

On the Era of Knowledge Authority

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Abstract: All the knowledge can be divided into skills, theories and arts. This paper is concerned the limitation of the second kind of knowledge i.e. theories and its social effects. Theories, either static, or dynamic have its inherent limitation. Static theory can't be perfect as the set theory has proved, dynamic theory can't be precise. The propaganda process of the theory has limitation too, cause the density of the theory can't be infinite. So we have to admit that the theory has left the space for the belief and random. Furthermore the world is undetermined in the boundary of human being's intelligence. And we'll certainly come into an era of authority not because of the lack of knowledge but the over rich state caused by the knowledge explosion.

Keywords: Knowledge limitation; authority; Social seperation; Knowledge discovery

1 Introduction

We have been in a era of information explosion since the invention of Internet. Internet and various modern media bring us over rich information than we can handle. We often use the search engine such as Google, Baidu etc to find the information we need. We'll certainly miss some information relevant. As the knowledge, especially theories can also be over rich which exceed the ability of human beings. So we need the computer to help us treat the knowledge and the theory itself. There is not a overall and clear analyze of the knowledge limitation and its impact on the modern society. This paper will the first effort trying to define the problem and give some conclusions through application of set theory and social relationship analyze.

2 Theory Hierarchy and Computer

All the theory belongs to the human beings. It helps people handle the outside world and the mind with more efficiency. It is well known that knowledge begins from the need to describe some thing so people can distinguish it from the world. The civilization is based on the various theory and its application. Hierarchy of the theory can be established in historical sequences. Descriptive (objectless), Statistic (objective), Dynamic (objective), Logical (objectless) and Original (transformation between objects). All the kind of theory reveals the main abilities of the human being's intelligence activity are memorize, calculate and believe. As shown in the table 1.

Table 1 Hierarchy of Theory

Theory Type	Object	Example	Intelligence Ability	AI
Original /Creative	Objectless	Religion	Belief, Imagination	N
	Objective	Physics, Chemistry	Memorize, Calculate	Y
Dynamic	Objectless	Mathematics, Logic	Memorize, Calculate	Y
	Objective	Physics, Chemistry	Memorize, Calculate	Y
Static	Objectless	History, Encyclopedia	Description, Memory	Y
	Objective	Photo, Painting	Description, Memorize	Y

According to the table 1, as so far, computer can help us in the memory and calculation. but have nothing to do with the imagination and the belief. So the computer can help us to memorize and calculate. They can store the knowledge and solve the complex calculation problem.

Knowing the limitation of both static and dynamic theory is the key to dismiss the illusion about almighty of the theory and make sure of the world is large and more complex than our mind and beyond

even the boldest imagination. We need the belief when we think about the world as a whole, because this object and relevant question are beyond the limitation of the theory. As the Pope said “God is behind the big bang.” in recent days.

3 Static Theory and Its Limitation

Static theory, such as the history, photo, painting and the lexicon or the encyclopedia of the plants even the music, is the descriptive reflection of the real world or the recording of the imagination in the human mind. The static theory tell people what is or what happened. The core concept of the static theory is the unique attributes of the specific object. We use these attributes to distinguish and separate and classify or package and label the object from the chaotic world around us. As mentioned before, static theory can be divided into two kinds. First is objectless, whose completeness is focused on description of the all the objects at specific time, location, space. Example is history, Geography etc.

The other one focus on one object. So it is the objective description of the specific object. Key criteria of static theory are the completeness for the objectless static theory and perfection or the precision for the objective static theory. The limitation of the static theory is rooted from the natural objects and related language or simply the symbols used to describe it. The completeness and precision of the description is the limitation of static theory. The set theory has shown that the existence of the one to one mapped relationship between the continuum world and the unlimited symbol (word) sequence cannot be verified. So the static theory cannot be the perfect mirror or the record of the real world. It must have some omissions according to the people’s interest. So no matter how hard we try, we’ll miss something compared with the real world with no doubt when we create the static theory. We can’t use this incomplete mirror to rebuild the real object by all the relevant static theory. But we just care what we care about, but nothing else. So the static theory is the combination of the description of the world object’s specific attributes and the angle of the author or partitioned by the author with his own attitude.

