PHILOLOGICAL SCIENCES

ANALYTICAL CHARACTERISTICS OF DOCUMENT FLOW OF THE DISSERTATIONS ON LIBRARY AND INFORMATION SCIENCE IN THE USA AND CANADA UNIVERSITIES

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Abstract

The article discusses the results of the research of document dissertations flow of in the field of library and information science, bibliography and bibliology, as well as information management for the period of 100 years. Scientometric approach, including sources, research, historical method, as well as elements of the content analysis were applied to solve the study tasks. The author has carried out a thematic selection of English-language dissertations from several foreign sources, including databases of the company UMIProQuest and Canada Libraries and Archives. The development trends of library and information science in the USA, United Kingdom and Canada for a hundred year period are investigated. The author compiled and published the annotated list of English-language theses on this topic with the translation to Russian language.

Keywords: library and information science, library science and information dissertation analysis, bibliometric analysis

The implementation process of computer technology in all aspects of society, the creation of computer world networks, which began in the last twenty years, have resulted in significant changes in the entire field of library activity. These changes have become the subject of numerous scientific researches of both Russian and foreign librarians-researchers. A tremendous flow of publications literally occupied the pages of journal and periodicals devoted to the up-to-date state of library and information science, possible trends of its development under the innovative surrounding.

All aspects of scientific thought librarians are interested in would be incomplete without analyzing the flow of dissertations. The dissertation is a unique scientific unpublished document. The scientific quality of dissertations testifies to the potential of the state and is relevant for its multilateral development in the present and future. Analyzing the scope of theses, it is possible to identify the most developed branches of science, to determine analytically the political, economic and cultural state of the country. Therefore, we can already confidently talk about certain emerging trends in the development of scientific library life in Russia and abroad, to make comparisons in scientific positions, research topics, to identify the world's leading and domestic library schools.

Access to international electronic resources, including databases of English-language theses in the field of library science, today allows librarians all round the world to get a comprehensive assessment of international library science, which in recent years has been deprived of the Russian library science and information. Lack of information of this kind in Russian library science was due to the difficulty of access not only to publications in the field of library science, bibliography and book science, but also due to the lack of access to foreign dissertation materials on these scientific disciplines.

This article is completely based on the results of the author's research on the stated topic [1-9] fulfilled in 2003-2004. The article deals with the analysis of such a document flow of English-language dissertations, the study of which was due to access to foreign electronic databases of dissertations, including UMI-ProQuest, Theses Canada Portal; electronic catalog of the British library. The author also uses the personal correspondence with some researches-librarians of North America. The access of Russian librarians to the main database of UMI-ProQuest has became possible as a result of the efforts of the late Russian librarian and translator, Professor Victor Skvortsov, as well as the staff of the Department of cataloging and acquisition of the Central scientific agricultural library (CNSCHB, Moscow).

The research basis for the analysis of the document flow of English-language dissertations encompasses the following sources: annotated bibliography after Schlachter and Tomison for 1925-1982; database of Digital Dissertations of the company UMI, included in ProQuest (http://www.lib.umi.com/dissertation/search); database of Theses Canada Portal; electronic catalogue of the British library (http://catalogue.bl.uk) and some other Internet resources containing full-text English-language dissertations om library science and information. The author of the article personally translated the primary sources - titles of more than three thousand English-language dissertations from English into Russian, many dissertations containing the first 24 pages of the text, as well as two full-text versions of the theses of North American librarians A. M. Schrader and E. Lawley, in total more than 1.5 thousand pages. Also, one of the result of Peter Romanov's dissertation had been an annotated bibliographic list of English-language dissertations in library science and information in the amount of 3130 titles year by year since 1903 up to 2004. In the beginning the author of the article selected dissertations in the field of library science and information, fulfilled by the researches from the USA, Canada, Great Britain, Australia, India and some other countries. It seems that the field of English-language dissertations contains a significant amount of information of scientific, bibliometric and documentary character, still insufficiently used by Russian researchers. It is the dissertation research that serves traditionally as a certain "indicator" in identifying areas of scientific research, and the whole field can serve as an information base for identifying trends in the development of library science and information science in general. It should be noted that in the analytical part of Peter Romanov's dissertation the information

