs the primitive characteristics and the survival struggle nature of the European civilization, on the other hand. Just as Xu (2017, 437) said, that considering the national state as the prerequisite of the modern civilization is a misunderstanding, because the civilization is a public economic system based on space, not on people, and moreover, the nationalism as an outcome of national state has led to lots of wars in the last century. So, comparing with the ancient Chinese civilization in the Tianxia system, the modern west civilization based on national states is not a better model of civilization for the future.

Of course, in virtue of the possibility of free-riding and the externality of public economy, the debate on the public economic activities has been drawing the attentions of all elites or scholars in the history of human beings, which mostly focus on the construction of governance structure in a state, so that the different civilization means the different structure of state governance. To deal with the externality, different from the stress of the early modern European elites on liberty and privilege, most of the philosophers in other ancient civilizations made their efforts to promote elites' altruism, moral norms, and justice idea, both of the ancient Greece and the ancient Chinese experienced a very similar development of philosophy before the century (Song and Zhang, 2016). Finally, we have to emphasize that, as a principle to establish a civilization or public economic system, the collectivism and altruism are the foundation of governance and the starting point of the civilization in logic, the war is just a tool to prepare the pre-condition of governance state.

However, in virtue of the clear advantages of the market system in efficiency in a short term, lots of the traditional civilizations could not meet the challenge from the west modern civilization which benefited a lot from a similar public economic system (bargaining between suppliers and buyers of public goods) with the market system. So, the requirement of those selfish business elites on liberty and property, not only showed some justices in fighting the rising kings and the disappearing God in political area, but also contributed a political base to the establishment of constitution as a theory of justice (Xu, 2017, 300). As a result of this theory of justice, under the umbrella of the principle of the equal opportunity, it seems reasonable and justice that they invaded the weak states and looted the property or took the land from the weak people, so that the

social mission of noble to protect the weak was replaced by the principle of businesspeople to obtain liberty and right for themselves, and that the struggle for themselves' benefits seemed to be civilized or noble. Just for the selfish efforts by those business elites was covered with a mask of modern civilization, the modern civilization met a huge dilemma in its way to the future: both of the justice of democracy and that of constitution construct the separation of the liberalism and democracy, and the conflict between democracy and constitution is tearing the society in those developed countries, such as the United States. Even though the dilemma is so clear, there are still some scholars considering the elegant selfish and war-like militarism as the key of the modern civilization society, then it is very likely that the selfish and militarism will lead to the disastrous outcome of the modern civilization in the future, that is, the sustained intense in international relationship and overflowing with terrorism in the world.

Maybe being influenced deeply by these theory in the mainstream, as a popular historian, Morris even self-defined himself as a developer of evolution theory, however, he did not focus his attentions on the ability of a society in coordinating with other groups and inside of group, but tried to promote the war-like idea of civilization with a "scientific method", and to seek the few elites' benefit in short term by damaging the benefits of the mass in a long term. Of course, we know Morris tried to confirm the superior of the west, as a model of the modern civilization, but we do not know why he do this along with a clear wrong way and on a clear wrong basis, and when it seemingly will go to a bad end. We know what Morris want to measure is the ability of a society, but we do not know whose ability will be measured because of the unclear border of the society. For example, is what he want to measure the ability of a system to governance a state? Or is it the ability of a culture to continue its influence? A worse situation, during his measuring and comparing, he changed his idea about the ability according to his needs to confirm the superior of the western civilization. To do this, both of the people and the geographic space of the west society changed from time to time.

We understand that Morris' measurement serve for his job to look for the causes of the continued ruling of the west. But, what is the meaning of ruling? Is it a governance on some people in a space? If so, or if the civilization what Morris measured is a governance structure in society, or even a public economic system, then we have to concern, which one we should to choose to measure when there are lots of structures or systems in the ages he considered. For example, is it Egypt or Babylon should be chose to be measured for the ages 5000 years ago? Is it the west or the east Roman should be chosen to be measured for the 5th century? One more, when he set the index for the west civilization, should he choose the average data of all people or the maximum? Anyway, to measure the ability of a society or system, it is a basic requirement to define an extent of the measured subjective in space, time, and people before any measurement can being conducted.

