CHEMICAL HERITAGE FOUNDATION

MAURICE B. LINE

Transcript of an Interview
Conducted by

W. Boyd Rayward

at

Harrogate, England

on

27 June 2000

(With Subsequent Additions and Corrections)

CHEMICAL HERITAGE FOUNDATION
Oral History Program
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MAURICE B. LINE

1928 Born in Bedford, England, on 23 June

Education

1950 B.A., Oxford University
1954 M.A., Oxford University

Professional Experience

1950-1951 Trainee, Bodleian Library, Oxford University
1951-1953 Library Assistant, University of Glasgow
1954-1965 Sub-Librarian, University of Southampton, Southampton, England
1965-1968 Deputy Librarian, University of Newcastle upon Tyne, Newcastle upon Tyne, England
1968-1971 Librarian, University of Bath, Bath, England
1971-1973 Librarian, National Central Library, London

British Library
1974-1985 Director General, Lending Division, Wetherby, England
1985-1988 Director General, Science Technology and Industry, Wetherby and London, England

1977-present Professor Associate, University of Sheffield, Sheffield, England
1985-1991 External Professor, Loughborough University, Loughborough, England
1988-2001 Independent consultant

Honors

1980 D.Litt. from Heriot-Watt University
1985 Honorary Fellow, Library Association
1988 D.Sc., Southampton University
1988 Fellow of Birmingham Polytechnic
1989 IFLA medal
1988 Companion, Chartered Management Institute
1990 President, Library Association

ABSTRACT

Maurice B. Line's interview begins with a discussion of his education and early career. After high school, Line received a scholarship to attend Oxford University and major in Classics. He began his long career in library institutions at the Bodleian Library as a library trainee. He then moved on to the University of Glasgow as an assistant librarian. While there, he was one of the first to conduct library system studies regarding student's attitudes towards the library. Line brought his interest in library systems to Southampton University where Beres Bland, the head librarian at Southampton, gave Line the freedom to develop his abilities and focus his ideas about information science. As deputy librarian at the University of Newcastle upon Tyne, Line helped create the first automated acquisition system in Britain. When he became a librarian at Bath University, he directed the study of social scientists' information requirements, named INFROSS, and a further study on the designs of information systems, named DISISS. In 1985, Line became the director general of Science Technology and Industry at the British Library. Line discusses the constraints of working in the public sector, and his desire to create easy access to library collections internationally. In conclusion, he describes the potential obstacles to the international library system in the future, and the importance of technology in making libraries more accessible to users.

INTERVIEWER

W. Boyd Rayward is a research professor in the Graduate School of Library and Information Science at the University of Illinois, Urbana-Champaign. He turned to librarianship after graduating in English literature from the University of Sydney. He received his Ph.D. from the Graduate Library School at the University of Chicago in 1973. He has held positions in the University of Chicago (where he became Dean of the Graduate Library School). He served as Professor and Head of the School of Information Library and Archive Studies and Dean of the University's Faculty of Professional Studies at the University of New South Wales in Sydney where he is now professor emeritus. He has published two books related to Paul Otlet, Belgian documentalist and internationalist, and a great many articles on history of national and international schemes for the organization and dissemination of information.

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LOCATION: Harrogate, England

DATE: 27 June 2000

RAYWARD: Let's discuss your early education.

LINE: Let's go back to the beginning. I was a child of working-class parents. My father was a postman. I got a scholarship to a public school, Bedford School, and from there won a scholarship in Classics at Oxford [University]. Now, Classics was accidental, because my best subject in school was mathematics; but our headmaster was short of Classicists, so I was forced to do Classics instead. It was, in fact, very good for me. Otherwise, I would have been a very narrow mathematician, I think. But my mind is still very much scientific and numerical.

I stammered a lot when I spoke from the age of 3 to about 23, which made me rather withdrawn and shy, obviously, because I couldn't communicate with people. I thought of myself as a born introvert. Also, my mother died when I was 8, which probably made me feel insecure as well. So when I went off to Oxford, I didn't feel at all sure of myself or who I was. It took years for me to find out.

After graduating, I considered becoming a lecturer; but I lacked the confidence because of my stammer. Therefore, I took a trainee job at the Bodleian Library and started doing my Ph.D. on, of all things, an eighth-century manuscript of *Life of Boethius*. It had an Anglo-Saxon gloss in the margin because I had qualifications in both Anglo-Saxon and Classics. The task bored me out of my mind, but at the same time I became interested in the library side of things. I went from there to Glasgow University Library, and by that time I'd forgotten about being a lecturer, and my stammer gradually subsided. Maybe marrying my wife helped.

RAYWARD: So you received no special treatment for your stammer, it just disappeared?

LINE: I received some treatment when I was about 17, but it didn't have any effect at the time. It just taught me to relax, which has been useful since. But it just disappeared. It comes back occasionally, but I've forgot all about it mostly. I suddenly discovered I wasn't introverted at all; rather, I was quite buoyant, aggressive, and extroverted. Things went on from there. Then, things took another dip when I went to Southampton University Library, where there was a librarian who was both mad and bad—I can say that now because she's long dead. We wished her dead many times!

RAYWARD: What was her name?

LINE: One Marjorie Henderson. She drifted into the job, which she had never really wanted, during the War [World War II] when the library was very small. She was just unspeakable. We communicated with her by memo only, and saw her as little as possible. There were some amusing moments. For example, I remember sitting in a meeting once, and one of my colleagues, Alec [Alexander] Anderson, who later went to Heriot-Watt University as librarian, had his legs crossed. She said, "Mr. Anderson, would you mind uncrossing your legs? I can see your knee above the table." It was like working in a madhouse. Anyway, to our great astonishment and surprise she retired at the age of 55, having worn herself out by antagonizing everybody else in the University. We couldn't restrain our joy, though I hope we didn't show it too manifestly.

I was thirty-two-years old by that time. Marjorie Henderson was succeeded by Beres [M.] Bland, from Birmingham University. I owe him my career, in a sense. He wasn't a dynamic boss; he had no ideas, he wasn't a good speaker, he never wrote anything, and he never contributed anything to information science; but he was a fantastic boss! Why? Because he "enabled" us before that word came into management use. He gave us freedom; he gave us our head; he coordinated. He was a real chairman; a leader who helped his staff to lead. And I came absolutely alive then, we all did. But I think he affected me most because I soon found ways to express all the energy ideas that I'd had shut up inside my mind. Automation was being introduced around that time, and I went into it like a duck into water; partly because of the interest I'd had in mathematics in the past, I suppose.

RAYWARD: Did you do systems studies, too?

LINE: Systems studies and surveys. I carried out one of the first studies of student attitudes to the library, for which I taught myself a certain amount of statistics and started writing. I discovered I wasn't too bad at writing. And inevitably, when you start writing people ask you to talk, which I discovered I wasn't bad at that either. And then I went as deputy librarian to Newcastle upon Tyne University, where automation really took off; I suppose I was one of its pioneers in the UK [United Kingdom]. We automated the first automated acquisition system anywhere in Britain, and we automated the catalog as well. In retrospect, it could have been done better, but it was done.

RAYWARD: These were in-house systems I take it?

LINE: They were all homemade systems, designed by Nigel Cox, from the computing department. He died just recently. I was only a deputy there, but the librarian was lazy and took no real interest in running the library; so I had to, otherwise nothing would have happened at all. I became very interested in management there—how to motivate staff, how to give them freedom. There were two elderly ladies in the acquisitions department. I thought, "My God! How can I get them to automate?" Then I asked those ladies, "What's wrong with the present system? What would you like it to do?" So they specified what they wanted ideally, and I replied, "Automation could help you do that." So they got involved, and we worked together closely thereafter. I never had any problems whatsoever. They were both over sixty-years old, and they were fantastic ladies.

