On the Contingency and Necessity of Social Career Choice from the Perspective of Development of Mathematical History

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ABSTRACT*: This article discusses social career choice on the perspective of development of mathematical history. Although various causes contribute to the career choice, there exist its chance and inevitability. However, as long as you choose it, you should pay the effort to get a good result. This paper provides college students with good employment guidance.*
KEYWORDS - *career choice, mathematical history, chance, inevitability*

I.   INTRODUCTION

Career is a job that people engaged in social work as a means of livelihood. From the social point of view, the employment is the social role of workers, and workers assume certain obligations and responsibilities for the community, and get the corresponding remuneration. From the perspective of human resources required for national economic activities, the occupation is specialized labor position of different nature, different content, different forms, and different operation. Career choice is the selection and determination of the type and direction of personal employment. It is an important behavior that people really get into the social life, and it is the key link of life. Through career choice, it is beneficial to the combination of humans and labor, so that the individual can enter the social work smoothly, which is conducive to the smooth proceed and implementation of the socialization. Social occupation choice can catch a glimpse from the history of mathematics(Lin,2011).

Throughout the history of the world, in the observation of the characters and events of the history of mathematics, we find that the choice of social occupation has its chance and inevitability, and it also interlinks with the modern social work.

II.   CHOICE FOR NEEDS

Need is a kind of psychological state that people lack something and produce a kind of "want to get". It is usually expressed in the form of subjective desire, intention and interest. And needs can be divided into social needs, family needs and personal needs and so on. And from the perspective of the history of mathematics, needs can be roughly divided into the following three aspects.

Career choice from the social needs

In the primitive society, for the need of distribution, one of the earliest digitals such as "nicking for remember things", "rope work for remember" are produced. And it was a head or a wizard who mastered these advanced skills. They are the earliest people who specialized in mathematics profession. Their choices were accidental and inevitable, which was the result driven by social environment.

In the Tang Dynasty of China, mathematics, as a subject, began to be set up, including two mathematics doctors , whose government posts were under nine pin, which was the minimum officer set by Tang. But so, mathematics began to be promoted, because people studying the mathematics can obtain official positions, which was a very important event in ancient China, and prompted a large number of people to choose mathematics as a career. Therefore, mathematics in China got to develop in Tang Dynasty.

But in the Ming Dynasty, Chinese feudal society began to decline, and capitalist factors slowly began to sprout. Due to the inhibition of the ingrained rule of the feudal dynasty, the sprout is not successfully developed. In order to maintain its ruling position, the ruling class stipulated that the imperial examination system must use the "eight parts" style, which made a large number of intelligentsia would research in the classics even though they were "hoary head". However, as for the

specialized knowledge such as astronomy, mathematics and etc, they despised them as "diabolic tricks and wicked craft". Although mathematical theories developed with high speed, they were separated from the reality, which resulted in the decline of Chinese mathematics. Thus, a good social environment is important for the occupation selection. Selecting the more favorable side of the social environment , you will be twice; if you choose the social environment which is not conductive to the development of your occupation, you will eventually get half the results with double the effort. All this is not what a person can control, but it is driven by the social environment.

Economic factor is another vital factor in the social environment. Today economic interest plays a more and more important role. Someone once said in contemporary society, "money plays the role of God." Slightly aggressive remark, however, the rapid diffusion and enhancement of the money consciousness is the fact that anyone could not deny. Of course, mathematical study also cannot lack economic support. Publication of research needs information, equipment, repeated verification, and other people's recognition; therefore, mathematics study needs economic support to continue.

In the Greece Age of Alexander, in the famous city Alexander, the chief, carefully fostered the arts and sciences, provided good working conditions and life support, to attract the talented people. At that time, the low productivity and continuous wars, the economic security became the first to be considered for the mathematicians, but also the very important conditions for the study of mathematics.

Career choice from the perspective of family inheritance

The family will leave a deep mark in life events, among which the occupation choice of youth is the integration of the parents' will. Parents will influence more through the influence of the family environment, which is gradually integrated into the structure of the youth. In the history of mathematics, some families of mathematicians, generations studied mathematics, for example, in ancient Greece, the world's first woman mathematician Hypatia, who studied the mathematics under the guidance of his father, and achieved better results. During the Chinese Qing Dynasty, The Mei Wen-ding family had seven talents proficient in mathematics during the four generations. And the famous Bernoulli family had eight mathematicians during the three generations. In the history of mathematics, there are many examples, such as father and son, brothers for mathematicians, so in the choice of occupation, family views more or less influence your choice, and the family needs have a very important influence on the subjective choice of occupation.

Career choice from personal point of view

For the personal occupation choice, the main factor plays a very important role. The main factor is produced inside, and is closely related to the sense of self-consciousness, including personality, ability and value orientation, and so on, which are the main factors controlling the occupation choice.

(1) personality

Personality or temperament is a stable factor in personality, and personality and temperament will play a continuous role in career and career success. These are the embodiment of personality. During the development of the mathematical history, there are naturally a lot of people with personality. During western mathematical history, the Pythagoreans made its important contribution. After the Pythagorean theorem was presented, Hippasus, a member of this school, considered a problem: the side length of a square was one, so how long was the diagonal length of this square? He found that the length can be used neither integer, nor fraction, but only be expressed with a new number. Hippasus' discovery led to the birth of the first irrational number of the mathematical history. But the appearance of this irrational number set off a huge storm in the mathematical community. It has directly undermined the mathematical belief of Pythagorean--all number can be expressed as the integer or the ratio of integer, and thus, it triggered the first mathematical crisis. Because the personality of Hippasus, there exists irrational number, a number of mathematical history. Therefore, the personality is important in career choice.