Indeed, some social scientists have tried to define the civilization in the terms of space and time when they consider its border. Zhang (2004, 13, 293, 400) cited the work of Toynbee that, the first meaning of the civilization is a relatively independent social and cultural community. Even there are some conceptual debates in Toynbee's research which cannot be verified, but, as a unit of historical research, the starting point, the civilization, has been an empirical idea in his mind. This kind of research, the discussion on the process of civilization and the relationship between different civilizations has touched the key point of human being history. They argued that the main characteristic of the big early civilization is the appearance of the sovereignty entity with some

geographic space, and a continued existence in a long run (Zhang, 1999,15-17). Therefore, we suggest that the political unit or the public economic entity should be the basis of the measurement of civilization.

III. On the Index of Measurement in terms of technology: Waste or War?

If we have defined the nature of the measured objective, and its borderline in terms of time and space, then the next question is which index we can use to measure. Before that, we have to choose the goal of measurement, what do we really care about? Is the efficiency of the process or the performance of activities?

According to his discussion, we know that Morris really care about the legality of the rule by the west. However, he did not explain how to evaluate or decide the legality of a rule, but chose directly the ability of a society or a political system in doing something to measure. Actually, the ability is an unobservable variable, then he has to choose the result of ability proceeding to measure as a substitution. Not to say, why the ability is the base of the legality of ruling is a very important open question.

Basing on his assumption about the legality of ruling, he choose the quantity of energy consumption to show the ability of energy utilization, in fact, it is the outcome of energy waste. He choose also the ability of a society in invading others, because the ability of a society in defending is never observed completely. However, the ability of a society in invading being chose as the index of civilization leads to a very bad influence on the academic or cultural research, even on the stability of the developed societies in the west, because it confused the civilization with the rule, the governance, or even the war. Many Chinese writers have started to show their respect to the hero in the ancient wars, and appreciate the war empire as the flag of the ancient Chinese civilization, overlooking the nature of harmony and coordination of the ancient Chinese civilization. Finally, they even made an anti-fact conclusion that the world was ruled by nomads before the west rules it (Su, 2007). It seems that the civilization is the war or the rule by forces, and that the four agricultural civilizations are not the signs of the human ancient civilization, on the contrary, both of the knives of nomads in the ancient times and the guns of the Europeans in the modern times are the marks of human civilizations.

Indeed, Harari is right (2017, 157), to evaluate the network of human cooperation is heavily dependent upon the standard or view point of the evaluator. Absolutely, Morris understand it deeply, as a supporter of the western political system. To draw an expected conclusion, he showed us his inclination or preference on Euramerica and modern times when he choose the index. When a similar preference in evaluating IQ of human for different groups used popular in the America academy, it once was criticized by Ehrlich (2000, 281-2): the bad record of black people in IQ was frequently explained by genes. But, it is not the fact. Firstly, intellectual is an idea hard to be defined correctly. Even more debates, generally, it is an ability to understand the world, to solve some problems, and to adapt to the natural environment. There is no any single index to include all these abilities, moreover it is influenced by individual characters or social features. For example, the native Australian people cannot get a good score in the Stanford-Bnay test, however, they can perform very well in dealing with the natural challenge in the primitive forest. The European people goes the opposite side. Similarly, every people has to solve themselves' problem faced before arriving at civilization, their problem always is specific, so that the measurement and comparison over different civilizations and societies are difficult. The measurement over a long

term is harder to achieve. In this situation, any new try to measure civilizations definitely face lots of challenges.

Unfortunately, maybe for the nature of task, among four index Morris constructed, three are seemingly random or irrelative to the ability of a society he defined, some even opposite to his idea about the ability of society.

The first is the energy consumption. Very clearly, the energy consumption is not only not the index of the ability of a society in energy utilization, but likely the embodiment of the energy waste or inefficiency. In other word, when the human development is not the major concern, that is, in the ancient times, the energy consumption is just used to maintain the life of human being. In this situation, the high level of energy consumption per capita means a low ability of a society to maintain its members to live, or they have to use more resources to maintain a similar life. But Morris designed the index of energy consumption to measure the civilization or developing ability of a society, he even said that the east civilization is lower than the west society for its low energy consumption. If the east civilization maintain more people with fewer energy, is it really a low civilization? So, the index of energy consumption being used to measure civilization is an anti-select as going south by driving the Chariot north.