And then I went as a librarian to Bath University, where I had a free hand. It was one of the new technological universities, ex-CATs [College of Advanced Technology]. The librarians ran the library with total control because academics didn't try to tell them what to do.

RAYWARD: What is a CAT?

LINE: It is a College of Advanced Technology. They were not quite equal to universities back then, but they awarded degrees. I went to Bath just as it became a University. Here again we automated the catalog and I learned more about management. We did a lot of other things there as well. We started the catalog research program, which developed into the Bath Centre for Catalogue Research, then into the Centre for Bibliographic Management, and eventually into the UK Office for Library and Information Networking [UKOLN]. A series of cataloging studies grew out of what I started. They lasted about 20 years, but most of the credit should go to Philip Bryant and Lorcan Dempsey, who did a tremendous job.

I went to the National Central Library in its closing days and then, when the British Library was formed in 1973, I went to the Boston Spa because I sympathized with [Donald J.] Urquhart's work and way of thinking. I understudied Urquhart for a year and then succeeded him. He had established a small research unit at the Boston Spa, which I expanded. We did several studies of use and compared the results with citation studies. Around that time, Alexander "Sandy" Sandison, of the Science Reference Library [SRL], and I wrote a long review article on obsolescence for the *Journal of Documentation*, which has become a classic text in the world of information science (1).

Having worked under Marge Henderson at Southampton, I realized she wasn't doing what people wanted. I began thinking, "How do you design libraries around users instead of redesigning people to fit libraries?" Such thinking has pervaded my whole career, practically. Moreover, I explored ways that statistical methods and systematic thinking could be employed to serve users, thereby integrating the human side with the technical side.

RAYWARD: It's interesting how that sort of idea is now animating the development of computer-based systems in a way that it never did before.

LINE: Absolutely! I wrote a piece for *Aslib Proceedings*, and another paper a couple of years ago, about what I wanted from a library and how to design libraries around their users (2). The same applies to computer systems. On one side, there are the technical and statistical people, and on the other side there are the social-serving people who study how people work, what they want, and what they think. So the piece I wrote motivated a lot of the social science studies. I felt that many things that applied to people in the sciences, did not apply to people in the social sciences; as a result, those people were getting left out in the cold. So I got a grant from OSTI [Office of Scientific and Technical Information] to do a series of studies, called INFROSS [Information Requirements of the Social Sciences], on social scientists' needs. Those studies covered both researchers and practitioners (3).

RAYWARD: That kind of research must've been quite new at that time. Did you have trouble getting the grant from OSTI as a result?

LINE: I didn't have much trouble because the research was so new that there were no competitors. INFROSS was followed by a further set of studies, called DISISS [Design of Information Systems in the Social Sciences], including some studies involving a large number of citation analysis, before they were automated (4). It would be far easier today, for back then it was all done manually.

RAYWARD: Was it done on cards?

LINE: No. The citations were put into the computer, but we had to do it manually. Those studies produced some interesting material on how the different social sciences related to each other, and how they depended on each other. For example, anthropology is highly dependent on economics, psychology, and everything else. However, economics is almost self-sufficient, which may be a sign of maturity in a discipline. On the other hand, interdependence may be a sign that the boundaries between disciplines are breaking down, as they are between physics and chemistry. But you can read all kinds of things into such findings. I made some radical proposals on the basis of that research, a few of which were taken up.

RAYWARD: Please discuss some of those proposals.

LINE: We did one study on the optimal pattern of frequency and coverage of abstract and index journals. For instance, we found that the journals would be too insubstantial for users to bother

with if they were issued once a week; whereas they would be too big to use, and out of date, if they appeared only once a quarter. So we tested some experimental patterns of a few services—with the cooperation of the producers—and we made some recommendations. Bill [William Y.] Arms actually did those (5).

RAYWARD: Who is Bill Arms?

LINE: He is currently a computer science professor at Cornell University. Back then, he was at Open University, and those studies were a sideline.

RAYWARD: What role did Bill Arms play in the studies?

LINE: He did the operational research, which I was not as up to date with, obviously (6). I supervised the whole study. Anyway, we made some practical proposals, which were made use of by one or two services. It was also apparent that there were far too many social science abstract and index journals; they had a lot of overlap, while also having a lot of gaps in overall coverage. We found that one had to use about five or six different journals to get reasonable coverage of a specific topic, unlike in the sciences, where there are very comprehensive services like *Chemical Abstracts*. Of course, the social science producers should have amalgamated integrated, coordinated, and so forth; but none of that happened. Some abstract and index journals were small, homemade services produced on a shoestring with no interest in being absorbed into something larger. Others were much bigger, like *Sociological Abstracts*. So there was enormous variation. And they are still difficult to use as a whole.

RAYWARD: Are you including *Psych Abs* [*Psychological Abstracts*], *Sociological Abstracts*, and *Historical Abstracts*?

LINE: Each of those offers good coverage as far as their own social science is concerned, but that coverage is not anywhere near comprehensive, partly because the borders of social sciences are vague. But there are many smaller abstract and indexing journals that cover a much smaller, more specific area, and those are needed to fill in the gaps, as it were.

RAYWARD: So back then, you made some proposals to change the coverage of those subjects as a result of your studies, but they were not taken up, correct?

LINE: Yes. Only a public sector body, or another large organization, could've outdone and thus superseded the existing services, but the chances they would've taken up our proposals

were remote. You can't stop the existing abstract and index journals, but you could start a new one, an all-singing, all-dancing super-service, and knock the rest out of existence. That was the only way it could've happen.

RAYWARD: And that's a bit unrealistic, especially if you consider the professional societies that support journals like *Psych Abs*, and so forth.

LINE: There is nothing in economics or sociology that parallels the size and recognition of a group like the American Psychological Association.

RAYWARD: What about *Sociological Abstracts*?

LINE: True, but that is still nothing compared to the scientific groups.

RAYWARD: *Sociological Abstracts* is very well established now. Nevertheless, it's interesting that the journals' competitiveness wouldn't allow them to come together in some reasonable way back then.

LINE: Clearly, they saw no reason to reorganize their structures while they were making a profit. At the other extreme, small university departments were issuing services on a shoestring. They were probably barely covering their costs, but they earned a certain amount of kudos. Either way, you weren't going to get them to give it up until those responsible retired or for some other reason had to stop.

RAYWARD: At what point did you leave Bath University?

LINE: INFROSS was done mainly at Bath, although I got the initial grant for it at [University of] Newcastle [upon Tyne]; and it was finished off when I was at the Boston Spa. It overlapped with DISISS also, which started at Bath and was finished 3 or 4 years into my time at the Boston Spa. By that time, I was much too busy doing other things to pursue it.

RAYWARD: Did you have someone takeover that role?

LINE: Mike [J. Michael] Brittain was the main researcher I recruited for INFROSS, and he stayed on for DISISS. He's now in New Zealand.

RAYWARD: But he was physically located at Bath University for a long time, correct?

LINE: Yes. That project was what started his information science career; before that he was a researcher in psychology at Southampton.

RAYWARD: Didn't Brittain write a review of the literature system (7)?

LINE: That's right. I suppose he owes his subsequent career to that beginning. One of the great joys in my career has been seeing people develop. Philip Bryant, for example, was an inconspicuous person; a non-graduate who had worked at the Bath Public Library; but he came into his own completely. He became a different man entirely when, in addition to his job as a cataloger, I put him on catalog research.

RAYWARD: Was his future reputation a consequence of that experience?

LINE: He says that himself. Yes, it's very satisfying to see people grow. I supervised over one-thousand staff members at the British Library, and I knew about three hundred by forename. But watching and helping some of them grow, inconspicuously in most cases, was very satisfying.

