READER INTEREST IN SCIENCE: ADULTS

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A comprehensive discussion of what adult readers read, and why they read, in the area of the sciences would take much more time than the limits of this portion of the symposium afford. This consideration therefore proposes to indicate some conclusions based on observations and reading--observations which it is hoped will be helpful, both as an aid in meeting current problems and as a stimulant to further discussion.

Katherine Prescott concludes her study¹ of the interests of people who used the Norwood Branch of the Cleveland Public Library by indicating that the prime function of this particular branch was to "help people meet the problems of everyday living." Reading for entertainment came second, and highly intellectual reading was a very poor third.

This study was undertaken as an aid in shaping book selection policy, and as such it is useful to us in furnishing the above mentioned clue as to why people read. The characteristics of a library's service area determine both quantity and quality in what is read, and therefore the specific conclusions certainly do not apply to each and every library because the physical, economic, and social factors vary from community to community.

When it comes to the sciences, the problem becomes extremely complicated, since we are dealing with an area of literature which has exploded beyond the comprehension of any one man. Here there is need for a trained pilot to steer between the Scylla of the practical and often elementary and the Charybdis of the purely theoretical and highly technical. I hope that this subject will be discussed in one of the future sessions.

When it comes to periodicals, the study² of Nigel Calder has some interesting conclusions, which by observation are

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valid for us here as well as in England. In this detailed study of the use 1,082 technolgists made of technical periodicals two conclusions stand out among all others, all of which are interesting:

"Making good use of technical literature is one of the marks of a well-trained and active technologist."

"Technologists read for the news and stimulation rather than for assistance in their work."

This study indicates that, contrary to librarians' hopes and wishes, the technologist does not depend on the library as much for specific information on a specific problem as he does for informative material to keep him abreast of the times in his field, even this type of reading is not as extensive as might be hoped.

It is possible for any library to clutter its shelves with, and expend precious funds on, runs of periodicals and fine technical books and pamphlets which "might" be needed only to find that if and when the "might" becomes a surety the material is either too old or available in newer and better forms.

Actually aside from the usual science area periodicals indexed in Reader's Guide, the small public library is in no position to branch out into the special fields, unless particular community conditions warrant it.

The use of reference books is not reflected in circulation statistics, of course, and a special word should be said about them. In the middle of the year the Dayton staff wrote down every question handled for a week. An analysis of them disclosed that the science area questions, quite naturally, indicated specific problems. For example: diagrams of television or radio sets from Rider's; consumer questions from Consumers Reports or Consumers Bulletin, for which a special index is kept; physics, engineering, or chemical questions which are answered usually from the various handbooks; and information from telephone and industrial directories of various kinds.

As a starting point in the discussion of material which patrons take home, it is thought that a person reads in a subject to the degree that it touches him in real life experience or interest. This may be bold and many may find faults and exceptions to it, but let's start here. If a library has its collection firmly based on this principle, coupled with a knowledge of the community and its resources, it is not likely to be open to what a colleague calls a "the chicken or the egg" type of criticism, i.e., that people don't read in a particular subject be-

cause the library does not have the material.

But what do people read in the sciences? The Dayton and Montgomery County Public Library uses Brodac charging for adult books, and it was a simple matter to take the charge slips and analyze them for this paper. Some attention has been paid to experiences resulting from direct patron contacts, and to the types of materials which patrons reserve. To illustrate, during a week in February 1960, the total circulation was 7,120. An average of 17 per cent of the daily circulation fell in the science area. As an aid in the evaluation of science interest, it should be made clear that separate statistics in fiction and non-fiction are not kept, and high school students use the complete resources of the library system.

Class by class, the following topics were found to be among the many which have more than special interest, and may be considered to have general appeal. In mathematics, all kinds of elementary and advanced presentations are in demand since the subject is basic to science and business alike.