The second is the index of social organization. Morris choose the population of city to stand for the ability of the society to organize people together. He thinks that, the bigger the size of city, the more civilized the society, but overlooking the goal of the city, the meaning of the social organization, and the existence of the countryside citizens. Because of the unknowing the research about the fiscal state theory (Epstein, 2000; O'Brien, 2012), he design the index of civilization according to the market economic theory and city system theory, without the knowledge that the city system is a worst one in governing people together¹. In measuring the ability of the social organization in governing society, he cannot get rid of the influence from the Neo-classic model. On the one hand, Morris tried to recognize all civilizations as city civilization, forgetting the early social organization is selfdom, chiefdom and territory state in the ancient agricultural civilization, especially the governance structure of county and prefecture in the ancient China; on the other hand, he disdained the nature of governance in the social organization to control a broad territory, overlooking the ability of society in controlling a group of people living in countryside.

Factually, the way Morris choose the size of city population as the index of the ability of a society in organizing people exposed his ideology of business elite politics, because the rulers or the business elites did live in the city. If we concern the benefit of all citizens, however, or the function of democratic society in organizing people, a useful index of population should be all population lived in the country, not just those in city. Moreover, the successful political society in the ancient times is usually the territory state with countryside, not the city state itself (Epstein, 2000; Stasavage, 2016), when they measure their performance in defending outside invasion or governing inside people. Therefore, the index of city population distorts the meaning of social organization or the nature of the state governance.

The third one is the ability in war, which is so absurd to the measurement of civilization or the development of the modern civilization. However, Morris even directly stressed the positive meaning of wars in his next book <War: Why it is good? >

¹ According to the recent works by Stasavage (2014,89; 2016,33), most of the city states existed during 13th-17th century Europe did not meet the challenges from the territory states, then disappeared in 18th and 19th centuries, and few of them could enjoy a population growth more than 200 years.

As described above, indeed, the ability to war is critical for the creator of civilization in the early stage. However, on the one hand, the ability to war is just the precondition to create state or civilization, not the civilization itself; on the other hand, there are two kinds of wars: invading or defending. In our point, the ability to defend its citizens in war is the foundation of the birth of civilization, and the condition of civilization development, but the ability to invade other society is the enemy of civilization. The invasion war not only destroys the other civilization, it often destroys itself if it has been a civilization, because it will use up its financial resource but not any income from the invasion or no continued revenue stream to maintain its ability in invading. And we agree with the point of the social biologist, Wilson (2012), that only the ability of human being to cooperate in defending can indicate the extent of civilization or sociality, and is the key point of human being different from all other animals.

Unfortunately, the index of civilization set by Morris is just the ability to invade others. With this index of measurement, he concluded that the east civilization, no need to invade other human societies for its agricultural nature, gets a low score for its low ability in invading others, even it hold a huge size of people living together with harmony; however, the west civilization, without enough food and good agriculture, gets a high score in the measurement for their frequently invading others and looting. However, ironically enough, the east civilization with a low score survived for its ability to coordinate inside of group, the Roman civilization with a high civilization index disappeared for its constant fighting each other and with outside.

Indeed, the superior of the west civilization in the ability in invading war is obvious and no doubt, however, it is necessary to think about it again why the ability to kill human beings is the index of civilization. As we mentioned above, almost all pre-civilized people had a war-like culture for their survival struggle with other animals or other people, however, none of them called themselves the civilized society just for their skills in killing human beings. Then part of them found that the cooperation among the group of human being can bring them the superior of survival ability over all other animals, the war, especially the invading war between human beings was prohibited or limited, the civilization appeared finally. The left part who still enjoyed the war-like culture unfortunately stays in the un-civilized status to struggle for survival.