source encompasses not only the English-language dissertations, but also the publications of individual scientists who supplemented and explained their views expressed in the dissertations, which made it possible to fill a certain lack of primary information. This challenge happened to be due to the absence of full-text versions of the dissertations. The managers of ProQuest Digital Dissertations have attached the first 24 pages of the dissertation text in English for the last some decades. Access to full-text sources was extremely paid. Direct appeals to some foreign University libraries to get free access was not successful. After the selection of the material, the autor translated the subject headings of the dissertations from English into Russian and compiled a bibliographic index consisted of 3130 dissertations. The next stage of the dissertation research was the analysis (both substantial and bibliometric) of the obtained set of English dissertations in the field of library and information science, which covered a large time period of 100 years. The first identified thesis is dated by 1903. The number of dissertations in the database and selected by the author of the dissertation is not an absolute, true indicator, because of "pre-computer period" dissertations lack in the database which were not scanned in full, as well as not included in the database due to disagreements of their authors and database owners. Nevertheless, the resulting sample of documents allows to make some generalizing conclusions about the results with a certain degree of accuracy, as well as to analyze the document flow. The author conducted a bibliometric analysis of statistical data that were obtained as a result of processing the electronic database of theses of the American firm ProQuest Digital Dissertations and other Internet resources. This made it possible to outline the current problems facing Western librarians, to consider the main emerging trends in recent years.

It should be mentioned that English-language dissertations in the field of library science, bibliography and book science rarely came to the attention of Russian researchers for quite objective reasons. This fact made it impossible to get a complete picture of the development of this branch of science in English-speaking countries. However, it should be mentioned that the English-speaking researchers were in the same situation as their Russian colleagues of library science scope: they had difficult access to the resources of databases on library science and information dissertation of Russian researches.

One of the most remarkable and global works on this topic belongs to American scientists G. Schlachter and D. Tommison. Their research resulted in a bibliographic annotated list of English-language theses on library science in two volumes published in the United States from 1925 to 1983 [10-11].

The author of the article carried out the analysis of English-speaking dissertations document flow in the field of library science and information for the period from 1903 to 2004 for the first time in the history of Russian library science. He identified the development stages of this flow, its quantitative parameters in dynamics for the last hundred years. The result is the process of library science and information becoming in North America as a branch of science with its subject and object of study was analyzed based on the dissertation flow. The author used a set of research methods for the analysis of document flows. The technology of use of electronic resources of the Internet for the analysis of document flow is offered. The current state of foreign library science is considered on the example of the most important dissertations. Introduced into Russian scientific turnover are the names of modern international researchers of library science and information: A.M.Schrader, George Nitecki, John Whitehead, B. Peretz, B. Dervin.

The number of theses defended by North American librarians from 1903 to 2004 is shown as the dynamic growth in the table 1. Dissertations in the dynamics of years 1903-2004. The total number of such dissertations is as a result of the conducted selection of 3130 titles from the electronic databases of dissertations.

Table № 1

The total number of defensed dissertations (1903 - 2004.)

Year	Number of dissert.	Year	Number of dissert	Year	Number of dissert	Year	Number of dissert
1903	1	1944	3	1965	22	1986	90
1909	1	1945	6	1966	24	1987	94
1912	1	1946	4	1967	19	1988	84
1913	1	1947	6	1968	33	1989	106
1924	1	1948	4	1969	41	1990	94
1925	3	1949	5	1970	55	1991	102
1927	1	1950	6	1971	51	1992	110
1929	1	1951	4	1972	78	1993	93
1930	1	1952	3	1973	64	1994	89
1931	2	1953	4	1974	55	1995	113
1932	4	1954	3	1975	74	1996	112
1934	1	1955	5	1976	59	1997	86
1935	5	1956	11	1977	82	1998	79
1936	2	1957	13	1978	76	1999	82
1937	2	1958	18	1979	73	2000	82
1938	2	1959	8	1980	66	2001	75
1939	3	1960	20	1981	83	2002	91
1940	2	1961	18	1982	27	2003	58
1941	4	1962	9	1983	48	2004	56
1942	6	1963	24	1984	71		
1943	5	1964	20	1985	90		
						Total	**3130**

The author also investigated the activity of the main library schools in the USA, Canada and United Kingdom. All 3130 dissertations mentioned in the list of annotated bibliography are created by researchers from more than 450 (four hundred and fifty) public and private universities and library schools in the USA, Canada, UK, Australia and India.

