On the Place of Specialization in Library Work: a General Review.

IT is an obvious truth that in every trade and profession progress is only made, and deftness only acquired, in proportion as the attention is concentrated within assigned limits, and is not suffered to roam at large among irrelevant subjects. The student of history could furnish many an illustration of this condition of the profitable development of the various branches of industry and learning. He could point to what political economists have so often reiterated when dealing with the question of the organization of labour. He could trace with them the advance that has been made in art after art when this truth has been recognized. He could show, for example, how, in the days when every man relied upon himself alone for the making of the goods—boats, weapons, clothing, &c.—of which he had need, the production of these goods was tediously slow, and their quality was more or less seriously defective. He would then point out how, as this at last became clear, one man would restrict his efforts to the production, say, of boats, and as his knowledge of the resources of his craft became more and more specialized—as he came to discern with increasing sureness and readiness what were the best varieties of wood for his purposes, and what the best condition of dryness in which to work upon the material; what the form of keel and prow which afforded, now the greatest speed, now the most stable equilibrium; what the shape of oar and rudder and sail which gave the most facile control over the boat's movements and the utmost rapidity of manipulation—in proportion as he mastered these matters, in that proportion did he leave slow experiment behind and find himself able to act swiftly and unerringly.

¹ Read before the Library Association, London, November, 1896.

In course of time, as the demand for boat-builder's work grew heavier, his craftsmanship more complex, and the gathering together of the most fitting materials more difficult, he would employ other men to aid him, allotting to one the rougher work in the building of the boat, to another the decorative carving, to a third the covering with pitch, to another the preparation of the sails, till the art of ship-building grew to be, in later centuries, a strangely elaborate art, and one in which special knowledge was required in each special branch, and in which labour became increasingly subdivided and increasingly organized; till now in our own days the hands and the clerks and the draughtsmen and the designers are numbered by hundreds or even by thousands; till we hear, for example, that Messrs. Palmer's works employ 7,000 men; whilst Armstrong's works employ 15,000 men, and the ship-building yards alone occupy more than 80 acres.

Our student might point, for further illustration, to the history of philosophy, to show how it was restriction of the range of speculation, once more, that secured to that speculation progress and incisiveness; how the earliest philosophers with their speedy and wide-sweeping generalisations in many subjects did not, so far as substantial results went, do greatly more than make ready the ground for others. He would indicate how, in the days when music, and mathematics, and physics, and grammar, and dialectics, were all within the mastery of individual philosophers, the direct outcome in the way of assured knowledge was comparatively small; and how it was only when a younger generation, attracted by their work, devoted themselves more specifically to these sciences—to mathematics, or to physics, or to dialectics—that one philosopher after another learnt the deeper secrets of nature, and the laws of her operation; till at length he got "behind the veil,"—

"Ultra

Processit longe flammantia moenia mundi,"

passed far beyond the flaming ramparts of the world.

[Here perchance it were wise to take swift leave of our student; for his eye is beginning to kindle, and methinks he would fain lead us, on the tide of his rising thought, far beyond the simple illustration for which we consulted him. Instead, we will recall for ourselves the illustrations (from medicine, from law, from painting), in which, as Sir Morel Mackenzie has so aptly shown, like laws apply.]

If we turn now to the history of libraries we shall find that the same processes which, in those other arts, have been in operation throughout the centuries, have here likewise obtained within more restricted periods. While the number of books placed at the service of the public is small, and while the readers whose demands have to be dealt with are few, the working of the library may be carried on with a very small staff—often the librarian himself alone, or the librarian and a single assistant. The resources of the library can readily be mastered, and the name of every book be retained in the memory, at least to the extent of knowing whether or no it forms part of the collection. The ten or a dozen readers who put in an appearance in the course of the day can be at leisure advised. The stock can be kept in efficient repair, the books dispatched at convenience to the binders, and the thirty or forty fresh volumes which make their casual appearance during the course of the year can be comfortably collated and stocked and placed upon the shelves.