The history of Chinese civilization also shows us a history of war being limited, then the civilization happened. In other word, all Chinese dynasties established from its ability to fight its rivals at the beginning, then the ability to governance starts to become a critical factor. The ability to fight usually comes from the theory of legalists, the ability to governance often drives from the principles of the Confucianism. From the experiences of Zhou Dynasty and Han Dynasty, the followers realized that the ability to governance coming from the Confucianism is the key of a civilization or the stable society, which context a mechanism of public goods supplying in fact. A Chinese saying then began to be popular in politicians that fighting on the back of horses can establish a state, but cannot governance the state for it cannot supply public goods to its citizens.

Actually, from the perspective of the sustainable relationship between the supply and demand of public goods, the inefficiency and short-cut of invading fighting is very clear: the only income from the invading war is loot, the revenue will cease once fight cease when the loot is the only return from invading war. Any war have to stop finally because the number of groups can be invaded is limited, then the income stream will cut off when all rivals disappear. On the contrast, the revenue from defense and governance include the increase of population under its rule and the economic growth under tis protection, even no people come to fight; the state also can get public

finance from the governed people and continued production. Of course, sometimes, defense cannot be distinguished from the invading war, but finally, it is just the defense make a civilization to exist in the world. This is the real hub of “Confucian-Legalist state” concluded by Zhao (2015), so-called “the efficiency of Legalist in supplying public goods help us to establish a state, the harmony of Confucian in coordinating conflicts help us to govern the state”. After the establishment of state, the fact that the European and America states still want to find a rival to fight shows us that they have not yet entered a stable civilization, which explain the frequent conflicts and the nervous relationship between different groups in their societies.

In our point, the experiment of the modern civilization in the Britain, is factually an exception or “out of path” from the European culture, it is an accidental combination of the invading war and the survival struggle in business area, which is an innovative try by business people to use parliament to improve the bargaining mechanism between supply and demand of public goods (Song, 2015). Even the new mechanism of public economy tried in the Britain was described by Fukuyama (2012) as a democratic system, but in fact, it is just a constitution for negotiation between the big tax payers and the government or the supplier of public goods, or in other word, it is a mechanism to bargain between the market economic elites and public economic elites. The fiscal modern state based on constitution, is an efficient negotiation mechanism between the supplier and demander of public goods, but not a good civilization mode for the co-existence and harmony between the elites and the mass because the mass is excluded by the system to participate the negotiation. The two-agent model of the fiscal state can maintain a benefit-sharing or dynamic equilibrium between the business elites and the political elites (like the system of two parties in USA) when there is no knowledge about the public interests conflicts being announced among the mass. However, once for some technological reasons, the mass know the nature of public economic benefit and their conflicts, there will be a game of three agents to bargain or negotiate for different benefit, in which there is no solution in the traditional theoretical model. The government or the supplier of public goods try to reduce the cost, but get more revenue; the market economic elites try to pay few tax, but get much more and efficient supply of developmental public goods; at the same time, the mass, some of them being poor, try to get much more survival public goods, such as social security system, but do not want to pay any tax. In this trap of triangle games, there always exists a risk to invade outside group in order to transferring the benefit conflicts inside of the society into the international benefit conflicts, which is the enemy of civilization, and will destroy the human modern civilization. During this risk term, the misunderstanding on civilization or the misleading from the theory and measurement of civilization by Morris who stress on the invading war will worsen the bad situation.

On the other side, the ancient Chinese civilization with the history of 2000 years, even also has some theory, like Sunzi and Mozi’s work, to deal with the strategy of wars, the mainstream of civilization just appreciates the idea that knowing military is never for war-like. And most of the mainstream ideology in ancient Chinese civilization have been focusing on the promotion of altruism moral and collectivism cooperation to revive the culture and social order of the Zhou Dynasty. As an evidence of the defense theory by Mozi, the city walls and the great wall that is very popular everywhere in the ancient China had been the embodiment of the Chinese civilization, similarly, the continually increase of population in the ancient China provide another civilization index for the success of the Confucian theory in harmony and cooperation in human society.

In one word, when the measurement of civilization has to consider the ability in war, it should make a distinction between the invading war and defending war. The winners of wars in the ancient China or the ancient Greece, maybe have no way to distinct the border line between two groups about debate for benefits, but they do know who is in the side of the justice in the war, or who is the invader. To stress war itself in measuring and comparing civilization, but overlook the difference between invasion and defense, will result in some unexpected outcome for the modern civilization. It is maybe safe to say that just because the powerful European states relied heavily upon their military, not the harmony relationship among them, both of two World Wars in 20th century broke up in Europe, and enhanced a badly influence on the human civilization development in the world.