Working out diagram to the Table №2, the author has chosen seventeen universities North America and United Kingdom as the most famous higher institutions. Analysis of data concentrated in the Table. 2, allowed to make a number of interesting conclusions. The top ten universities in the U.S. and Canada are Columbia University (5.5 per cent of the dissertations from the total number during the study period), State University of Florida (6.2 per cent), Indiana University (4,7 per cent), the State University of Michigan (5.3 per cent), University of New Brunswick (4.3 per cent), Rutgers State University of New Jersey (4.0 per cent), the University of Chicago (5.2 per cent), the University of California (5.7 per cent), University of Illinois at Urbana-Champaign (6,5 per cent), the University of Pittsburgh (9.0 per cent) and the University of Toronto (3.5 per cent). It should be noted that these quantitative data do not in any way indicate the superiority of a particular library school in North America. Till 2004, the number of higher institutions with dissertations on library and information science inactivity almost doubled. It should be taken into account that in the considered period of time the number of universities and administrative units did not remain unchanged. There were natural processes of administrative merger of some universities, changes in the number of library schools and faculties, new library schools has been organised.

Table 2

Number of defended dissertations in basic library schools (selectively) of North America, UK, Canada and Australia for the period from 1903 to 2004

№№	University	Number of dissert	Share per cent
1	University of Pittsburgh	282	9,0
2	University of Illinois at Urbana-Champaign	204	6,5
3	Florida State University	196	6,2
4	University of California	177	5,7
5	Columbia University	172	5,5
6	Michigan State University	167	5,3
7	University of Chicago	162	5,2
8	Indiana University	148	4,7
9	New Brunswick University	137	4,3
10	Rutgers State University of New Jersey	124	4,0
11	University of Toronto (Can)	110	3,5
12	Texas Woman's University	79	2,5
13	Berkeley	75	2,4
14	Case Western Reserve University	75	2,4
15	University of North Texas	67	2,1
16	University of Waterloo (Can)	65	2,1
17	University of North Caroline at Chapel Hill	62	2,0
18	University of Texas at Austin	49	1,6
19	University of Southern California	49	1,6
20	Georgia State University	42	1,3
21	Los Angeles University	44	1,3
22	University of Western Ontario (Can)	41	1,3
23	University of Wisconsin-Madison	42	1,3
24	University of Alberta (Can)	40	1,3
25	Syracuse University	35	1,1
26	University of British Columbia (Can)	32	1,0
27	University of New South Wales (Australia)	26	0,83
28	McGill university (Can)	21	0,7
29	Memorial university of Newfoundland (Can)	21	0,7
30	University of Calgary (Can)	15	0,48
31	Loughborough University (UK)	14	0,44

From the point of view of Russian library and information science the cornerstone of our professional scope is the subject, object and methodology of this scientific discipline and therefore the bibliometric analysis of dissertation flow was expected to find out these categories mentioned above.

The author of the article has conducted a thematic analysis of the information flow of English-language dissertations in the field of library and information science. The statistical result of this analysis is given in table 3 and graph 1"Distribution of dissertations according to the themes during 1903-2004 (by decades)".

