



METHODOLOGICAL AND PHILOSOPHICAL ASPECTS OF FORMATION OF CONSTRUCTIVE AS WELL AS TECHNICAL KNOWLEDGE

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ABSTRACT

This article examines “Methodological and philosophical aspects of the formation of constructive as well as technical knowledge”, besides, which is based on philosophical and scientific research in terms of the formation of scientific knowledge. It is undoubtedly true that scientific knowledge which is obtained via reading scientific sources, such as a wide range of scientific articles, journals and books. Additionally, the article also concentrates on the position of scientific evidence, struggle and unity of contradictions, philosophical categories, as an example of them, the troublesome situation in the formation of technical, constructive, scientific knowledge.

KEYWORDS: *scientific issue, scientific evidence, contradictions, troublesome situation.*

INTRODUCTION

Up-to-date improvement needs the acquisition of digital knowledge as well as contemporary information technology. As stated by President Shavkat Mirziyoyev: “This will permit us to take the shortest path to progress”[1, p.55].

The rudiment of contemporary technologies along with digital knowledge, certainly, is a deep scientific and methodological, philosophical knowledge. For this crucial reason, in this research we want to concentrate on the constructive and technical aspects of scientific knowledge. Philosophical analysis of obvious. When it is not possible to depict the principles of the manifestation of creation in formulas, modal, graphs, and quantum words, the process of comprehension on a daily basis, it takes several years [2, p.226]. As a matter of fact current teaching process is the most valuable case of enhancing autonomous scientists`scientific knowledge perceptibly and efficaciously. Therefore, the vast majority of independent students, who want to be a scientific researcher, attempt to acquire details of informative materials which are related to how merit for enhancing their scientific knowledge thoroughly.

METHODS AND DISCUSSION

As scientific knowledge promoted, it became evident that natural language was semantically incompatible and powerful with the content of what was being expressed in that. The ambiguity of language expressions which are natural, the ambiguity of the logical structures of specific sentences, the diversity of the meanings of language signs under the effect of context, psychological associations –the whole this highlighted the success of clarity as well as clarity of meaning essential for scientific knowledge. As a consequence, there a requirement to replace natural language within artificially formalized language. His or her invention which greatly riched the means of scientific cognition, enabling her/him to tackle new and new strong activities or else tasks. It is undeniably true that both hypotheses and scientific evidence, theories, scientific issues are based on artificial languages created in science.

Scientific obviousness enters the theoretical system and possesses two significant properties: one diversity along with reliability. The reliability of scientific evidence is portrayed in such a way that it can be expressed and



obtained by most researchers utilizing new experiments conducted at various times. One variation of scientific obviousness is that it maintains its reliability regardless of the various interpretations [3, p.178–180].

As a consequence of the generalization of scientific obviousness, they serve as the rudiment for the theory. The simplest forms of generalization of technical obviousness are their classification and systematization on the basis of analysis, classification, synthesis, usage of principal explanatory schemes and so on. It is clear that the vast majority of scientific discoveries or else inventions are the result of the selfless activity of scientists in arranging as well as classifying obviousness.

Empirical laws along within empirical hypotheses that shed light on the relationship between the quantitative indicators of the items under studying determined by scientific obviousness and the nature of regular reproducibility are the most complex forms of generalization of evidence.

Scientific obviousness, empirical laws and empirical hypotheses merely supply knowledge about how incidents and processes occur, yet they do not answer the question of why events and processes occur in definitely the identical manner, nor do they explain their reasons. The tasks of science is to persuade the causes of phenomena, to explain the importance of the processes underlying scientific evidence, the task is tackled within the framework of the highest form of scientific knowledge—theory [4, p.344].

Scientific obviousness is the product of reliable experiment, observation: it is in the form of direct observation of objects, instrument indicators, diagrams, test reports, photographs, records, archival documents certified by witnesses and others. Nevertheless, just as building materials are not yet a building, the evidence alone is not a science. Obviousness takes place in science merely after it has been chosen, generalized, explained and classified. The task of scientific knowledge is to persuade the cause of this evidence, its necessary properties, the legal relationship between the obviousness. The discovery of new evidence is valuable for the improvement of scientific knowledge.