The repeated history shows us that a foreign ruler, who just defeats a civilization or state by forces or the ability in war, is not necessarily an advanced civilization, the victory of Mongolia, the German's occupation on Roman and Spanish destroying Mexico are this kind of cases. The real early modern civilization is the public economic system developed by the British which focuses on budget bargaining, not the military conquering all the globe by gunships and cannons. Without the new public economic system, the continent great powers in Mongolia and Byzantine, and the ocean great powers in Spanish and Portugal, never create a new civilization for human beings. Morris did not understand the nature of civilization in terms of public goods, but focused on the ability in war to discuss the human civilization, even considered the victory of a group of the British soldiers in the Opium war (fighting for selling drug officially) the flag of the superior of the west civilization. If the ability to sell drug by forces is the index of civilization or social development, is it the goal we will arrive at in the modern times in the future?

IV. The Aim of Measuring Civilization and the Meaning of the Civilization Comparison

Certainly, as a historian, Morris has done a great job when he discussed the evolution of civilization from the perspective of a long historic term and tried his best efforts to design some index to measure and compare civilizations. Regretfully, his contribution was overestimated, and his mistakes has a huge negative affect on the understanding of civilization for this oversize. It will block the development of academic research and the transformation of the modern civilization if the mistake is not corrected. Harari is right when he said (2017, 53), the history research is to get rid of the limitation of the past, then look at many different direction, and realize some possibility which cannot be imagined by the past people or be blocked by some old ideology. In other word, if we want to imagine the possibility of different people co-existing in a society or in modern civilization with harmony and cooperation, we have to rethink of the nature of civilization in terms of relationship between different groups of people, then construct some civilization index to measure and compare the different civilization in the past.

Factually, about the relationship between war and civilization, there is a long history in the west academic area to misunderstand the civilization and to mislead the direction of civilization investigation. As early as the Roman times which has been recognized as an origin of the west civilization, there was also some misunderstanding about civilization basing on the logic of war. Just as Osborne said (2006, 96) that, in so-called Roman civilization, the governance agreement between the Roman and the local elites in occupied territory is not a governance structure of sharing public goods or a system of peacefully co-existence, but just an agreement to obtain soldiers by slave trading. This kind of agreement is not to bargain for the supply of public

goods---order and defense, not for the end of war, but for loot, for expanding war. Then, it is not strange to say that by Osborne, the Roman civilization is just a union of loot or bandit. Without the public economic system to govern its citizens peacefully, the union would be dismantled if the loot cannot be maintained, therefore, the Roman Empire is not a stable system of civilized society. However, such a union of loot has been recognized as an origin of the west civilization. If so, the colony war, slave trading, and pirates looting done by Spanish, Dutch, and English in the early modern times, would be described as a part or kind of human civilization reasonably. Just in this mode of civilization, it is conferred as the major part of the modern civilization to rob the property right of those colonized land with forces, and to maintain the civilized life of the European elites with those bought slaves.

Just for this theory of civilization, a million of Gaul being taken to be soldier and a million of Gaul being killed in the conquering by Roman would not damage the brightness of the Roman civilization, and even the original context of the Roman civilization (Osborne, 2006, 97). Similarly, in 18th and 19th century, in colonizing the central America, millions of natives being killed and millions of African being slaved will be a supporting material to the advanced civilization of the Europeans for their ability in war, not the evidence of their savageness. As to this kind of civilization, Osborne's evaluation maybe rigor, but still perfect: an obvious system of slavery is called civilization, a clear loot is defined as the protection of property right or civilization society. Just like the ironically narrative by Gibbon: Roman conquered the globe with their defense.