RAYWARD: Tell me something about [Donald J.] Urquhart, your association with him, and how you eventually followed him into the position as director general.

LINE: Urquhart had a one-track mind. He was a most uninteresting man, and spoke of almost nothing except the Boston Spa. He was a great egotist, who was undoubtedly responsible for a huge achievement. After his retirement he wrote two books, which are not actually very good (8). I was asked to referee one of them for an American publisher. I recommended non-publication, largely because I feared the books might harm his reputation. The books did have some good stuff, but it's expressed egotistically; such as, "I did this. I did that." Urquhart could be quite a bully.

He appointed a lot of yes-men. When I became boss, I had my first senior staff meeting, and they sat there. When I asked for their opinions, they replied, "We're waiting for you to tell us; Dr Urquhart always did." And I said, "I'm not Dr Urquhart; I'm Maurice Line. I want your opinions; you're being well paid, and we're going to work together. I'm not going to boss you around." In that new environment, some of them really blossomed, but others never learned; including my deputy Keith Barr, who died a couple of years ago. He was a marvelous deputy

and did everything I asked of him superbly, but he never did anything on his own because he didn't have a spark of initiative.

I had two initial tasks. First, I had to make Boston Spa more humane. It couldn't have lasted in the sort of benevolent dictatorship that Urquhart had run because the unions were getting restless, and staff attitudes were changing. Second, I had to integrate the National Central Library into the NLL [National Lending Library]: two organizations with totally different cultures and traditions. That task was interesting, too.

RAYWARD: Having come from the National Central Library must have been a great help in that respect.

LINE: It was helpful, yes. I gave some support, though not too much, to the National Central Library staff. Many of them stayed behind in London and took jobs with the British Library, so not all that many came up, actually. But the problem wasn't the people so much as it was the traditions—getting two cultures to grow together. I reckon within a year we cracked it, and in two years there were no problems at all; by then, the organization was virtually seamless.

RAYWARD: Had Urquhart set up the Boston Spa as a factory operation?

LINE: I always strongly defended his approach. What are libraries for? They're to provide people with information. Urquhart's job entailed providing information to people remotely, in the most efficient way possible. Now the Spa is not a factory. Factories deal with large numbers of a small range of items, while the Boston Spa deals with huge numbers of individual items. This is a more complex task, requiring more detailed planning and skill. Urquhart devised a simple system, which paradoxically requires clear thinking and great skill. It was resisted by librarians at first, but was soon widely accepted. I'm sorry to say some procedures have become complicated since the systems inception. For example, books are now both fairly fully cataloged and no longer arranged on the shelves in alphabetical order of title. I strongly disagree with those changes.

RAYWARD: Yes. Wasn't that one of his inventions to get away from traditional library thinking?

LINE: Absolutely right. With his system, you could go straight to the shelves with requests. I don't know why it has been changed—maybe because of a policy to achieve closer integration between London and Boston Spa, which I have never believed in either. I was all for agglomeration, but then I was all for great freedom for the component parts, because I think it leads to greater efficiency and local responsibility. ICI [Imperial Chemical Industries] at one

stage, tried to run all its widely scattered divisions from the center. It simply didn't work, and they had to decentralize again. My division at Boston Spa had nearly eight-hundred staff. I saw that division as a country where everyone had some national feeling and obligation, but it was organized into regions and villages. Each region had some autonomy, and so did each village. The villages related to the regions, and the regions to the country, and every part related to the other parts. I believe that there must be some local freedom if there is to be job satisfaction and reasonable productivity.

There are, of course, job-satisfaction experts who generally propose a greater delegation of responsibility. We achieved that at the Boston Spa, partly to keep staff costs within bounds but mainly to make work more demanding and more satisfying. In fact, we nearly had two or three nervous breakdowns in the process because the staff at the bottom of the hierarchy was given more responsibility, and then found they were doing work that had been done previously by more senior staff. Consequently, their immediate bosses started to wonder, "What are we here for? What have we been doing all this time? We obviously haven't been managing our staff properly; and we ourselves are no longer needed." Such thoughts can be devastating.

Wherever I worked as a management consultant in libraries I found the same thing in danger of happening. I dealt with it by making the staff produce a wish list at an early stage. They had to ask themselves, "What would I like to see done in this library if I had all the time and money in the world?" Many people thought there was no use in asking such questions, but I encouraged, "Don't worry about it. Let's put it down and forget about it until later." Then, a year or two later when a lot of work had been simplified, or delegated, or both, those people found they had time on their hands. I then turned back to the list of things they wanted done, and said, "You can do most of these now." It all happened quite painlessly.

You must also motivate your middle-level staff. This is where I first became interested in how to motivate people to do boring jobs. We had to face the fact that a lot of work at the Boston Spa was very routine and boring; almost like factory work. We had to give staff some satisfaction in their work, and I think we created a happy atmosphere there. I believe the Spa still has a happy atmosphere, and the staff has a fair amount of freedom. The people work in teams, and nobody is bossed around. Further, they are all familiar with the Spa‘s mission, and can make some contribution its procedures and policies.

RAYWARD: The "online revolution" was happening while you were working at the Boston Spa.

LINE: We ran the UK MEDLARS [United Kingdom Medical Literature Analysis and Retrieval System] operation, for which Tony [Anthony] Harley was responsible, but it was a sideline. For our main operations, we started to use automation cautiously. You can't automate matching requests with collections material until you digitize all the collections; nor can you fully automate retrieval of books from the shelves. We looked at the mechanical retrieval system devised for Delft University of Technology, but concluded that it was impossibly expensive and

would be quite impossible to operate on a huge scale. However, the operation was organized systematically—Urquhart made sure it was—even though it was mainly manual. For example, the high use material was in the high use storage. Everything was organized according to statistical studies.

RAYWARD: You referred to a study the Urquhart did. When was the study done?

LINE: Urquhart carried out several studies well before the NLST [National Library of Science and Technology] was established. Indeed, those studies formed a large part of the case for establishing the NLST (9). His great discovery was that the items most wanted on interlibrary loan were the ones most commonly held by libraries—It was truly "interlibrary lending" in those day, whereas I much prefer the more accurate term, Remote Document Supply [RDS], now that most articles are copied or sent electronically—Anyway, librarians didn't believe that because they thought the materials were everywhere, which was true; but they were still the most wanted because the libraries couldn't supply them—they were either in use locally, or were very recently acquired, or they couldn't be supplied for other reasons.

Lynne Brindley, who has just taken over as chief executive of the BL [British Library], wants to revisit the future of the Boston Spa document supply operations in the light of electronic technology. She is quite right to raise those big issues. But you've got to be very careful because there's absolutely no way universities could fulfill the demand for information if, to take an extreme option, you scrapped the Boston Spa.

RAYWARD: Hasn't the Boston Spa also become a significant revenue provider for the BL?

LINE: It recovers all the transaction costs of supply. UK [United Kingdom] prices are set to recover the cost of transactions, but not the cost of acquisitions. The foreign service is priced to make a profit. I wanted to be more self-sufficient, so I increased overall cost recovery from around 22 percent to 60 percent during my time at the Boston Spa. It stuck at that level, and I doubted if we could go much higher. Mind you, we included the building in the total cost. We were paying a large sum in rent for the building, so if you took that away, the cost recovery would be much higher than 60 percent.

I am currently a Boston Spa user myself, actually. A big change happened after I left. We used to serve institutions only, not individuals, because we didn't want to bypass individuals' local libraries. Also, we wanted to avoid a lot of requests coming in with inaccurate or inadequate information. However, the Boston Spa's decision to serve individuals benefited me, anyway.