Not a few of us will remember, for example, the tranquillity of a library in Grafton Street in years gone by—its peaceful alcoves, its sparse readers (a clergyman, a quiet young student, a snuffy antiquarian), its dusty books, its atmosphere laden with the half acrid smell of leather bindings. Nor can we lightly forget the antique, spectacled librarian—kindly in the main, though at times not without the contrary humours of old age. We recall the advent of his frugal dinner at one o'clock, brought in on a plate, and discreetly deposited within a remoter alcove, whither he would retire for a space; and anon, a few hours later, his tea would be brought in like manner. At these hours, one that recked aught of old Folio's peace of mind would e'en hold his soul in patience till the meal, and the maturing nap, were done. His experience of readers, though gathered slowly, was varied enough, and ranged from the neophyte, who wanted to know whether they had this or that book, to the confidential *habitué*, who came to say how he wanted to write a book, and would like to know what to read to learn something of his subject.

But in the course of years the old man disappeared, and the library was carried on by a different staff; and some of the old readers fell away, and more younger ones came. The catalogue was developed, issues were registered more systematically, and abundant work for a younger librarian and two assistants was found.

Again, several of those here present will remember something of the Old Town's Library in Newcastle, how for years it was managed by a librarian whose chief function seemed to be, when he *was* in attendance, to see that each reader wore "a white shirt and a white neck-cloth."

Where the number of books is definitely limited, and where readers are few and far between, this picturesque and primitive state of things may suffice; but if readers increase, and if new books begin each month to come in no longer by ones and twos, but by tens and twenties, a somewhat expanded system becomes necessary. More special heed must be given to the disposition of each of the main divisions of the work. The *internal economy* of the library—including the adding to stock, its maintenance in thorough repair, its cataloguing—will now need a no less careful organization than will the external administration (to wit, the issuing and receiving of books, the registration of borrowers, and the advising of them in their reading). And the adequate dealing with periodicals will demand a distinct system of punctual registration. Then, too, when the separation of Reference from Lending Libraries has been accomplished, further subdivision and further organization are pre-supposed. As the resources, and the demands made upon these resources, expand, there grows also an inevitable need for methods of administration which are economical, time-saving, and unerring. Such means must be searched out and adopted. Each function of the library must be developed; and to that end devices that are specifically appropriate, and assistants that are specially skilled, must be employed. Due proportion in such development must, however, as we have been recently reminded by Mr. Barrett, be in the long run always observed, and no one aspect of the general work should come into prominence at the expense of others. If emphasis is for a time laid upon one function, and, in order that it may be brought to a state of higher efficiency, unwonted care given to it, other functions in turn must be similarly scrutinized and developed. For example, our tabulation of statistics (which, by the way, through the wide variety of systems in use, are often, for purposes of comparison, either without significance or else are actively misleading), should not be so inordinately developed that there is no time to be found for adequate cataloguing, or for such directly educational work as the making special exhibits of books to illustrate lectures in the neighbourhood, or the arranging for the delivery of "half-hour talks" on books, &c., &c.

While maintaining, then, that fairly uniform proportion of functions which, in a general library, is requisite, the whole will be brought into a state of efficiency and strength; and we shall be prepared for dealing with a more numerous body of readers and an enlarged annual accession of books. Let us assume that our borrowers and our students are now numbered by thousands, where before they were numbered by hundreds, and that instead of 20 or 30 new books each month we now receive 200 or 300. The ordering of such books grows yearly more difficult, unless a lucid system is organized and unless the cataloguing is kept up to date. The checking in the different departments of the library to see whether books recommended are already there, the sorting of the needful records, the collation, the grouping into classes, the stocking, the questions of shelf arrangement (whether by fixed or movable location), the various details involved in the replacement of worn-out volumes—all these demand an increasingly elaborate organization, each claims a more particular specialization. Now, too, the difficulties of the great catalogue question grow more clamorous of solution. Our charging systems have to be reviewed. Various Indicators appear before us to facilitate issues and receipts, and a discerning eye and a trained and quiet judgment is needed to confront the noisy rivalry of their advocates. Newspapers, magazines, the publications of learned societies are delivered in the library at all hours of the day; and the need for securing their punctual arrival, and their complete yet economical registration, grows more imperative. The English Patents, at times the American Patents as well, are urgent with us for special registers, for roomy pamphlet-boxes, for substantial bindings, for unlimited shelf-room.