In fact, just like the point of Harari mentioned above that, the sociality of human being over animal is not the ability to compete each other, but the ability to cooperate flexibly in a scale. According to this logic, the extent of the civilization of a society certainly is not the ability in war, but the ability to co-exist in harmony. As all known, the first great leap of human society or the birth of human civilization is not the result from the improvement of the ability in invading war, but from the improvement of ability in defending within a settlement. Of course, the birth of civilization also needs some institutions to coordinate the different benefits and to deal with those conflicts among different groups. The appearance of the defense in settlement and the inclusive social structure are innovations in the institutional change, and the precondition of the birth of civilization. In discussing the fate of Celta, Osborne (2006, 35-6) thought, the establishment of settlement, the set of system, and the infrastructure for defense show the start of civilization system. Different from the war-like German, he pointed out furtherly, Celta developed a system to maintain harmonious coexistence, like other civilization. Unluckily, Celta without enough ability to defend was killed by war-like German, then the dark middle-ages arrived at and the dead Europe continued for a long term of thousand years.

Luck enough, in the East Asia, different from the continued attack of German, the northern nomads with an experience of co-existing with the agricultural civilization in the central China in a long run, understood that the settlement, defense, and harmonious coexistence are one low cost way to survive, then a civilization. Except for a few cases, like Yuan Dynasty, most nomads' dynasties coming from north accepted the ideology of agricultural civilization, and give up their knives, and try to become the civilized people. They not only learn the Confucian culture and polite system or public economic institution, but also establish a Confucian-Legalist state according the Heaven Mandatory, then become the transporter and spreader of civilization system which focuses on the harmonious coexistence, and lead to the Miracle of the East Civilization in the terms of extending over two thousands of years.

Even there are some successful cases in the east, however, it is regret that many scholars still trapped in the misunderstanding about civilization for stressing on the ability in war. It is very likely in virtue of the misunderstanding and misleading of intellectuals, up to 1950s, there is no so-called inclusive institution (cited by Acemoglu and others for successful political system) to supply the same public goods for all citizens whatever their race or religion in those developed societies, such as the United States. Even more, up to today, in the USA, the leader of the west civilization, there is still some inequality in consuming public goods among different groups, not to say the distribution of public goods between inside of and outside of states, so that the policy of emigration limitation frequently become the debated topic in the politics in US.

Even the misunderstanding and misleading have a deep background and a long historic origin, the emphasized by Morris on war and his measurement according to the ability in war, no doubt, worsen the mistake for its looking-like science in investigating the path of transformation of the modern civilization. Which index is the best one to measure civilization is a hard question to answer, but the ability to kill neighbors definitely should not be that one. We agree at that the civilization is always a confirmation of winner about the legality of their government and their property obtained in war, but as a foundation of the civilization theory, we have to persist in that the civilization is not war, but the peaceful society.

All in all, we insist on that the social system to prohibit war is the basis of civilization. To do so, in the history of the east civilization, once a state established, war will be pushed down, the military officials will be reduced to the least, and the low-taxation will be long term policy, in other word, the low-taxation and non-war policy is a basic theory of civilization or state governance. From the Heaven Mandatory, the demand of public goods always is concerned and stressed as a principle of governance, even more those poor's needs for survival public goods. Maybe Osborne is right, the west scholars exaggerated the role of war because they are late comers in civilization (2006, 248).

Certainly, the relationship between different groups of people is the key point of civilization, the national state basing on the genes is just one form chose by the western elites from those social organizations to contribute public goods. However, the gene characteristic of the national state strengthened the bloody links, then block the establishment and extension of geographic state which cope with the externality characteristic of the public economic activities. Since the early modern times, both of the property right and liberty right are not distributed according to geographic feature, but with the link of family or tribe, then a national state is reasonably established for some people on the territory. We confer that the national state is a choice as a makeshift to replace the church in the late Middle Ages in the West Europe, however, for those ancient civilizations where the mundane public economic system have developed for a long term, even have enjoyed a long term and a huge scale peace, the national state importing from the West Europe is likely a retreat of civilization, not a helper.

Factually, the national state is a system of sovereignty similar with the property right, both of them focus on the distribution of benefits according to their bloody links and their occupation by forces, without concerning the externality of benefit and the geographic characteristics of some public economic interests. From North (1973) to the Acemoglu and others (2012), the liberty and the property has been being considered as the hub of rights need to be protected by institutions, and the origin of the west civilization, even more the protection system on private property rights were praised as "an inclusive system open to all people" (Oligive, 2014), no one mentioned the

origin of the property right coming from loot, robbery, or the native people being expelled from their own lands in the history, and no one mentioned the segregation and custom mechanism still driving others out in the present. Woefully, the wrong theory of civilization will probably lead to the direct war worship which distorts the co-existed modern society into the uncivilized world by teaching the defeated “goat” to be a war-like wolf (Osborne, 2006,278).

