

"POPULARISATION OF SCIENCE IN RUSSIA: ANALYSIS OF PUBLICATIONS
IN THE JOURNAL PRIRODA, 1917-1929"

GALINA V. GAVRILOVA

LENINGRADO (URSS)
CONFERENCIA CPCT 21-24/5/91

In the analysis of relationship between science and society an important role may be played by study of popular science literature, which is a common element in all of the physical, natural and social sciences, as the binding link between science and humanities. Popular science publications are a special category of issues, in which both the progress of development of science and changes in the relevance of different areas of science in public consciousness are reflected.

Popularization of science in Russia has historical traditions taking their origin from "The Age of Enlightenment". However, we shall not consider all periods of development of popularization in Russia, our task is to show what role can be played by popular science journal in public understanding of science.

This paper will trace the change of the subjects of publications in the journal "Priroda" in connection with political and economic changes in country. What was of paramount importance for the public of that period: popularization of "scientificness", as science proper, or dissemination of "scientific literacy", so that scientific knowledge could be used to meet the practical needs of people? This is the main question raised in the paper.

To date the functions of popularization of science have been determined sufficiently clearly. The major of them are the following: world outlook, enlightenment, information and communication.

It is obvious, that in different periods of the history of science and society the role of one or another function increases.

If the popular science issue realizes its dominant function and correspond to it in its purposes, content and style - this issue

will be a success and bring benefit. If we apply this conclusion to the appreciation of the journal "Priroda" we can see in what way this journal changed taking into account first of all the changes of historical and political conditions of that period.

In the early part of the XX century with the advent of the Industrial Revolution almost all west-european countries Russia including, faced the problem of scientific literacy among the public. This lead to creation of pulp magazines, newspapers and other media, which have directed their efforts to calling attention of ordinary people to science and encouraging in them craving for knowledge. On the other hand science itself was more and more in need of the support of society. At that period in 1912 the Academy of Sciences began to publish the journal "Priroda". The authors of all papers were themselves scientists, who attempted to incal- cate scientific outlook in the minds of rank and file people. Connecting the rise of common wealth with the distribution of knowledge among the public they announced, that their major aim is: to inform the public about scientific achievements at first hand and to acquaint it with the scientific directions of the Academy of Sciences and new discoveries in an accessible and popular form. Thus, the basic function of the journal was enlighten- ment.

Now we can pass over to the analysis of publications of the jour- nal and answer the question: in what way did the journal fulfil its enlightening function during 1917 to 1929?

The structure of the journal consisted of the following section:

1. Original and translated papers
2. Scientific news and notes
3. Bibliography

For the comparison and showing the dynamics of changes we took the papers of 1912, the first year of the issue.

We analysed only original and translated papers. The total number of papers, which were look throught "deviso" amounts to 500.

The first stap was to analyse the papers from the point of view of the accessibility of the scientific content for the public at large. In this connection we pointed out three levels of accessibility. The basic criteria were the following: simple style, exciting presentation, absence of special terms. Purely scientific papers are referred to the First level. The Second level covers popular scientific papers characterized by simple wording and the absence of special scientific terms. In the Third level we included the papers with descriptive elements, as well as some helpful advice for the practical life of ordinary people. The Table of the levels accessibility of papers showed, that during the period under consideration the number of papers of the III level was dominant. (See Table below). By 1929 the number of papers of the level III had become to fewer. The number of papers of the level I had become larger. The number of papers of the level II had increased in the comparison with the level I and the level III.

The Table of the levels accessibility of papers for public at large.

The year of the publish.	I level	II level	III level	Total number of papers
1912	15	22	23	60
1917	16	20	19	55
1918	4	3	7	14
1919	-	2	11	13
1920	-	-	-	-
1921	4	2	11	17
1922	5	20	9	34
1923	3	5	5	13
1924	3	4	6	13
1925	7	16	22	45
1926	6	12	25	43
1927	15	21	23	59
1928	14	23	14	51
1929	17	27	13	57

It may be suggested, that these changes were connected with changes of purposes. When we analysed the papers from the point of view the subject, we can see how the content changed with political and economic changes. In the first year of the issue the major aim was enlightenment of the public. A lot of papers concerning world outlook, philosophical problems, history of natural testifies to it. At the period of the Civil War 1917-1922 such fields of science, which could solve the urgent problems of people came in the foreground. A lot of publications concerning the problems of hunger, food and nourishment, diseases, scantiness of resources appeared. We can cite some titles of papers for illustration: "The food and work", "Energy of life", "The War and crisis of bread", "Modern nourishment" etc. Popular science papers had accessibility of wording and interesting presentation.

By 1929 the journal had begun to incline to "scientificness". The development of natural science and technology required wide information of not only the public, but specialists in different fields of science. Besides, this information had to be popular, because the number of specialists in any field of science was not sufficient yet. The information function had become dominant.

Analysing the papers of journal for different years we can see in what way it realized its major functions in connection with historical changes. In spite of inclination to "scientificness" the journal has existed to the present time. We think, it became possible, because the journal changed according to changes of the social order of the public. Thus, it may be said, that it was one of the best popular science issues, so during all the period it realized its dominant function.