In all these things, while there is a growing need for specialization and for the work of experts, there are also growing dangers of unbalanced specialization. We may specialize and theorize upon the methods of doing any given thing until the very time for doing it is all spent; until the method overrules the work; until the incidental kills the essential. Who does not recall, with joy in its satire, the Right Hon. Barnacle's statement in *Little Dorrit* of the quantity of business performed in a single year's work by the great Circumlocution Office? "He perceived, sir," he said, "from this little document, which he thought might carry conviction even to the perversest mind, that within the short compass of the last financial half-year this much-

maligned department had written and received fifteen thousand letters, had made twenty-four thousand minutes and thirty-two thousand five hundred and seventeen memoranda. Nay, an ingenious gentleman connected with the department, and himself a valuable public servant, had done him the favour to make a curious calculation of the amount of stationery consumed in it during the same period. It formed a part of this same short document; and he derived from it the remarkable fact that the sheets of foolscap paper it had devoted to the service would pave the foot-ways on both sides of Oxford Street from end to end, and leave nearly a quarter of a mile to spare for the park; while of tape—red tape—it had used enough to stretch, in graceful festoons, from Hyde Park Corner to the General Post Office."

Could any critic, after so exemplary a demolition, "have the hardihood to hint that the more the Circumlocution Office did the less was done, and that the greatest blessing it could confer on an unhappy public would be to do nothing"?

It is of course in a far-sighted understanding of these risks, in a firm and sane co-ordination of each specialism into relation and harmony with the whole, in a regulation of the enthusiasms and (at times) jealousies of the specialists whose methods he employs, that one important function of the librarian himself comes in. He has to keep ever before him the main objects of the Public Libraries Acts, studying how he may give them their most enlightened interpretation. Like a jeweller that sets lovely gems which, though he made them not, yet he chose; so the librarian, rather than himself specialize in this thing or in that, must excel in so "setting" other men's specialisms that "sweetness and light" may come forth. It is his part to be concerned less with the process of specializing than with its outcome; he must specialize in the results of specializing. He has delicately to appreciate the relative value of the specializations of others in facilitating that interpretation of the Acts, rather than unseasonably to develop any specialization of his own.

If we consider the matter of ordering new books a little more closely, it is clear that serious dangers will arise as time goes on. Mere duplicates can of course be avoided by a mechanical system of adequate checking. But a graver risk is that of purchasing, within one subject which may be of local importance, *intrinsic* duplicates—such for example as many of the text books on mechanics and mathematics. One knows how dangerously—in fact, almost plagiaristically—similar they too often are to one

another—how one is but a *rechauffé* of another. So too, in commentaries on the classics, one finds note after note copied, with or without acknowledgment, from older and better first-hand workers. Against all this *crambe repetita*, this “oft-reiterated cabbage,” one has to be on one’s guard. If one would recommend only such books as are, under one aspect or another, really significant, one must pick one’s way warily, by means of a sound knowledge of the subject.

One has to question, with no small sense of responsibility, how far “librarian’s instinct” may be trusted by itself to carry us in safe guidance through these tests of good craftsmanship. Mr. Brown has pointed this out in the case of music. In other cases also, *e.g.*, the one just mentioned of editions of classics, the danger is no less real. Perhaps indeed it is even greater, owing to the extraordinary deference paid to “authority” in this domain—to the *ipse dixit* of by-gone scholars.