Indeed, just like Osborne (2006, 455) stressed, it is very doubtful about whether or not the west society is a civilization even they got the leadership of the world with forces. Or in other words, it is absolute that the western people rule the world in the recent 200 years, however, we are not sure that how much ability of the western society be used to improve its ability in war or in killing other people, and how much being used to improve the survival security and life of weak people. As a guide for the people in the future, the measurement index of civilization has to be discussed again, because it is not just a historical comparison, but a model to lead people to close to the goodness, escape from evil, including war.

Of course, if we agree at that a civilization is a model of relationship between groups, a system to share public goods not partially, a social structure to govern a state, a platform to bargain for public goods, not just an political idea, we should measure or evaluate the civilization mode or the ability of state governance according to the performance and efficiency of supplying public goods.(Song and Pan, 2016) The tradition that concerning the performance of officials in government, not their bloody links with kings or empires, because of the theory of Heaven Mandatory, has been being the key point of the Chinese civilization since Zhou dynasty.

To measure or evaluate the performance of civilization or state governance structure, the right way is likely to concern the size of the population who consume public goods, and the quantity of the public goods being supplied, from the perspective of human society. Just for this, we suggest that the size of population, the population density, the public revenue, are better index than GDP and the ability in war for the measurement of civilization. In the new system of measurement, the logic of collective action and the advantages of centralized government can be explained in economics. Basing on this system of measurement, the mistake in defining the religions as the western civilization can be corrected, the nature of civilization in public goods supplying will be understood better, and then, the advantages of the fiscal modern state comparing with city states can be explained by the efficiency of the public economic activities.

Secondly, we suggest that the measured and compared unit of civilization should be the unit of public goods supplying, that is, the state in history, not the unit of religion, culture, race even or geography, if we agree that a civilization is a public economic system (Song, 2015). Similarly, the chose term of time continuing, should be the continued term of the public economic system. One more, the measurement of civilization also should be the measurement of performance of the system to solve the problem they faced or to supply public goods because the establishment of the system or the civilization is to meet the challenge they faced. In one word, the measurement of civilization finally become the evaluation on the ability of state in supplying public goods or the measurement of the performance of the officials in public economic activities.

Actually, in the early stage of human society, the different group often deals with the same challenge by trying different ways, when the problem happens. The elites in some group construct a cultural system to integrate people together according to their consistent theory of nature and human, then a system of civilization to coexist with nature appeared, starting from the conceptual explanation to make human being feeling well. The elites in other group maybe lead their

followers to move to other locations to escape the challenge, then meet other groups, the competition and cooperation between groups also resulted in some institutional arrangements, which evolved into another civilization latterly. In the first situation, because the attention of elites has been paid to the relationship between the nature and the human, the agricultural civilization gradually grow up from the development of the agriculture and the fiscal system located in a fixed area or a walled area. In the second story, the elites focused their attentions on the development of transportation technology and the relationship between different groups, then religions appeared, and the political system developed furtherly into the modern civilization, that is, constitution. Before the development of energy-driven transportation, the agricultural civilization domain the globe for its advantage in the supplying public goods, however, the appearance of the steam ship made the so-called industrial civilization the superior one in the world for its efficiency in public economy basing on market and business. To measure and compare this two kinds of civilization, we have to concern the variation of public economic system and the difference of public goods structure to seek a general basis to evaluate.