RAYWARD: Recently, while in France, I spoke with Nathalie Dusoulier in France about the competition between what CNRS [Centre National de la Recherche Scientifique] was trying to

do, and what BL was doing on a much grander scale. I wondered if you had any comment on that apparent international competition.

LINE: There is certainly international competition. As far as we can tell, the Boston Spa has a very high proportion of international demand at the moment. A slight sidetrack: the BL sees its future heavily involved in digitization, but hard copies will have to be used until most material is produced in digital form, which may not be for quite a long time. Of course, you can digitize a hard copy and use that afterwards, but you encounter copyright problems, and also there has to be a double process. They have been working at that now for several years and haven't got nearly as far as they'd hoped. Digital transmission will come, but it has been long, hard going so far. A similar story applies to Elsevier's [Reed Elsevier Group plc] Adonis project, which involved Boston Spa from the start and dragged along for several years, but was never a major element in supply.

RAYWARD: Again, it covered only a small proportion of wanted material.

LINE: That's right. Adonis covered mainly biomedical journals. As an aside, I've just written a paper on the national acquisition systems saying they are largely a waste of time (10).

RAYWARD: In what way?

LINE: We don't need them. We want international acquisition systems. It matters less and less where items are located, especially in the case of journals.

RAYWARD: The assumption is that they will be available electronically.

LINE: Most scientific journals are available electronically; if they are printed at all, it is from an electronic version.

RAYWARD: Many of them are. I think you have discussed that before.

LINE: Yes, as far as local libraries are concerned; but that's another matter. But we should think internationally when we consider the national provision of books. Think of trying to coordinate the national acquisition of books in Britain. The logistic problems are horrific. And you would be asking universities, for universities would be most involved, to buy books they don't need locally with the prospect that somebody else might want them in the future. It's crazy! You can't predict what foreign books will be needed anyway. Several attempts at

acquisition plans have been made in various countries. They've all broken down, or at least failed to fulfill even the most modest expectations. For instance, the Farmington Plan was discontinued after a few years. The Scandia Plan in the Nordic countries broke down as well. In Europe, we should put all major European catalogs online and arrange faster, better request and supply procedures. Most supply catalogs are online already, but they are not all easily accessible. Moreover, we don't need a British system because the effort is much greater than the cost.

RAYWARD: Presumably there's been a role for the BL Document Supply Centre [formerly the lending division], nationally.

LINE: Insofar as the UK can be said to have a national scheme, it consists of Boston Spa, but it doesn't acquire many foreign books. There are arrangements to back up its resources with loans from the London collections of the BL, which constitutes one of the three or four best libraries in the world. But loans from London are made selectively and for use in the borrowing library only. My son is doing a PhD at Leeds University, and he has had books from London occasionally, but it has been inconvenient since he does most of his work in his flat in Harrogate.

I simply don't know what the long-term future of the Boston Spa will be. As I said earlier, the matter has to be handled with tremendous care. Apart from a drastic reduction in document supply, there is a question of the British Library's credibility. One of the good things about the BL is that it has been much more user-oriented than most national libraries, which are book-and-scholar oriented. In addition to document supply, there are also the bibliographic services, which are currently housed at Boston Spa, and the Science Reference and Information Service in London. For my last three years in the BL, I was also in charge of the Science Reference and Information Service.

RAYWARD: Had Michael [W.] Hill left the BL by then?

LINE: No. I took over overall leadership of the operation from Alex Wilson, director general of reference services. Hill worked under us in turn.

RAYWARD: I find it interesting that the social sciences emphasize essay collections. People get a volume and get contributors themselves. It's like a single-issue journal in a way.

LINE: That's right. Essay collections are common in the humanities as well. The contents are rarely indexed properly in bibliographies, and the *British National Bibliography* doesn't index them at all.

RAYWARD: In terms of a study, you were looking at citations, books, and so forth. Have you separated out the citation patterns in books and journals?

LINE: We did, yes.

RAYWARD: Did you find any major differences in the citation patterns of books and journals?

LINE: Substantial. I can't remember the details, but I wrote an article specifically on the differences (11).

The indexing in the bibliographies of essay collections is one of several deficiencies in bibliographic control. I don't want to know what British books have been published. I want to know what materials have been published in languages that I can read and cover topics that I'm interested in; whether they appear as essays in books, journal articles, reports, *et cetera*.

RAYWARD: Is there a global agency that can find books in that manner?

LINE: It would have to be a combined effort by national libraries that cooperated with commercial bibliographies; or perhaps it could be an entirely commercial venture. The various component indexes would not have to be merged; however, they would have to be accessible as if they were merged. The data are nearly all there, so we ought to be working towards such a global agency.

RAYWARD: Working from a national center seems to be a logical approach.

LINE: Yes. We can't even integrate periodical indexes, but there are already front-end systems that effectively integrate the indexes into one search engine. For example, one inputs search terms and then may search several databases at the same time.

RAYWARD: Yes. It's interesting how we are gradually moving towards a whole new setup for managing periodical literature. For instance, there's been a recapitulation in the digital arena of what was available in print; it's only now emerging into something quite different. The front-end systems that allow one to search across a whole variety of databases seem very natural, but it has taken ages for us to get there. I think the lack of computing power was partly responsible for that delay.

LINE: I agree, but the antiquated thinking of those responsible is partly to blame as well. They tend to ask "How can we improve the *BNB*?" not "How can we serve users and potential users better?" It is rather like theology and law. Practitioners get so tied up in legalities and technicalities that they forget all about God and justice. It's much easier to fiddle around with the redesign of lamp-posts than to find new ways of shedding light.

RAYWARD: Maurice, let's redirect the conversation towards the people you worked with at the BL. Would you describe their influence at the BL? Further, please discuss how you worked together to achieve your objectives in the BL's lending division. As I ask these questions, I'm thinking of Harry Hookway specifically, whom I think was the first chief executive you worked with.

LINE: Let's go back a little bit, though, because someone asked me a month or two ago about who has influenced my career. In response, I can think only of two people: Wilf Saunders at [University of] Sheffield and Beres Bland at Southampton, who took over as librarian at Southampton University after the mad Miss Henderson. I don't think anybody else has influenced me personally. I suppose Urquhart influenced me indirectly, through his systematic way of thinking. In the BL itself, I had marvelous colleagues, but I can't think of anyone who influenced me. Harry Hookway was splendid. He always had marvelous judgment. He handled in a masterly way both Lord Eccles, who could be like a bull, and Fred [Frederick S.] Dainton, who was intellectually brilliant; both were very different men, and often very difficult men.

RAYWARD: Were Eccles and Dainton both board chairmen?

LINE: Yes. Harry handled them both superbly. Harry wasn't a man to grasp nettles quickly and firmly, and could appear rather cautious; but I always trusted his judgment when he occasionally queried my greater sense of urgency. I consulted him when I needed, which was rare. In fact, I was left very much on my own at Boston Spa—200 miles from London. The only interference I ever suffered was when the library's central administration tried to impose new restrictions, and the like.

RAYWARD: Please say a little bit about Lord Eccles.

LINE: I admired him greatly. He was very much a conservative, having been a member of a conservative cabinet, and a very dominating man; but I found him very supportive. When I retired, I was given one of these books in which colleagues write nice things about you. One of the very nicest ones that I remember was from David Eccles. He was very genuine and very warm.

RAYWARD: Did you admire Fred Dainton as well?

LINE: Absolutely, but in a different way. David Eccles knew government from the inside, and he had political influence. In fact, we wouldn't have the British Library had it not been for him, for it was his conception. Alternatively, Fred knew his way around from a different angle, and his influence was more intellectual.

RAYWARD: Did you ever meet Mrs. [Margaret] Thatcher?