While, then, this duplication (explicit or implicit) is one great danger, another is that of neglecting, through mere oversight, to provide for certain important branches of learning. From the public one gets, in comparison with what one might get, very few direct hints as to defective parts of the library. Many are content merely to see whether the library has such and such books in his particular subject, and if they are not found, to go away disappointed, yet in silence. Thus one source of suggestion is practically stopped. Again, if one considers the hundreds, or the thousands, or the hundreds of thousands of branches, which the tree of knowledge has put forth, it becomes but small matter of surprise if the memory of anyone—even of the librarian who, like Mr. Pickwick, “looks encyclopædias”—fails to retain them all in accurate remembrance, much less to see to it that each has its due relative importance assigned to it, and, month by month, or even year by year, the most competent authors upon it discovered and purchased.

When we come to search out remedies for these dangers—that of duplication (essential duplication, that is), and of omission, it becomes obvious that they are in the main two-fold.

The first is (supposing, as we may generally do, that the subject in question is one in which the librarian is not an expert) the getting the advice of outside specialists. This first remedy will take the form of using bibliographies compiled by experts, or of getting personal advice, or of studying the reviews. In the last-named case great caution and no mean faculty of reading between

the lines will be, alas, too often required. In the case of personal advice, we may of course place before the friendly specialist a list of the books on his subject already in the library, and so get advice whereby we can save needless expenditure on duplicates, and futile crowding of the shelves. In the matter of special bibliographies, while not a little has been accomplished, much more remains to be done.

The second remedy is, naturally, for the librarian to keep constantly before him a clear conspectus of the range of subjects in which the library is to be developed. Some lucid classification of the forms of knowledge, such as, of late years, Cutter or Dewey has given so fully, is here most serviceable, an adequately expanded form being employed for those subjects on which, by reason of local interests, most stress has to be laid.

By employing then, in supplement one to the other, these two systems—that of getting expert advice (either in good bibliographies, or in the reviews, or in talk with specialists personally known), and that of keeping before one's eyes a sufficiently full conspectus of classified knowledge—safe progress may be made. By combining the two we shall get, as it were, both shell and kernel—the conspectus of classified knowledge giving the shell, while the specialist supplies the aptly fitting kernel.

The librarian himself, if a specialist in any subject, will of course add his quota. He must cultivate, within that subject, that unerring "instinct for truffles" (as it has been called), which will enable him to pass by books which are fatuous or noxious, and swoop surely on what is sane and stimulating; to discriminate between the capable and the incapable exponents of the art, the philosophy, or the science; to discern the few original first-hand workers from the many imitators. If his subject, for example, is classics, he must be able to recognize the scholars who have chiefly helped to fix the text of their authors; those whose notes are chiefly valuable in matters of philology, or of the history or the geography of the time; those whose elucidations of the philosophical questions raised are peculiarly suggestive. And he will learn to estimate the distinctive merits or demerits of each member of the long procession of grammarians, scholiasts, learned or ignorant monks, Renaissance scholars, and erudite or humdrum latter-day editors. So too in other subjects: we find everywhere that the same urgent need for clear knowledge of an intimate and specialized kind confronts and invades us. We know, by reiterated experience, how often in our own reading we

spend time over books which after all do not give us what we want—books that are more or less irrelevant for our purposes. The accurate knowledge which was needed to prevent this waste of time comes only after prolonged toil. "One must," to quote De Quincey, "read thousands of books only to discover that one need not have read them." How far then we, in our official position, may advise our readers to their harm, or at least not to their profit—how far the reading they undertake at our bidding may prove, like the toil of Sisyphus, barren—this is a question which requires now, more than ever, to be resolutely faced, and for which some approximate solution must be found. One attempt towards the solution is, of course, being made in the appending to the titles of books in catalogues short notes written by experts, indicating the special scope of the volumes, *e.g.*, the *Boston Public Library Bulletins*, Leypoldt and Iles' *List of Books for Girls and Women*, Adams' *Manual of Historical Literature*—to say nothing of Allibones' *Dictionary*, or Eyre and Spottiswoode's *List of State Papers*, &c.