On a daily basis, evidence which involves random items. Science is principally concerned with legitimate and general things. The rudiment of scientific analysis is not a single piece of evidence, but a set of evidence that

refers a major trend. The obviousness is innumerable. Of the great number of disagreements, some that are essential to comprehend the nature of the issue must be selected wisely and pedantically.

However, it should be borne in mind that the practical criterion is that during the practice it is not able to fully deny or confirm any person imagination. This criterion is also so vague that it does not allow human to turn his/her knowledge into a certain and complete reality that does not require to be developed and supplemented. [5, p.450]

Obviousness has scientific essence only if there is a theory that explains them, a method of classifying them, besides, they are comprehended in relation to other evidence. Merely in an interlinked and holistic point of view can the obviousness serve as a basis for theoretical generalization. Accidentally and isolatedly, obviousness separated from life unable of substantiating anything or an incident. Any theories can be constructed from unappropriately opted for evidence, yet it has no scientific importance.

– *Scientific issue*

Any scientific knowledge begins with a variety of problems. Overall, development process of human knowledge can be depicted as the transition from posing certain issues to tackle them and then convincing new problems. However, *what is the position of the problem? Why do scientific issues arise? What is the differentiation between the issue and the problem? What is the scope of scientific issues?*

An issue is a problem or else set of problems that arises purposefully in the cognitive process improvement and possesses a necessary practical or theoretical essence. It should be stated that it is also a problem, a practical or theoretical problem that requires to be tackled; Science is a contradictory situation that takes the form of controversial approaches to the explanation of any event, process, object, needs an appropriate theory to solve it.

Result:

As a result of below research, the author wants to persuade any educators, who may be language teachers or pedagogues, psychologists, it does not matter they should be thoughtful and skillful at analyzing some researches or evaluating students' skills thoroughly. That is to say that it should be known that any problems can serve as a successful reasons for identifying



or realizing the subjects from head to toe. Problem statement which is the first step of the scientific acquiring process. When causing a problem, initially, it is significant to perceive some conditions as a problem, apart from them, to clearly comprehend the content of the issue, to portray it via differentiating between unknown and known items.

Scientific issues will be connected with the subject or procedure. Problems which are regarded the subject reflect the objects being studied, also issues related to the procedure refer the methods of learning and assessing knowledge. In turn, there are conceptual and empirical kinds of subject-related issues, methodological as well as evaluation-related kinds of procedural issues. So as to tackle empirical problems, additionally, a purely theoretical analysis of the materials, it is important to present certain actions within objects, even though conceptual issues do not need a direct reference to existence. Unlike subject matter issues, procedural problems are occasionally conceptual in nature; the differentiation between procedural issues appears to be that methodological issues can not be solved in the form of comparative observation, whilst issues related to assessment include purposes and indicators that serve as criteria for science. [6, p.543]

The empirical problem principally includes the search for data; respond to empirical issues can be found utilizing scientific methods, for instance, measurement, observation, experiment. It is also empirical to seek for a resolution to the problem of instrument making, reagent preparation and others.

Conceptual issues are related to the great amount data gained and include the regulation and interpretation of them, the induction of results as well as the formation of hypotheses, the elimination of contradictions accordingly the needs of logical consistency.

Methodological issues which are mainly connected to the research planning: by tackling them, some agreements are made, the order of problem solving, various observation, experimentation is persuaded, the planned conceptual procedures are determined and so on. Problems in assessing a technical issue include evaluating empirical hypotheses, data, theories and even evaluating how perfect the problem itself is structured and portrayed. In order for the issue to be thought correctly:

–Reliability of certain scientific knowledge (methodology, theory, data) that can be involved in the structure of the problem under studying;

–The issue form is structured appropriately;

–The issue is reasonable, its grounds are not false;

–The problem is bounded to a certain extent;

–Indication of the situation of the resolution and its uniqueness;

–Situations for acceptable solution criteria and colourful approaches for checking the acceptability of the solution. [7, p.205]

Therefore, finally, not the whole scientific issues can be solved: some issues remain unsolved for a long time after they are posed. Some issues remain unresolved and some problems disappear totally from the concentration of the altering generations of scientists.

The scientific issue differs from other problems by the below features:

–It continually directs the scientists to learn real specific knowledge.

–Goals to learn new knowledge. The scientist consciously struggles for innovation.