LINE: I met her only once, when she was present at the unveiling of a bust of Lord Eccles by the sculptor, Elizabeth Spink. It was a very good bust, and I remember thinking irreverently that it was a good thing she was unveiling his bust, and not the other way around! Anyway, it wasn't an unpleasant occasion, though I was surprised to find she had a handshake like a wet leaf. One of those present was the then Secretary of State for Arts, Norman St. John Stevas, who was about to be sacked by her but didn't know it. In fact, he was asked once how he got along with Mrs. Thatcher. He replied, "Perfectly well. Her Tarzan, me Jane."

On the night of the unveiling, St. John Stevas stood beside Mrs. Thatcher as she gave a speech. I remember she said, "We've had numerous secretaries of state for the arts, but I can say without hesitation that the finest, by far, was David Eccles." And St. John Stevas turned absolutely purple! During the lunch buffet afterwards, St. John Stevas sat sulking alone in a corner, eating nothing. It was an incident that illustrated both characters.

RAYWARD: How very ugly! Tell me something about Fred Dainton.

LINE: He was a most interesting character. He had a marvelous fund of stories. One of my favorite stories of his describes an incident when he was an undergraduate at Oxford [University]. As he tells it, he was walking in the Yorkshire Dales with a friend in the springtime, when they came across a lone shepherd on a hillside. Politely, Fred asked, "Lovely morning, isn't it?" And the shepherd replied, in his strong Yorkshire accent, "Aarh! Marning's orl right. It's t'booggers you meet!" [laughter]

RAYWARD: In essence, was Dainton's Report what brought the British Library into being?

LINE: It was Eccles' initiative, but Dainton and his committee's Report [Dainton Report] gave birth to it (12).

RAYWARD: Did Dainton manage the politics of the BL's birth? How was that done?

LINE: The decision had already been made to set it up, but Dainton gave it substance by producing a far-reaching, sensible, practical, and realistic report.

RAYWARD: The creation of the British Library is quite extraordinary.

LINE: It was a fantastic achievement! I can think of no other official report that has been acted on so quickly. Actually, if you look at the Dainton Report's recommendations and what happened afterwards, there were quite a few variations; but they didn't matter because he'd established a sound framework. It would be an interesting job for someone to research what the Dainton Report said and what actually happened. The Dainton Report was followed by the establishment of an organization committee, chaired by Lord Eccles, of which I was a member; and a two-year study of automation's potential application to the British Library, which I was asked to undertake (13). Ideally, I should have done that on full-time secondment, but I had not been at Bath very long and I didn't want to leave several initiatives at a delicate stage.

As I conducted the study, I had to understand all the systems before deciding how, or if, automation should be applied. So it was as much a systems study as an automation study. From the study, I learned that some processes could be eliminated, and others could be simplified so greatly that automation would be unnecessary. It was a good study if I may say so myself.

I can say so because I didn't do most of it myself; I coordinated it. I had a team of four, which incidentally included Bill Arms, and I contracted out nearly thirty studies of special aspects. Managing that project was just about the hardest job I'd ever done, managerially and intellectually. For in parallel to running that study, I ran the Bath University Library and carried out the social science studies. I was quite pleased with the end result. Some of the recommendations were carried out, and some weren't; but that doesn't matter. The study helped to setup the system, and it influenced thinking for several years. Almost all of the study is long out of date now.

RAYWARD: At the time, each one of the institutions brought into that central organization must've had completely different systems. How did you coordinate all of them?

LINE: I suppose the hardest part should have been creating the NCL [National Central Library] and NLL [National Lending Library], which we have discussed already. The whole culture of Boston Spa was very different from that of London, and possibly still is. However, the cultures have changed as bibliographic and computer services moved to the Boston Spa, and as the new building in London was occupied—the influence of buildings on organizational culture is easy to underestimate. So the Boston Spa and London have gradually moved closer together. Now,

there are still different cultures at Boston Spa and London, and that's alright; they are serving different functions. That's one main reason why I want there to be a high degree of autonomy.

To return to influences, Wilf Saunders influenced me, partly because of his personal support, back when I was unsure about my future career. I helped him develop a social science course at Sheffield. He's a very nice, persuasive, humane man who nevertheless got things done; that's a very uncommon combination.

RAYWARD: He was a pioneer in information education in his day, was he not?

LINE: Very much so! He was innovative, but you wouldn't recognize his entrepreneurial intelligence from just meeting him. He showed that you don't have to be a dynamo to get things done.

RAYWARD: Please discuss your connection with Sheffield.

LINE: I have been an associate professor at Sheffield for more than 20 years, though it's more of an honorary position. I was an external professor at Loughborough University for 6 years as well; I enjoyed that. I still have indirect associations with Loughborough. I just completed editing a festschrift for [A.] Jack Meadows, in *J. Doc.* [*Journal of Documentation* (14)] He's one of the nicest people I've ever met—a lovely person. He's a real information scientist. He came in from Astronomy, as you know.

RAYWARD: Let's discuss the international connection through the IFLA [International Federation of Library Associations], and in a way, the extension of the lending division through the Universal Availability of Publications [UAP].

LINE: I wouldn't quite put it that way. UAP was Urquhart's idea, originally. When IFLA setup the UBC [Universal Bibliographic Control] program, Urquhart pointed out, quite reasonably, that providing bibliographic records is nearly useless if you can't get the documents to which they refer. So, he established that concept, and I carried it on after him and developed the UAP program. I don't think the immediate impact was great, but it helped to change thinking gradually.

RAYWARD: That's interesting, please explain.

LINE: Our goal is to enable people to obtain the publications they want, when they want them, where they want them. UAP was all about making the material accessible, in whatever way. With that in mind, we produced several reports and held seminars in various countries (15). Though there was only manual access to materials when we began UAP in 1975, electronic access has changed matters. Indeed, initially many libraries were reluctant to lend; they lent on very restricted terms only, or sat on requests for several days before they processed them. So we worked to change that way of thinking. We realize that universal availability and universal bibliographic control are unattainable, but they are objectives to work towards. I think the program helped change people's thinking, and some useful studies were done on the way.

RAYWARD: What are some of UAP's successes?

LINE: First, publications are more available than they once were. Second, some countries looked at their contemporary systems, or lack thereof, and used our models to make improvements. A good deal of that happened after my time, particularly in developing countries; some of which lacked organized systems of document supply entirely. Those countries started thinking how they could make publications more available; whether by creating or improving union catalogs, or by other means. Third, libraries began taking document supply seriously, in ways they hadn't done before. They realized that the distance between the library and the user should not affect the user's ability to get materials. So, that kind of thinking is spreading throughout the library system.

RAYWARD: Did you provide a headquarters for the UAP?

LINE: We provided the office for it, yes. I directed it until a year after I retired from the BL. But I always enjoyed international contacts, partly because I have always needed to see librarianship in a broad perspective; I see Britain differently and more clearly from outside. It is true that UAP benefited the Boston Spa, but that wasn't the point of it; it was incidental. I try to think internationally, and whenever I have to work in another country, I like to spend a day or two there first to absorb the atmosphere. Of course, you can't fully understand the culture of another country in just two days, but you can get a feel for how the people think, how the people work, and how the country ticks. So far, I've been to forty other countries.

RAYWARD: It is interesting that the UAP, an agency of the IFLA, was then located in a major international service.

LINE: That was originally because of a promise from Lord Eccles. When the IFLA conference was held in Liverpool around 1970, Lord Eccles promised the British Library would do

something for the IFLA. As a result, the BL established the Office of International Lending, which then helped make the Boston Spa an acceptable location for a UAP office.

RAYWARD: What other connections do you have to the IFLA?