Consider again that cognate question to this knowledge of the matter itself of our books—I mean that of the shell or classification within which the detailed learning is to be contained. We find, as was naturally to have been expected, that this classification grows more and more complex as the kernel is sub-divided and specialized. One needs but glance for a moment at the history of library catalogues to see how wide the range of this classification has been. There is the simple author catalogue in which no logical scheme is used, at one end. There is the title catalogue, which contains just the germs of classification. Then comes the dictionary catalogue, which, in spite of many demerits (of which Dewey, among others, gives a clear synopsis), is a great step in the right direction. Next we reach the roughly classified lists which are now gaining ground in our Lending Libraries, and which seem to be the half-way point between the dictionary catalogues and the elaborately differentiated schemes which learned societies in their special provinces, and, in universal knowledge, such men as Cutter and Dewey, have promulgated.

Somewhere within this range we have each to decide what classification our local public is capable of appreciating. Perchance, too, we have to decide what degree of accurate classification *we*, the librarians, are capable of offering. Let us, for example, remember the long classification of mathematics,

given in the *Index du Répertoire des Sciences mathématiques*. There is, too, the scheme of classification in the *Fortschritte der Mathematik*, which, being briefer, may in part at least be quoted. It is given in full in the 22nd volume of the journal. The chief headings are twelve in number :—

History and Philosophy (with 4 sub-divisions).

Algebra (with three main, and several minor sub-divisions).

Lower and Higher Arithmetic (4 sub-divisions).

Combinatorial Analysis and Calculus of Probabilities.

Series (general and special).

Differential and Integral Calculus (7 main sub-headings).

Theory of Functions (general and special, with several sub-headings).

Pure Elementary and Synthetic Geometry (5 main, and about 10 sub-headings).

Analytic Geometry (5 main and several minor divisions).

Mechanics (5 main divisions).

Mathematical Physics (4 main divisions, 9 minor).

Geodesy, Astronomy, Mathematical Geography, and Meteorology.

Then follow various other heads which need not be enumerated.

These main headings, with their subdivisions, can, where a special wealth of books makes it desirable, be profitably supplemented.

A quite cursory study of these complex divisions will suffice to remind us once more—those of us at least who have not made serious study of the higher mathematics—into how many pitfalls we may be betrayed in dealing with a valuable collection of mathematical papers and books. Where, for instance, are treatises on Clairant's equation, on hyperdistributives, on cubic and quartic transformations, on poristic equations, on epicycloids and hypocycloids, on the theory of correspondences, on sectic torses, and so forth, to be placed? And, of course, we must be able to discriminate whether the treatment of cycloids and epicycloids, &c., is analytic or synthetic (for these things are by no means always stated on title-pages!). The review itself, by grouping its criticism of new works under the suitable headings, of course does us admirable service; but the twenty-eight years of its existence do not cover the mathematical output of the world. And a similar criticism applies to the very useful work being done on like lines by the *Journal de l'Ecole Polytechnique*. What we need, in fact, is alike the knowledge of a specialist to

distribute the books under the right heads, and the practical skill of one who has special cataloguing experience.

If we endeavour to gather up the threads of what has been said in this brief general review, what are the general conclusions at which we arrive? We see that, just as in all trades and professions that have attained any profitable development, so in library work, there arises inevitable subdivision and specialization of labour. In cataloguing, transition is to be made from the simple author list, which at first answers readers' requirements, on to the title catalogue; thence to the dictionary catalogue, which still appeals to so many readers; and thence to the subject catalogue, or to the subject, title and author lists combined; or again, as Mr. Campbell's book on *National and International Bibliography* suggests, to the author catalogue, title catalogue, subject catalogue, and index of matters. In this subject catalogue an increasingly minute classification becomes requisite.