The static theory needs the abilities of sense, recording, memory and imagination to represent. The activities of the static theory is produce, remember and recall and represent^[1]. For the static theory, computer can help us to record, store, recall and represent static theory. Even it can discover the new static theory through the calculation of new attributes among large amount of records.

4 Dynamic Theory and Its Limitation

Dynamic theory deal with the cause, the way and the rule of the transform. Not only the transform of the objects or between the objects on the world, but also the transform of the theory itself. Just like the static theory, the dynamic theory also can be divided into two kinds. Objective and objectless. The objective dynamic theory is about the rules of the transition of the specific object. Which means the object is specific. The transition is its attributes including the physic location.

The key character of the objective dynamic theory is the coverage and precision. The objectless dynamic theory is the dynamic theory of objective dynamic theory, i.e. the Logic. It handles the rule of theory and use the symbol to present any kind of symbolized theory presented by any language or code. The transition or movement of the object could be linear, destined or random. According to its transform environment or movement surface is flat, concave or convex^[2].

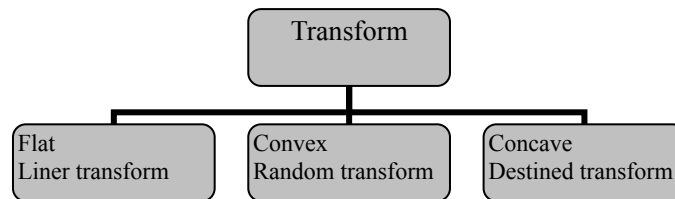


Figure 1 Dynamic Theory

So the first limitation of the dynamic theory is it can treat the flat and concave surface but can not handle the convex surface which is dominated by the probability. The limitation of the dynamic is clear. It can’t cover the world as a whole. And it can’t be precise as in the convex environment. Ability to use the dynamic theory is reasoning or calculation. Let’s see the leaf falling to the ground as the example to explain the limitation of the dynamic theory.

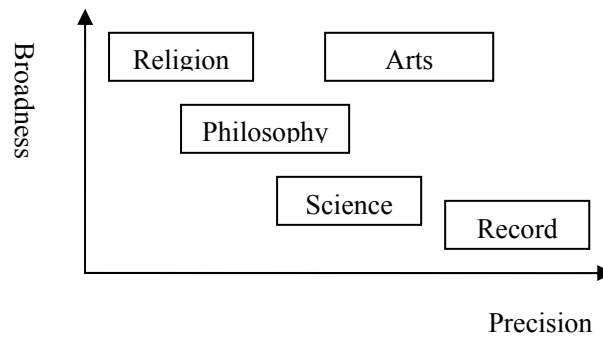


Figure 2 Theory Breadness and Precision

The most precise theory about the falling leaf is the record film, but as the same as “there are not two leaves in the world are same.” there are not the same track of the falling leaves. So the most precise theory is the narrowest. Physics is the most relevant science about the falling leaves. But we must know that in the real world there is no leaves falling to the ground exactly follow the prediction of the physics. So this question is left for the philosophy to handle. Such as why the science is believed as precise prediction tool although it even can’t predict any leaf falling track in the real world. All the unsolvable question reserved for the religion. Especially the theory about the world as whole.

5 Theory Evolution and Its Limitation

Theory used by the human being to accumulate the experience and theory itself. And use all this theory to teach and inherent it. That is civilization. Theory evolution related to the process of theory create, record, propaganda, replace, upgrade and orphan. All the theory can be broadcasted by means of words, formulas and graphic, photos and videos, even the computer programs. The density of the theory represented by the objects it covered. So the more objects it can apply, the higher its density. The higher the density it has, the slower it move forward or refresh. Because we are harder to find or meet the phenomena to prove the false of theory.

First we can establish the theory life cycle concerned certain people. Theory will transfer form one generation to next generation through education and propaganda.