LINE: Many. I have been chair of the Section of National Libraries, and most recently chair of the Round Table of Editors of Library Journals [RTELJ]. I have been on the Standing Committees of the Sections on Bibliographic Control and Science and Technology Libraries. My interests in IFLA are spread very wide. I have also given more papers at IFLA conferences than anybody else, I think. [laughter].

RAYWARD: You have an incredibly long bibliography.

LINE: I'll complete it sometime; don't worry. I've published some 380 papers to date, but I promise I will stop soon.

RAYWARD: Three hundred and eighty, that's the tally?

LINE: That's the total of articles; it doesn't include books or reports.

RAYWARD: How have you found the time to do all that work?

LINE: I don't like writing very much, though I know people don't believe that. When I do write, I usually do it quickly. I will write for three reasons: First, with research such as INFROSS and DISSIS, conducted on public money, I felt I had a responsibility to disseminate the findings and make use of them. Second, there are talks to conferences, which the organizers insist on publishing. And third, I feel so strongly about some ideas that I put them in print.

RAYWARD: Another organization connected for a long time with planning in the information area was Aslib [originally the Association of Special Libraries and Information Bureau, now just a set of letters].

LINE: I haven't been very involved with Aslib, though I am currently a personal member. I have been more involved with the Library Association, though not really a great deal. I was surprised when they offered me the presidency a few years ago. I almost turned down the offer, because I thought I might have to do a lot of standing on platforms and being dignified, which isn't my style. But then I thought, "You don't have to be pompous—just be yourself." So I

was. I had to be dignified once or twice only. Even after my presidential address I told a rather rude limerick: [laughter]

"*There was a young lady named Blyton*
Who always made love with the light on.
As the climax drew near
She cried 'I've an idea—
Could you please get me something to write on?' "

Enid Blyton was a well known, and rather bad, children's author. [laughter]

Anyway, I enjoyed my year, during which I gave about 90 talks. I especially enjoyed meeting so many people.

RAYWARD: What do you think about the merger of the LA and the Institute of Information Scientists?

LINE: I've always been a strong supporter of that merger. I supported it when it first emerged as an issue some ten years ago. These things take time. Aslib never will join it. Information scientists always saw librarianship as something for public libraries, and "librarianship" as somehow demeaning. "Information science" is the wrong term; most of its practitioners are information workers—and so are librarians.

RAYWARD: It is interesting to see how the distinction between librarian and information scientist arises. In my chat with Michael [W.] Hill, he was quite clear that librarians were a different kettle of fish, who on the whole had the very simple job of providing books; apart from the most senior librarians. That topic kept popping up in our conversation, but I didn't pursue it. Personally, I believe Hill's view about librarians' traditions was very limited and narrow, especially for someone working in a science library. One would think the union of more traditional library provision, and the notion of providing actual information in various ways, would be a priority. However, I had a sense that that was not the case for Hill.

LINE: How extraordinary! The SRL [Science Reference Library] was a much more user-oriented part of the BL than the ex-British Museum part, but it still could have been improved. Still, I'm astonished that Michael should make that distinction.

RAYWARD: It came out several times in our conversation.

LINE: I think that many librarians could have learned from information scientists; for example, by taking a more systematic approach, and so forth.

RAYWARD: In the other direction, many information scientists have failed to learn from some of the techniques that librarians have tested over the centuries, and so it seemed to be an artificial disjunction.

LINE: Absolutely. I've never seen a distinction. I've always had a foot in both camps. I'm a fellow of both the LA and IIS [Institute of Information Scientists]. I can't see any problems.

RAYWARD: Is the Association going to change its name to something else to reflect a change of attitude?

LINE: I forget what the proposed name of the new association is. There are a number of details to be worked out, but it is going forward in principle.

RAYWARD: Was the new name chosen recently?

LINE: Yes, I went to both the LA annual conference in September last year, and then to the IIS conference, and they both approved it. So it's going ahead.

[BREAK IN DISCUSSION]

LINE: There is the question of access versus holdings. Clearly, we need both, and so it's actually a question of balance (16). I don't know how librarians will handle the fact that many scientists are obtaining copies of articles directly by accessing them online. I rather doubt if the library can offer scientists better service. The idea was that through skilled intermediaries they could offer scientists a better service than they could get themselves, for less cost. I have said that once or twice myself in the past, but I'm not sure it's true; there will be a lot of bypassing.

RAYWARD: Some of the larger information services are taking on the major functions of the libraries, by providing access to both bibliographic and digitized sources. Another important question is: what will the library's role be in the future?

LINE: Yes. Further, is there currently a growing disinterest in keeping libraries going? I use the internet quite frequently. I find some good articles online, but how do I know they're

authoritative? How do I know there aren't better ones around? How do I know what I'm missing? What I'm working on now, studying topics like globalization to prepare talks to local audiences, doesn't raise so many questions since I'm not worried about attaining absolute academic precision. But I want to do a full search and get accurate results in areas in which I claim to be expert. I want to look at the books as well as to obtain a context and background. I could miss a lot of that.

Let's forget public libraries for the moment and look at the future of libraries in higher education. They've got to be transformed, it seems to me. With life-long learning, distance learning, and self-directed learning, we have a totally different ball game. Some large industries are setting up their own universities, in effect, to provide their staff with degree or qualification equivalencies. Hence, universities may become irrelevant for some people.

I think universities must look outwardly, toward serving remote users of any age. People may now obtain their degrees through coordinated courses at remote universities; indeed, some British universities already offer access to US courses, and *vice versa*. So libraries should be part of those changes. In my mind, libraries must be much more closely integrated with the whole education process to continue playing a major role. The permanent gain from university education is not subject knowledge, which quickly goes out of date, but learning how to learn. That is an absolutely crucial skill; learning how to select, how to find out, how to discriminate, and how to evaluate. When you have those skills, you can learn anything, but without those skills you tend to take things for granted. The misconception, "I read it in the paper, therefore it must be true," is very common.

Another general change that is only just beginning to hit higher education is the much greater emphasis on the consumer. Higher education will become much more individualized, like everything else. It'll be tailored to the person. It won't be something you have to take or leave. You won't spend several continuous years of your life undergoing it, and time won't matter as much. For instance, you could study for a degree over as many years as you wanted—2 years, 10 years, whatever. So, I hope we'll see some major change; some educational thinkers are saying much the same. The first time I said that was ten or more years ago, when it wasn't being said much (17). I'm glad to say that now it's being said much more frequently; and not by librarians, but by quite a few vice–chancellors and principals. This is one of my hobby-horses. I've got a stable of hobby horses, by the way, and they breed. [laughter]

RAYWARD: So you're saying that there is a conduit, or a series of conduits, through information services and libraries, which validates the information provided to the user. You're also suggesting the information that the internet provides is generally limited, unless you subscribe to certain services through a mechanism for the exchange of funds. Without such a mechanism, those people seeking information will be forced to use a local institution, which is their local library, generally. So the library becomes a sort of glorified subscription agent.

LINE: The library will become an information transfer mechanism of some kind. I'm not sure what you call it. It won't be a library in a traditional sense. I think we will have many more librarians teaching people how to learn. The trouble is, teaching them how to learn sounds easy, but it's not. It's a kind of Socratic process, isn't it? Asking questions and demanding answers, getting people to think for themselves—which, again, is another thing I've tried to do throughout my career. For example, I pose questions instead of giving answers; I hate giving answers. I noticed the other day that many of my articles pose questions with words like "why" and "what," and so on, in their titles. I want people to think for themselves. I tend to throw out provocative remarks and try to get readers and audiences to react.

RAYWARD: I think you have quite a reputation for being provocative.