For example, on the one hand, the relationship between the elites and the weak or between groups is still the key point or the precondition of the sustainability of the civilization even in the 21th century when the survival materials have been enough to feed all people in the world; on the other hand, because of the stressing on national state, the selfish rationality and market economic efficiency by the ideology of the west civilization, the modern civilization cannot find a way to deal with the conflicts between the elites and the weak in a country, and the contradictory between different national states. Especially, if there is any bad economic situation appears, and then some worrisome, the worst survival struggle still likely happens inside of a state or between countries into war, like those right-wing parties expect. Therefore, in a modern times, even the west modern civilization has an absolute advantage in state competition because of its efficiency in performing developmental public goods, however, we cannot make sure that it is the best one to supply some efficient public goods in coordinating the coexist of different groups, especially those rich people and poor people, in one society. The imperfection of the west modern civilization is not a problem in technology, but a fault in ideology or philosophy formed in the process of civilization development in the past.

In fact, both of the west civilization and the east civilization originate from the effort of the early elites to face the natural challenge for the human survival in some “luck locations” between N20-35° of the earth. According to the memory recorded in myths, the often happened challenge met by the ancient human is the flood or big water. To deal with the similar situation, the elites lived in the west and in the east developed different ways basing on different geography and conceptual ideology: they are so-called “blue civilization” and “yellow civilization”.

The blue civilization focused on the moving on the water to other land according to the myth of Noah ship, that is, human emigrate, but water stay, which is called as dynamic, business, or advanced civilization, even it is just a way of emigrate for food or escape to live. To get on the ship to emigrate or to escape, the fairness or justice of the process to choose people to go is critical for the group or society; that is the origin of the west politics or the philosophy of the west civilization or the ideology called as democracy or constitution. It is very likely that, the Athena Democracy, the Roman Republic, the Dutch Republic, and the Britain Constitution, all of them got a hint from the choosing process in the myth of Noah ship, which brought an inequality of distribution of public goods among different people, and also led to the birth of the modern west

civilization in UK by the bargaining power of the chosen elites.

The yellow civilization, got an experience from the myth of the Great Yu, who led the water into Ocean, that is, the water move, but the human stay, in which everyone, even every animal and plant, was saved, but no need to escape, and no need to choose some body to be saved. In this situation, whether or not the goal is achieved or the performance of action as the supplying of public goods is the key. To the contrast, the democracy in process is never considered as a necessary factor. And more, the water being led to its place, not being blocked by earth, becomes a classical traditional philosophy of the east civilization.

Lots of west scholars did not understand the different origin of the west ideology and the east philosophy, but highlights the processing characteristic of the west civilization coming from the first imperfect solution as its merit. This so-called superior of the west civilization has been transferred into a conflict, when all people expected to be chosen recently during the vote or selection of leaders, and when the technology make the cheat impossible, at the same time. In other word, the traditional west model of civilization which just choose the elites to be “the voter of God”, is facing a big challenge when the gate of the west civilization is asked to open for refugees, and when the free trade is required by developing economies for globalization.

The solution to this problem, however, likely existed in the philosophy of the east traditional civilization, which concern the need of the mass on public goods, and stress the openness and externality of the consumption of public goods in the solution of the Great Yu to all people. Just like Chen said 100 years ago, the Confucianism teaching people to share the world with others will come if China is powerful enough, there will be no war between and inside of country. In fact, the Heaven Mandatory has been trying to deal with the natural problem for all people in the world. To finish this task, the Confucian and other philosophers constructed the theory model of the harmonious coexistence, which is effective to deal with the conflicts among different groups when we have enough food or resources to feed all people on the globe.

It is emphasized that the harmony idea is not just held by Chinese people, Zhang (2004, 403) said, there are some evidences to show that most of elites in other ancient civilization held the similar harmony or coexist idea as a moral principle during the formation of the civilization. The feature of the Chinese civilization is that they derived the ideology from the practice to deal with weather or natural disaster like flood in supplying public goods, not from the theoretic model.

Finally, the characteristics of the openness and centralization of the Chinese civilization, not only come from the experience of the Great Yu to deal with the flood or weather and the externality of public economy, but also come from the mode of settlement in city wall to defend and the stability or sustainability of agricultural civilization. On the other hand, basing on their geography and their experience in moving or emigration, the west civilization focuses on the process of choosing some people to go. If all people understand this mode, and try to obtain the same opportunity to be chose, the conflicts will appear, and seem no solution in that ideology. That is the reason why we need to investigate those traditional philosophy in the ancient Chinese civilization basing some reasonable measurement and comparison of the east civilization and the west civilization.

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