Table 3

The distribution of theses on topics 1903-2004 years (by decades)

Topics	1903 - 1919	1920 - 1929	1930 - 1939	1940 - 1949	1950 - 1959	1960 - 1969	1970 - 1979	1980 - 1989	1990 - 1999	2000 - 2004	Итого
Librarianship activity automatization. Information technologies. Digital electronic libraries. Internet.						11	78	179	326	151	745
School libraries. Library and information centers		1	1	3	5	18	36	69	96	41	270
Leadership in libraries. Management. Finances. Economics.			2	10	3	22	88	62	61	21	269
Employees. Librarian profession.				1	3	15	64	80	67	33	263
Library services.		2	4	5	9	28	68	66	59	20	261
Librarian education.		1	1		5	22	51	56	79	33	248
Library management all round the world.				1	1	4	43	75	81	29	234
Book science. The book history.		1	7	4	19	28	42	33	37	11	182
Library funds and collections formation			3	2	3	9	34	39	55	13	158
Librarian cataloguization.			4	4	6	22	56	21	33	9	155
Librarian history. Library leaders and researchers.				8	8	20	34	25	40	10	145
Bibliography science.	5	1	1	2	8	14	28	23	46	13	141
Reading. Readers topics.		1	1	5	3		22	24	33	21	110
Library and information science. Library philosophy.					3	6	25	17	31	6	88
Librarian facilities and equipment. Libraries design and buildings			1			1	7	1	5	3	18
Total in every decade	5	7	25	45	76	220	676	770	1049	414	**3275**

88 dissertations or just 2.8 per cent of the total number of dissertations were dedicated to the library and information science. The share of this indicator in the total amount of dissertations is evidently small. The analysis revealed the insufficiency of basic researches in the field of library and information science. Theoretical fundamental research often has a practical implementation, nevertheless, their number is extremely small. The insufficient development of this part of librarianship knowledge is quiet understandable. The main attention in all the librarianship researches was attracted to the pragmatic features of librarianship.

269 works or 8.6 per cent of the total number are devoted to the Economics of libraries, organization of library business, leadership, library management problems. The problem of librarian personnel is closely interrelated to the problems of management. 263 works or 8.4 per cent of the total number have been written on this topic. The increase of interest of graduate students to the subject is marked in the periods 1970-1979 and 1990-1999. As a result of work the topic of library management occupies 17 per cent of the total number of theses.

248 works or almost 8 per cent were written on the subject of library education, 270 or 8.6 per cent – on the subject of school libraries. Every year the problem of school libraries occupies a very special position, approximately the constant number of researchers develop this theme. Even a cursory look at these figures shows how much attention is paid to the work of library institutions with the younger generation in North American librarianship. These data are very harmoniously correlate with the information on this topic taken from periodicals and journals.

The reason why the modern researchers in North America are interested in this scientific theme perhaps could be explained by the increase in public funding for school education in the North American continent.

The share of public funding for public primary and secondary schools in the United States over the past fifty years has increased from 4.5per cent to 7.3per cent, including school libraries from $ 6 million to $ 15 million.

The dissertations devoted to information technology, electronic databases, automation of library processes, electronic libraries, the Internet occupy a large share in the total number of researches: a total of 634 works or 20.2 per cent. It should be noted that the topics of information retrieval, the formation of user requests, their interaction with librarians and the Internet, as well as the topic of the state of readers in the library have attracted the greatest interest of postgraduates in the last fifteen years. Six dissertations are devoted to the issues of intellectual property and copyright, which is extremely relevant at the present time. It is the most demanded subject in dissertations of the last twenty five years.

Thus, 145 works are devoted to the history of library science, which is 4.6 per cent of the total. A set of theses on the organization and current state of library business abroad is also of great interest to researchers. There are 234 or 7.5 per cent of the total number of such works. They tend to be generalized. It is interesting to note the attention of English-speaking authors to the library activity in the Middle East, Africa, South-East Asia. Several dissertations are devoted to the state of library and information science in the former USSR and Eastern Europe. The activity of libraries in the acquisi-

tion, organization of funds, their processing and maintaining throughout the period under review was in the focus of attention of English-speaking authors - 319 theses or 10 per cent of the total. 243 works or 7.8 per cent of the total number are devoted to library services.

Analyzing the themes of dissertations for the period under consideration, we see that all the main problems of library science are involved and investigated. The usage of capacity of each topic varies on average from 5 to 10 per cent a year, except for the topic of new information technologies (20.2 per cent). According to the results of the research, the author of the article created an annotated bibliographic index of English-language theses for a period of 1903-2004 years in chronological order, and translated the titles of theses into Russian, which was published on the electronic optical disc [3].

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