LINE: But I'm not provocative for the sake of effect; rather, to challenge assumptions and get people thinking for themselves. I want people to think. I won't tell them anything at all. As Dr. Johnson says, "I dogmatize and am contradicted, and in this conflict of opinions and sentiments I take delight." I am similar. People think I'm dogmatic, but I'm not. I utter hypotheses in a forceful manner, and I want people to contradict them if they can. It's a debating point, not a final statement. I remember one occasion when I was at Southampton University. My colleague, Alec Anderson, and I lived next door to each other, and we used to walk to and from work. One evening when we were coming back home, and we had a vigorous argument. I forget what it was about, but we both dug our toes in hard. Then that evening I thought about it and realized, "Alec's right, and after reflection, I'm wrong." Next morning we went to work together and I said, "Alec, I've been thinking about this overnight and I think you're right." And ironically, he said, "That's odd. I've been thinking about it too and I decided you were right." So we started the argument over again from different positions!

RAYWARD: I think nostalgia is a whole different question, but you asked the question. It seems to me that one doesn't know where one is unless one has some historical sense.

LINE: That's right, but some people seem to dwell in the past all the time, particularly as they get older. I'm not interested in that. I'm more interested in where we are, maybe how we got here, but then where we go from here.

RAYWARD: Then let me ask, where do we go from here?

LINE: Beyond the next ten years, I don't know, either so far as libraries are concerned or as concerns the world. I suppose I could cop out and say everybody should find their own answer. The first thing is that they should ask the right questions, which many of them are not doing. They think how they can defend their present patch, how they can keep libraries more or less as

they are. To me that's an irrelevant question. What's society going to look like in ten, twenty years' time? How can we react to it? What will be the economic and social changes? For example, let's look at immigration. Massive immigration into developed countries will occur as pressures mount from the rising populations of less developed countries, while populations in developed countries are stable or declining. Certainly, the number of working age people is declining in developed countries, and so immigrants are needed to keep the economy going. Without immigrants, the health service and the transport system in Britain would break down completely. Similarly, the so-called underclass of "black immigrants" in the US is necessary if all the dirty jobs are to get done. Population shifts on a huge scale have, of course, happened several times before, even before recorded history. This is only one example of changes that will have an impact, direct or indirect, on libraries: global warming and the world water shortage are other changes. In fact, our mixed populations have made big demands on public libraries, which have, on the whole, reacted very well to them.

We will have enormous economic and political disturbances in the future, as well. Horace Walpole said, "Life is a comedy to him who thinks, a tragedy to him who feels." This may be true in general, but sometimes thinking arouses feelings, and feelings have to be controlled by thought. Sometimes I worry about the future, and think to myself, "My God! Where are we going?" and other times I think, "How fascinating it all is! I wish I could be around in 150 years' time to see what happens."

RAYWARD: Yes, exactly.

LINE: Whatever forecasts one makes for the future, one will be wrong. But you have to do some planning for the future, and you make projections ten or fifteen years ahead, I think, as society changes.

RAYWARD: Let's move back to information services and discuss, not necessarily libraries, but the broader question regarding the establishment of various systems for the dissemination of information. Many of those systems are owned by professional associations, many of which are becoming increasingly market-driven. How do you think profit motive will impact those systems in the future?

LINE: There are great dangers, of course. Libraries might be left to sweep up the unprofitable services that no commercial body will want to undertake. One big factor I have already mentioned is individualization, which automation has made increasingly possible. People expect individual service in shops and elsewhere now, which affects information services enormously. People are not content with a massive "take it or leave it" service. I think there's a big market niche there, which libraries can't fill easily. It would be very hard for libraries to give individualized service in the way that a private company could.

RAYWARD: Is that because the private company requires you to pay for what it is that you get?

LINE: Partly that, and partly because the systems run by private companies are often more specialized and much more flexible - they can act more quickly.

RAYWARD: Why aren't libraries more flexible in that connection?

LINE: Because the public sector imposes constraints. For instance, staff may only be sacked for gross misdemeanors. If the public organization is conservative and stuck in the past, you can't sack them all. Further, they can't recruit new staff quickly or pay comparable salaries because there are budget restraints. Bosses are also often stuck. Many of them are too old to change and don't want to change. Some bosses I worked with as a consultant said, "I suppose big change is coming, Maurice, but it will be after I retire in five years' time." As well as staff inflexibility, the inertia of any public sector organization creates problems. There are also constraints imposed by the committees to which the librarians are responsible. Many library committees are more conservative than librarians.

You don't know Sir Colin Campbell, Vice-Chancellor of Nottingham University, do you? He has his finger in many pies, and is a very powerful and dominant man. He called me in as consultant because he was concerned about the library, which was spending a higher percentage of its budget on staff than other comparable university libraries in the U.K. I found out the reasons for this very quickly. One of the reasons was that they had three main libraries, each of which had to be staffed. The second was they were spending less on the library as a whole. The less you spend in total, the greater the percentage you spend on the staff, since the service still has to be manned. When I pointed this out, he took a great deal of persuading, and I'm not sure he was ever convinced. When I first talked with him, he said "Maurice, my view is that libraries are very conservative." I said, "In my experience, Vice-Chancellor, most of them are less conservative than their universities." [laughter] He didn't like that at all!

After having worked for him for about a year, he said, "Maurice, the academic staff is complaining of low morale. I can't understand this at all." I replied, "If you wanted to, you could bring in a very experienced public-sector consultant I've worked with, who was involved in the beginnings of the job satisfaction movement years ago." So he bought in Keith Robertson, who spent a day and a half talking with the staff. After his meetings, Keith said, "If I may, Vice-Chancellor, I'd like to speak to a meeting of as many of the staff who can come, with yourself present." So they all gathered together, and I have it from Keith's mouth that he said, in his very slow and deliberate manner, "Vice-Chancellor, you brought me in to look at discontent among the staff and low morale, and after talking to staff myself, I have to say that I am convinced that much of the responsibility lies with yourself." [laughter]

RAYWARD: Did he change the system, or kept on going?

LINE: No, no! He didn't understand it. He thought it was the staff's fault, not his! He didn't believe it ever could ever be his fault. I wish I could've been at that meeting.

Anyway, I think conservatism is a natural thing, isn't it? Nobody likes change. It disturbs our lives. If somebody told me to move house tomorrow, I'd hate it!

RAYWARD: I can certainly subscribe to that.

LINE: It's easy to look at systems and see how they can be changed. As a consultant I feel privileged. I can suggest things, which, though I wouldn't want to do myself, still need to be done. Things are still changing rapidly, largely because of government funding of the public library network. Those funds will certainly have an impact. The government's doing a terrific job here, and we should recognize their efforts. But there are some public librarians that don't want to know. I think of four or five whom I would put in the top rank in Britain, some I rate at the bottom, and the rest in the middle; they will move if they're kicked or pulled or shoved, but they won't otherwise. As in any profession, you try to get three or four leaders and with luck the rest will follow.

RAYWARD: You said that you were associated with *Engineering Index* [*EI*] for quite a while, and I wonder what insight that gave you into what was changing with these commercial-based services.

LINE: I was on the *EI*'s board for several years, until it was taken over by Elsevier. It was managerially interesting, because John Regazzi, the current president of *EI*, has done things that no librarian could possibly do in the public sector. He turned the place around from virtual bankruptcy in three years. No librarian could have done that because there are too many constraints. Librarians can't borrow money, and they can carry only a small amount of money over from one year to the next. When I was at the British Library, the government official drove me nuts because they were saying, in effect, "You should behave more like the private sector." My reaction was, "I will if you let me, but I can't break dance with my hands and feet tied together. I can't work as if I am in the private sector if every possible public constraint is put in my way. Give me freedom and I'll do better. I'll be accountable, but give me freedom." And the government would ask, "How many staff have you got? How much do they cost?" And I would assert, "It doesn't matter how many staff I've got. All that matters is what service I'm giving and whether it is cost-effective." That message is getting through the Civil Service now, but very, very slowly. The same could apply to any library. Why not give them a lump sum, and then say, "This is what we want of you, now do it. If you don't, then out you go." Freedom with accountability is what is needed.