An actual patron's problem a few years ago might serve as a good example. A young man's employer told him to brush up on his math or face the loss of his job. The librarians helped him by guiding him to the best remedial math books on the shelves, and by answering many of his questions. The fellow wants information on computers and computer techniques and Boolean algebra is following the beaten path of others for the same material.

With the launching of the first Sputnik a little over three years ago, public interest in astronomy experienced a greater impetus. There isn't a public librarian, who has not been pressed for astronomy books, and asked for material on telescope building. This question, involving elements of optics and light, can become quite involved. It is well to have available several good books on the subject.

The subject of calendar reform is always with us, and one or two books should fill the need in most libraries.

Textbooks are often the only source of good material and the field of physics is no exception. A selection of current elementary, intermediate, and college level texts is quite useful. The voracious appetite of high school and college students for information in the area of nuclear physics is almost beyond the comprehension of many librarians.

Space travel involves the use of many special subjects in the sciences. Interest in gyroscopes, heat transfer, heat barriers, ceramics and algae all bear eloquent testimony that man's eyes are on the heavens.

In this connection, Einstein and relativity are still steady popular subjects with patrons. One or two books are good "over the long haul." Even the small library will need these. Some basic books on electricity and magnetism might be necessary, although most interest is in the applications rather than the pure theory.

Chemistry is no different in its appeal to readers from physics. Here, too, good basic texts on various levels are in demand. The crossing of field limits in such interrelated subdivisions as biochemistry, biophysics and a new one which has come to my attention, bionics, pose problems, but the average library can await demand. There is a demand for laboratory manuals in many of the sciences, usually by the high school or college student with a special project, or by the harassed parent of said student.

The search for uranium is not as popular as it used to be, but other geological subjects such as water, water conservation, and engineering geology are important in some communities. Weather and earthquakes come in for their share of interest, but not to the same extent as the search for and identification of gems and minerals, including information on how to polish and mount them.

Just a brief mention is all that is required of the enormous interest in fossils and prehistoric animals. Lucky is the patron who finds more than two titles on a library shelf at one time.

In a like manner, early man and the so-called "lost continents" of Mu and Atlantis are perennial subjects for investigation of young and old alike.

Man has always been interested in his contemporary natural surrounding, and present-day man is no exception. Some requests are motivated by student assignments, but there is still a non-student use of books on trees, flowers, animals, shells, snakes, birds and bird houses, and the like.

In the 600's, there are some requests for books and pamphlets on vocations by adults, but most use is by high school and college students. The 610 area is one full of subjects which present problems in selection and preservation. Here are the books on anatomy and nursing which both students of registered and practical nursing require. Here also are such titles as Folk Medicine by Jarvis, Body, Mind and Sugar by Abrahamson, and Arthritis and Common Sense by Alexander.

Here, too, are those harrowing accounts of bouts with various diseases. Throughout this area there are good popularly styled books, and the selection problem frequently centers

around the need for reviews honestly written. When there is doubt about adding a title, the advice of one or more members of the medical profession might be sought.

Usually titles by the prolific Fishbein and others of the "home doctor book" type, if up to date, are useful, as are pamphlets put out by the various insurance companies and associations. Hygiene textbooks at high school and college levels are needed. Marriage and sex manuals, from both Protestant and Catholic viewpoints, and chosen for various age groups, are a must.

There is almost always a new book on smoking or alcoholism on the market. There is comparatively little use of these by adults who wish to do extensive reading on the subject. High school and college student papers account for continued demands for material on these subjects. A good current collection should be available if your community has a need.

Some of the heaviest use for a science collection comes in the engineering area. In Dayton, with its large concentration of tool, automotive, and aeronautical industries, books in both electrical and mechanical engineering are used extensively. There is also a demand for practical shop subjects such as shop mathematics and machine shop operation. There are frequent calls for the care and repair of A. C. and D. C. electrical machines, diesel engines, and, of course, automobiles. The various trade publications on automotive repair are very good, but the comparatively inexpensive collection of service manuals issued by the manufacturers receives the most concentrated use of all. Every library should consider some of these for purchase. Interest in special subjects such as sports cars, antique cars, and trailers also require some resources.