It should be restated that “What is the first matter of the world?” “What is an item?” “What is mind?” “What is movement?” such global issues can merely define the limitations of some disciplines, but are not the first step of scientific research. Clearly, not every issue is scientific. Scientific issues differ from other kinds of problems in that they are based on scientific foundations and are studied mainly utilizing scientific methods so as to expand scientific knowledge.

There is no common approach of creating issues that can be deeply, efficaciously solved. However, the origin of science depicts that in some cases, deep scientific and instantaneous problems arose during the realization of the following four aims:

–The purposed solutions to the issues posed earlier should be implemented critically, even if these solutions seem unequivocal at first glance; in any case it is possible to find several shortcomings or at least to generalize the solution found, to persuade which applies to the peculiar case;

–It is essential to apply certain resolutions to new conditions, to evaluate their



eligibility or else invalidity: if the solution of the issue maintains valid, as a consequence, not only the solutions but also the problems are generalized, if the solution is invalid, a new set of issues arises;

–It is significant to endeavor to generalize certain issues by transferring them to new areas or territories adding another indicator to it;

–To collaborate with the existence of the problem within knowledge in other areas of knowledge, to attempt to study the issues in a complex manner.

Overall, the choice of issue is creative in nature, where it supplies more experience and intuition than methodology. The scientific problem, like the didactic system is based on the laws of creative assimilation of knowledge as well as methods of activity, which is one of the efficacious means of improving creative considering, which is necessary in the cognitive process and practical activity [8, p.15].

Anybody who is somewhat familiar with the scientific cognitive process gets acquaintance that contrast is an essential, immanent reason of cognition, its promoting force. Not only philosophers, but also several eminent representatives of definite disciplines have utilized contradiction between one way and another to stimulate their wide range of creative activities. According to N. Bor's perspective: "his way of working style and thinking was somewhat creative. N. Bor liked to have a stroll around the room, not sitting behind a desk on the text of scientific articles. Bor would write his articles to one of his staff who convinced him to support himself as a stenographer, critic and listener. By this way, he was regularly discussing himself and his staff. His staff was tired by the end of the conversation. Schrodinger, Einstein, Heisenberg and other physicists who could not help yet notify that N. Bor was occasionally looking for oppositions, he aspired to them, he would like to sharpen contrasts as much as possible. By that way, the similarity between the principles of complementarity and the method of proof, which is characteristic of N. Bor, was the capability to take advantage of the contradictions of alternative points of view".

CONCLUSION

Nevertheless, the organization of oppositions in the cognitive process and its presence in the product of scientific research,

state, in the text of scientific works, are totally distinctive things. In the second case, according to the specific writing, the procedural component of knowledge is eradicated as much as possible and the primary emphasis is placed on the ready, completed, "gained" outcome. The living movement of cognition on a daily basis alters beyond recognition, and in the end there is little or nothing left of the locomotive of action—the contradiction. Finally, it should be noted that scientific knowledge which is comprehensively necessary to implement the most crucial skills of autonomous scientific researchers successfully.

REFERENCES

1. *O'zbekiston Respublikasi Prezidenti Shavkat Mirziyoyevning Oliy Majlisga Murojaatnomasi. O'zbekiston Milliy axborot agentligi, 2020–yil 25-yanvar. Page–55.*
2. *Qurbonova L. "Inson borliq va ijod". Toshkent–"Noshir", 2012, page–226.*
3. *N. Shermuhammadova. "Ilmiy ijod metodologiyasi". Toshkent –" Noshir", 2014. Pages–178–180.*
4. *Tulenov J. T. "Dialektik nazariyasi". Toshkent –"Sharq" nashriyoti, 2001, page–344.*
5. *Xolton D. J. "Tematicheskii analiz nauki". Moskva– "Nauka", 1991, page–450.*
6. *Rakhmonkulovich. N. K. "Muhammad Ibrahim Al-Geyoushi's contribution on the studying of scientific heritage of Al-Hakim Al-Termizi". Asian Journal of Multidimensional Research, 2018, 7(9). Page–543.*
7. *Doniyorov A. Kh., Karimov N. R. "An incomparable book of a Great Scholar // Journal "Bulletin Social-economic and Humanitarian Research", Volume 6, № 8, 2020 April, page–205.*
8. *Тоджибаева К. С. К. Формирование мотивационной сферы нравственных качеств учащихся //Проблемы педагогики. – 2017. – №. 4 (27).*