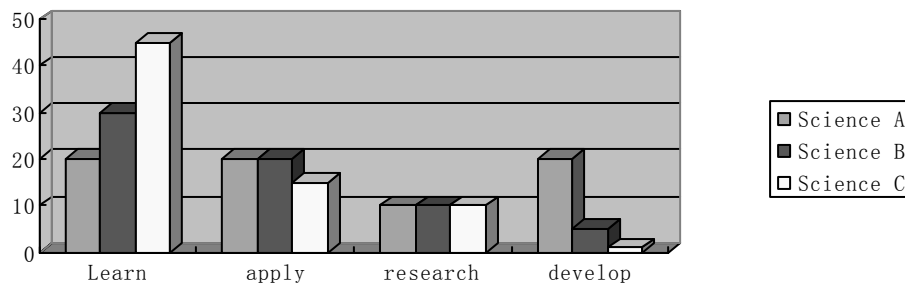


Figure 3 Theory Life Cycle

When learning one profession’s theory from the predecessor exceed the span of average human lifetime. Either we must divide this profession into more professions, or we need the higher density theory more urgently, cause we can’t use the whole life time to learn a theory or understand it. We must could apply what we have learn from the predecessor to practice and improve the human being’ life quality. Otherwise it is useless for the people^[3].

6 Theory Limitation and Social Effects

From now on we know the theory limitation is both logic and historical. When the theory exploding beyond the human being’s life time, the theory evolution will stop cause we can’t expand it without the higher density theory. That is the natural limitation of theory.

Certainly, computer can help us to decrease the natural limitation by use the computer to help us to memorize the static theory and use the computer to calculate the logic conclusion of the dynamic theory. Human being's effort on theory should focus to understand the theory stored and reasoned by the computer. The more important activity about the theory must be done and only could be done by the human being is to find out the higher density theory than the theory we have own now! This is the only way to promote the power of human beings. We are the theory creator and applicator but not the memorizer and the calculator.

The logic limitation of the theory i.e. the theory about the world as whole, is beyond the reflection thought of human beings. Leave it to the Religion. The temporary limitation of the theory i.e. the span of the theory life cycle is larger than the life time of people can be leave to the Philosophy and can be solved by find out new theory with higher density. Various theories owned by the different people have divided the people into different occupations, professions and even cultures. But we can understand and communicate each other now. If the information and the theory expand too fast without to increase the density of the theory, we'll have to handle the problem of the separation of the civilization caused by the over-civilized world in the recent future. For there is nobody can understand all the theories created by the people and the machine. We'll lost in the concepts, logics and theories. We can't learn, understand and verify all the theory by our self. So we must trust the other people whom we regard as capable to understand the whole world or all the theories. That is where the modern authority comes from.

We need the unified theory with the highest density which means all the relevant theories can be rooted from it. So we can only memory the presumptions or the axiom of the basic theory and logic applicable to the theory, then we can deduce all the application of the basic theory, i.e. the application theory. Even we can realize this dream of Leibniz. There is another natural limitation for the knowledge. i.e. the lifespan of the human beings. So we need the machine to store and analyze logic and calculate the applications of the various theories.

The era of the internet have pushed the people into the information explosion. The era of the over rich knowledge division will certainly create the new era of authority and the separation of people with the knowledge they hold. When the knowledge grow up over the natural limit of human being's lifespan. The separation of the people group will unavoidably melt by the authority admitted by both groups^[4]. So we'll in a new era of authority of knowledge caused by the over rich knowledge not by the lack of knowledge just like the middle ages.

7 Conclusion

Knowledge we owned today include three forms, i.e. skill, theory and art. Skill is mainly concerned about the human body movements, such as sports, theory treat the facts and its numerical and logic connections, art is using the imagination and represent this unique imaginations. All the Intelligence beyond or superb those three king knowledge is belong to the religion. Let's focus on the theory. We can easily find that the explosion of the information about the facts of this vivid world around us will set off the explosion of the theory knowledge itself. But according to the set theory and the natural lifespan of the human beings, we must use the computer to help us to treat the theory knowledge, even through we have the ceiling limitation that we can't break through. That limitation is the theory knowledge which can't logical correctly treat the world as whole, and knowledge which is too complex will needs the people to spend entire lifespan to learn it.

When the explosion comes with the internet boom, we'll enter the era of authority ironically caused by the over rich of knowledge not the lack of knowledge like the middle ages. We all hold some knowledge but not all of them. We socially separated by the knowledge we hold. if we go beyond the world we known well, we have to trust somebody else who we believe they hold the correct and enough knowledge we need or lack. Then the new era of authority comes.

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