RAYWARD: So Margaret Thatcher‘s advent was not able to change that approach to the service very much?

LINE: It has had an effect, but it was very, very slow. I have a great dislike for Mrs. Thatcher and all her works, but on the other hand, some of the effects she had were good. I have a theory: there’s no bad thing that doesn’t have some good results, and *vice versa*.

RAYWARD: And she was a bad thing with some good results?

LINE: The worst thing politically was the huge division she opened up between the rich and the poor, but there were other bad things. But there were some good results; notably, the trade unions had become too powerful and occasionally irresponsible.

Public libraries are in some ways better placed than academic libraries, because many of their users won’t have computers, and will need help in using them. With the growth of lifelong learning, I think there’s a great opportunity for public libraries to fill the gap. This is something the government has recognized. So I think public libraries, if they handle things properly, might actually be on to a winner. Academic libraries are not in the same position, but they still have a traditional function. There will still be books to be supplied for a long time ahead. There is still some time to play with.

But I like to have a long-term vision. I think many librarians and other information professionals are short-sighted and narrow-minded, and I want the opposite. You can always narrow the focus, but until you have seen the whole picture you don’t know what to focus on. You need to imagine ten, twenty years ahead until you can conceptualize the entire picture.

RAYWARD: On the other hand, it is very difficult to achieve such long-term goals.

LINE: Another way you can have a go at it is by thrashing out ideas. You get people to throw ideas into a pot and then you see if there is some convergence between them. I think this is a time for speculation, ideas, and so on; with luck the ideas may come together. For example, we talk about the future of education. I don’t think there would have been any consensus five years ago. From what I have been reading recently in the way of statements by Vice-Chancellors and similar authorities, there is a move towards a consensus on the huge changes necessary. They don’t yet agree on how to do it, but they agree as to what needs to be done. So we may be reaching a consensus at the top, but universities have not yet reacted to the new vision. A good many of them probably can’t because of all the constraints.

RAYWARD: Yes, but some of those constraints are anchored in a vision of what they think the university ought to be, which is not quite on the lines of new thinking.

LINE: Perhaps there's a cop-out, or intellectual laziness?

RAYWARD: Not necessarily. I don't think so. Much of the speculation at universities regarding technology-induced transformations is driven by economic considerations rather than broad educational and philosophical views. In a way, the higher education system as I know it is becoming stratified, creating an inferior, mass approach that would inappropriately apply technology in the future. I don't think we yet know if the achievements we've experienced with casual approaches to online education are as effective as some of the more traditional approaches; such as bringing people together at a university and having them interact directly with one another. I'm not sure we've found anything as effective as direct communication.

LINE: I agree that the physical place is tremendously important. There always need to be campuses where people can debate. Much of what I learned at the University came from other undergraduates rather than tutors. Talking shop is essential, and the library should be, among other things, a place where people can meet and discuss. I think that many features will be technologically driven, but technology can have human aspects as well. It can support music and art, for instance. There is now the possibility of dialing up and visiting online major galleries of the world; many have their own websites. I suppose the internet has helped people learn more about art and music in the last few years.

RAYWARD: Don't get me wrong: I'm not saying there's not a major role for the internet, for there most certainly is. But some of the talk that I have heard at the level of Vice-Chancellors is saying we can now provide an entire educational system online, which will be cheaper and that we can sell to more people.

LINE: All expressed in economic and technical terms. I'm opposed to that.

RAYWARD: True. And expressed without establishing the university's broad educational and social value. They're thinking in limited economic terms, where one institution competes against another to attract customers. You know, in our university [University of New South Wales] one of the deputy vice chancellors said, "We must never talk about students again. We should talk about customers." Arguments like that make it seem as though we must devise systems for users, and not the other way around. But to call a student a customer is to misunderstand, fundamentally, who that person is, and what his or her role is.

LINE: I think there is a counter-case. If you regard students as customers, the onus falls on the student once more, as it did in the medieval university where the students employed the lecturers. I think that students will be more demanding in what they want. Even if they don't express demands vocally, they'll still make demands in practice. But I agree with you—we don't want universities defined entirely in terms of money. Nothing should be defined entirely in terms of money. People are selfish and greedy, but money shouldn't decide all of our values.

RAYWARD: I think that's one reason why, at one level, there's a lot of talk but not a great deal of action. Actions have been taken when new technology could be applied to enhance students' work. Such actions include access to music and art galleries on the web in undergraduate classrooms, where online access was integrated fantastically well and creatively.

LINE: Integrating virtual libraries and museums, where sculptures and pictures are available in the same way and on the same screen as digital text, will be a big step. I think the decision in Britain to have a top-level body like *Re*Source [now the Museums, Libraries, and Archives Council], concerned with libraries, art galleries, and museums, will move this forward. Some local public libraries are already in the same local government pocket as museums and art galleries, where they are coordinated administratively.

Things are in a state of flux, and no one can see their way through. What I'd like, not as a professional but as a person, is to know what society will be like in the future. Where are we going? As I've said, you can predict up to ten or fifteen years, except that even then you're likely to get it wrong; partly because commercial factors are predominating, and these, with greed, will create more instability. We have to try to develop a counter-balance to those commercial influences. The current greed trend may not be with us for all that long, because individual greed works against ordinary people. So the first stage is to imagine what is likely to happen in the future. The second stage is to understand what you want to happen. And the last stage is to figure out how you can change what's likely to happen to what you want to happen.

RAYWARD: Like you, I think it's terribly exciting and interesting. I think your distinction from Horace Walpole about feeling and thinking is very apt, because all of the nostalgia for the past and for its certainties is being undermined. But what is happening is so intriguing.

LINE: Yes.

RAYWARD: And unfathomable. We don't know where it's going.

LINE: I've got no nostalgia for the past. I see television pictures of children and women with their arms cut off in Africa, and I weep. Then I start to think how we can get out of such situations; I go into intellectual mode. And for that I need information. I couldn't live without libraries, because they are an essential support for intellectual thinking and solutions. If I were purely an emotional

person, I think the stress of the world would cause me to break down. That's why I need different angles of approach. You can look at things from a psychological point of view, a social-Darwinist point of view, a logical point of view, *et cetera*. I'm an atheist. I was brought up as a strict Calvinist, by the way, which affected my early life. I grew out of it painfully and slowly. But I was saying to a Jewish friend in London the other week, my vision of "God", if there is one, is someone playing a computer game, where he tries to see what happens if he gets people shooting at each other and so on; he's just having fun, in the same way an ordinary human being might. There is no moral sense in nature. Actually, if you go back to Jewish thinking in the Middle Ages, one of the heresies was God behaving just like that, as if he were playing computer games, just doing things for fun—designing human beings' nature for fun, to see what happens next. Jewish medieval thought is altogether interesting, because some of its heresies, including some which [John] Milton incorporated in *Paradise Lost*, are really quite extreme even by modern standards.

RAYWARD: What you see is the system ideal, but we've come a long way from the automatic data processing days, through online systems, to the Internet.

LINE: Yes, and much information service has become user-oriented, otherwise people wouldn't buy it. I think there are some ways in which you want a market, which isn't necessarily financial. Libraries can benefit from taking a market approach. Otherwise they won't "sell" to anybody at all. Some libraries hoard many old books without thinking what they are good for or if anyone wants them or not. Again, thinking in terms of markets has forced libraries to prioritize services. In the early years of the BL we did a market study—not a financial market study—to decide what we really needed most.

[END OF INTERVIEW]

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