Amateur radio, including construction, licensing, and broadcasting is a popular area, and good material is easily and cheaply obtained. Television repair, transistors, and the newest developments in the communication field are topics not slighted by the public.

Missiles and rocketry compete with interest in muskets, pistols, and other hand weapons.

Many of the patrons have taken to the air in fact or dreams, but many more have taken to the water. The upsurge of interest in boating has been met with many new books, on boat building in your back yard, basement or living room, navigation for the amateur, and even housekeeping afloat.

There are also stay-at-homes who ask for a few books on the operation of stationary boilers, bulldozers, clam shells, and other heavy equipment. All this is, of course, brought about by the increased complexity of the construction and operation of new buildings.

The agricultural subjects even in the large urban library have a good following. Sometimes it is the urban armchair farmer or the "back to the country" city dweller, on rare occasions it is the real plain dirt farmer. Little needs to be said about interest in the many phases of gardening.

Interests in pets range through the whole gamut of the animal kingdom. Dogs, man's best friend, are the most popular, followed by the feline contingent. Horses and horsemanship, bees and beekeeping, fur farming and tropical fish all have wide followings and a fairly good body of literature.

Early in this paper, it was mentioned that interest in a subject seems to be in proportion to the importance it has to man. Few other subjects can be closer than food and family living. Cooks have a choice of books on foods of many lands, books on particular types of cooking, and books on the many ways to use a particular food. There is also an interest in quantity cooking expressed by commercial establishments and by schools and churches. Nutrition and diets of various kinds are also important subjects in the area. The "do-it-yourself" element is also evident here in the books on how to repair that automatic washer or toaster a la Cluny Brown. Many titles such as those written by Spock and Gilbreth on family problems are in demand. Lastly we must not forget the sewing, tailoring, knitting, slip covers, and drapery requests.

The various industries and their histories find a small amount of interest on the part of the reader. Here demand is very closely allied to the community. If there is a rubber industry, books will be needed on rubber; paper, books on paper; ceramics, books on ceramics; etc. The past several years have seen a great development in the plastic industry. The large demand for books on the subject has now slowed down to a steady pace in most libraries.

Concern with the various techniques of metal working, and welding in particular, keep constant drain on some library collections. Much good and inexpensive material is available. The newest development in the field, inert gas welding, is still awaiting the satisfactory treatment in publications which libraries need.

There is no library represented at this institute that does not have a constant drain on its resources to supply books on the various crafts and techniques required in home building. New books are needed on designing one's own home, but there is much good material in print on the crafts involved.

Works on the construction of hi-fi sets, repair of watches, clocks, locks and guns, and the refinishing and upholstering of furniture, together with the "how to make a soap box out of that old chest of drawers" type of book complete this quick survey of adult public interest in the science area.

To summarize: Adults read in the sciences because of a an interest aroused by a particular quest for a specific fact or facts. Student papers, or help on a particular problem at home or at work fall in this area. Adults also read for self-improvement, and for hobby and avocational interests.

Libraries must have book selection policies based on a total knowledge of their separate and individual communities. Many libraries may find themselves oriented more towards the intellectual reader from force of habit and/or because of the comparative ease in selection in the intellectual area. Actually, upon a re-examination of the service area, it might be found that the intellectual reader, type 1900, is almost as scarce as hen's teeth or in the same class with the dodo. Perhaps a total reappraisal of book selection policies is indicated.

References

- 1. Prescott, Katherine. A Study of the Interests of Adult Readers Norwood Branch Cleveland Public Library, February 1954. Cleveland, School of Library Science, Western Reserve University, 1959, p. 39.
- 2. Calder, Nigel. What They Read and Why. London, Her Majesty's Stationery Office, 1959, p. 20.