(2) Ability

Ability refers to the competence to accomplish a certain activity, including the specific way and psychological characteristics needed for the completing certain activities. Ability can usually be comparable with knowledge, and any career needs involvement and cooperation of knowledge. Ability belongs to the dynamical system, and knowledge to the empirical system. To acquire knowledge must be on the premise of certain ability, and require the improvement of the ability.

A reportage sensation throughout the China, Goldbach guess, made the math wizards Chen Jing-run known by everybody. He promoted the process of the Goldbach conjecture that had not been solved hundreds of years. He had a remarkable ability in mathematics, and had the more than others' diligence and the tenacious will. For many years he tirelessly studied mathematics, and achieved such results. Therefore, in the choice of career, it should be considered whether we ourselves have this ability.

(3)Value orientation

Value orientation is the core of one's consciousness system, and it fundamentally restricts the other aspects of main factors. It is a hidden deeply stable factors, can't be observed and felt, but this do not prevent value orientation factors from becoming the principal factors influencing college students' career orientation and choice. The value orientation is the embodiment of values and directions, and value is a general attitude towards all kinds of things, this kind of attitude shows more clear and single tendency and emotion, and it becomes the value orientation. As the basic finalization of the design values, the value orientation of young people is basically finalized.

In the mathematical method of limit, there is a very important rule-- L'Hospital rule. We usually think it was found by L'Hospital, so we named after him. However, we are wrong. It is said that the law was summed up by John Bernoulli, the teacher of L'Hospital. L'Hospital was rich in France at that time, he always wanted to be a mathematician, and then bought the rule to publish. His teacher regretted it later, revealed the matter to the public, but people hated it, so this also called L'Hospital rule. This fact tells us that any time all we should have our own value judgment, not for the money to betray my own value orientation. Obviously, the value orientation has important influence on the career choice.

III. THE TYPE OF CHOICE DECIDING THE RESULTS

Career choice has the initiative and passive problems, but their forms and inner relationships are different. In terms of its essence, they are the same, and the need to work. There is only a slightly different: one is a passive choice, the other is an active one. Active choice is for the interest, and the interest is the best teacher in the learning. In Northern and Southern dynasties in ancient China, Zu Chong-zhi had a passion for mathematics, and conducted in-depth study, even in a period of very unstable, he still insisted on doing research in mathematics. Because of interest and the hard study, he had made a lot of research achievements, including the well-known achievement that π is firstly accurate to seven decimal places in the world.

Career choice involves passive and active aspects. There are active factors in the passive aspect, and passive ones in active aspect, both of which are inseparable. Choosing a career must correctly deal with the relationship between active and passive aspects, and change the passive to the active. If we choose the career for interest and so we will have an expected future. But no matter for what reason we chose this career, we should pay voluntarily for this job, and do a better job, thus form a virtuous cycle, and result that we like it, really change the passive to active. In the mathematical history, there are a lot of people who chose mathematics as a career not for a natural interest, but for various reasons, such as economic factors, family influence, social drive, etc., but in the end, people who gain good achievements were those who have formed a virtuous and likes math due to hard work.

IV. CHOICE DECIDING PAY AND PAY INDICATING GAINS

Career choice is divided into the subjective and objective choice, and being able to identify them is just the first step of career choice. The stand or fall of the first step for future achievements

has great influence, but not the decisive step. The first decisive step is the determination of professional chooser - what you are determined to pay for your career.

Gaining due to more thinking

When one has professional thinking, what he thinks in his mind and what he sees in his eyes are all contents about questions. If these questions and content are associated, one will have gain. In the history of mathematics, there are many geniuses, who conducted a large amount of thinking and made lots of effort, besides intelligence, finally getting the title of genius. When the famous Aristotle was thinking of the problem whether a crown was made of gold or not, even in the shower he was thinking, finally he found the method to solve the problem.

Gain due to habits

When professional selectors decide to work hard for careers, they will gradually get some professional thinking habits, such as a flower, the different professional people see it as a different thing: aesthetes saw beauty, mathematicians saw numbers, and other professional people saw this flower, which naturally involves their own thinking patterns. Formatting this result, naturally is the result of career choice, and the choice of career make professionals desperately their own thinking lean towards career experience.   So for a flower, each different profession has different feelings. It is such habit that can have the real from the mass, and have content needed for professional spun off from the complicated things, and abstracted. Throughout the history of mathematicians, all are proficient in this field.

V. GAIN PROMOTING PROFESSIONAL DEVELOPMENT

Each kind of career is determined by the professionals' choice. If we choose it, we will make effort accordingly, then we will get personal gain, and then personal gain will in turn affect the sustainable development of the career. The two complement each other, and contribute to our social progress.

To sum up, career choice has vital significance for everyone. Although career choices are influenced by multiple factors or even intervened, but after years of study, college students must start from the first career choice. And after real career trials, they will adapt their career according to their personal characteristics and ability, so that they will pursue their first career, or change. Also in the process, students' professional consciousness entirely become realistic, professional ability and professional requirements, professional reality and professional ideal can keep balance. In this way, you will find a job that suits you.

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