In the selection of books the advice of experts and specialists in each subject should be, to the utmost degree possible, employed, and their intimate knowledge of the different reasons for which particular books are serviceable should be recorded for the guidance of readers—this being done either by an exceptionally minute classification, or else by subjoining to the titles, notes indicating these particular excellencies.

In the various other departments, too, of library work, the devices of experts and inventors should, in order to minimise mechanical labour, be subjected to close scrutiny, and be more abundantly utilised.

In our staff, in order to secure a really high efficiency of work, the work should be in no slight degree differentiated, the members being made, and held, responsible for accurate administration of their special departments. Our librarians themselves should, on the basis of a broad general culture, mainly specialize in the results of specializing. They must appreciate and then secure lucid results of particular specialists, and they must so co-ordinate their work that a harmonious and well-proportioned operation of the functions of the library may ensue.

What the outcome of our efforts in this direction is to be, and how these results are to be finally attained, are very difficult questions. With the restricted means at present at our disposal much must of necessity remain undone. To adapt a sentence of the work on "*National Bibliography*," already quoted (p. 150, l. 12), we might say that "with the aid of specialists . . .

any conscientious [librarian] . . . will do valuable work; but in proportion to the size of his work, so will his powers and those of his staff find greater difficulty in accomplishing their duties satisfactorily." How can we, who are in a position to offer, perhaps, £60, £80, £100, or £120 a year to our best assistants, reasonably expect to secure the really efficient help that becomes more and more indispensable? We have the voluntary helpers—our local professors, scholars, musicians, &c.? True. Yet, even though most of them at times respond generously to the appeals we make in the interests of learning—how, from such voluntary workers, can we exact the persistence of interest, or the uniformity of method in toil, which is ultimately a *sine qua non*, if we are to have adequate results? Either their interest flags after a time, or a thousand and one things intervene to interrupt the accomplishment of their helpful schemes. It looks more and more as if some form of State aid, in the way of a central bibliographical bureau, where competent specialists were permanently working, were destined to solve at least many of our difficulties—difficulties of overlapping statistics, of inconsistent cataloguing, and of inadequate classification.

That learned societies are recognizing some of these difficulties within their own sphere is well known. The Royal Society is evincing deep interest in these questions. The Institut International de Bibliographie and its admirable schemes are now prominently before us. The Geographical Society in its Congress of 1895 passed a resolution, "That this Congress expresses its approval of the principles of State-Printed Registration of Literature as the true foundation of National and International Bibliography, and approves the appointment of an International Committee to further the said object, the constitution of the Committee to rest with the Bureau of the International Geographical Congress."

. . . Thus we see¹ on all sides, "learned societies of different character, combining, with the determination of doing their best to remedy the present state of affairs. Their very zeal and energy is the chief danger against which we have to contend. Matters have drifted for so long that we are now confronted by the danger of rushed remedies and the stereotyping of hastily considered measures, which might easily, in the end, involve fresh complications; for when once systems

¹ p. 333 of the work above quoted.

are laid down on false or imperfect lines it is not easy to change them. . . . The intricacies of literature are such that our interests are all identical. We must attack literature as a *whole*, on one well-ordered, scientific plan, carefully studied beforehand, which shall take cognizance of the wants of *all*. . . . For these reasons librarians should hail the advent of the "Institut International de Bibliographie" with joy, should wish it all success, and should be eager to help forward that success. And the augury of the future is all the more propitious because the organizers of the Conference went to the root of the matter in definitely recognizing the fact that the future of Bibliography depends not only upon the general co-operation of Governments, but also on their actual intervention in the control and direction of National Bibliography."

Thus far Mr. Campbell.

Meanwhile, till this one life-blood, as it were, shall from a single centre permeate and vitalize our whole library system, we librarians have to develop to the utmost attainable degree the powers of the particular centres in which our work lies; and to see to it that their growth shall be as sane, as consistent, as uniform, and as well-ordered as is, within our resources, practicable.

BASIL ANDERTON.