

Journal of Librarianship and Information Science

<http://lis.sagepub.com/>

The case of Paul Otlet, pioneer of information science, internationalist, visionary: reflections on biography

W. Boyd Rayward

Journal of Librarianship and Information Science 1991 23: 135

DOI: 10.1177/096100069102300303

The online version of this article can be found at:

<http://lis.sagepub.com/content/23/3/135>

Published by:



<http://www.sagepublications.com>

Additional services and information for *Journal of Librarianship and Information Science* can be found at:

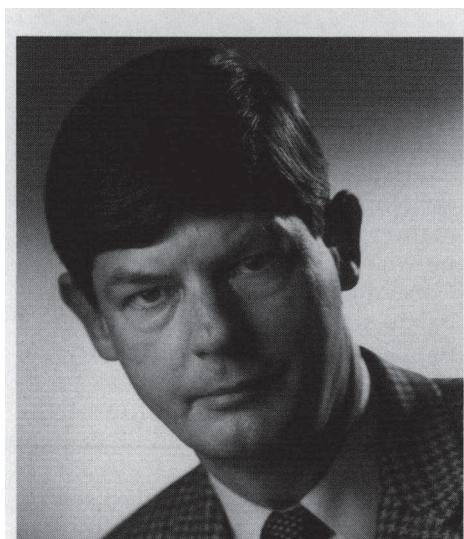
Email Alerts: <http://lis.sagepub.com/cgi/alerts>

Subscriptions: <http://lis.sagepub.com/subscriptions>

Reprints: <http://www.sagepub.com/journalsReprints.nav>

Permissions: <http://www.sagepub.com/journalsPermissions.nav>

Citations: <http://lis.sagepub.com/content/23/3/135.refs.html>



science, internationalist, visionary: reflections on biography

W. BOYD RAYWARD

W. Boyd Rayward is Professor and Head, School of Librarianship, University of New South Wales, Sydney, Australia. From July 1990 to January 1991, he was an Honorary Research Fellow in the School of Library, Archive and Information Studies, University College, London.

The author takes as his point of departure his studies of Paul Otlet, co-founder of the present International Federation for Information and Documentation and the Union of International Associations, developer of the Universal Decimal Classification, theorist of 'Documentation', and pioneer of information science. Drawing on these studies he examines aspects of the art and scholarship of biography, of the processes of research and imagination that it involves, especially: recognizing an appropriate subject and determining an approach to it, the problem of evidence and the frames of reference within which evidence is deployed, the personal involvement that develops between the subject and the biographer, and biography's final goal of historical and personal understanding.

Why do some of us write biography? What are some of its challenges and difficulties? How does it help develop and give shape to historical understanding? Why, as a kind of obverse to all of this, do we want to read it? In what ultimately does the biographical imperative subsist, for it seems to me that it has undeniable and wide-reaching power?

These questions are examined in the context of my biographical study of Paul Otlet. This was published for the International Federation for Information and Documentation (FID) in 1975 (Rayward, 1975), was translated into Russian in 1976 (Rayward, 1976) and will be published in Spanish in 1991 (Rayward, in preparation). The original study is also being revised for a new edition to appear in 1995, the centenary of FID. As one of the steps towards this revision, an annotated translation into English of a selection of Otlet's papers appeared in 1990. This presented a brief re-evaluation of Otlet's career and achievements (Otlet, 1990a).

OTLET'S LIFE AND WORK

Born in 1868, Otlet was a Belgian lawyer turned bibliographer and utopian internationalist. His was a long life for he died on the eve of Peace in 1944. In 1895 he co-founded

with Henri La Fontaine the International Institute of Bibliography (now known as the International Federation for Information and Documentation) and in 1910 the Union of International Associations (Otlet, 1990g). During the First World War and afterwards he was active in the Peace Movement that led to the creation of the League of Nations and later to its Organization for Intellectual Co-operation, forerunner of Unesco (Otlet, *ie*: 1916; 1990e).

His most important work was inspired by what he had come to understand to be the latest bibliographical technology, the standard 5" x 3" card. For him this was a revolutionary technology because it allowed for continuous intercalatability of entries and ease of correction of errors.

Based on the promises of the technology, he and La Fontaine formulated plans for, and helped create in the International Institute of Bibliography, a huge database called the Universal Bibliographical Repertory (La Fontaine and Otlet, 1990). This had reached 11 million entries by the time war broke out in 1914 (Otlet, 1990g, p.119) and had grown to 15 million entries by the late 1930s. The major problem the technology presented for Otlet and

his colleagues never resolved. It was that of copying entries in the database, either in response to searches or as a way of decentralizing access to it by publishing and distributing parts or all of it to libraries and information centres throughout the world.

Otlet also enunciated the principles by which the co-operative elaboration was undertaken internationally of a large, complex software package, the Universal Decimal Classification (UDC). Its function was to provide sophisticated subject access to the database (Otlet, 1990b; 1990c). This was the first great modern synthetic or faceted classification. Still widely used, it has gone through many releases and upgrades around the world since 1896 (e.g. FID, 1975).

Until the outbreak of the First World War, vigorous attempts were made to provide an active international search service from the database. As a result of experience of this service, some fairly primitive, but for the time original, concepts of search strategy were formulated. These turned on notions of 'narrower' and 'broader' subject terms, deriving in part from the hierarchical structure of the UDC, on primitive Boolean operators incorporated into the synthetic UDC expressions in which subject requests were coded, and the range and volume of documents retrieved (Rayward, 1975, pp. 121-122).

It is not generally realized how similar conceptually to our modern online search services the Universal Bibliographic Repertory was. Its practical difficulties, however, presented critical limitations to its effectiveness and success. There were no online communications between the centrally held file and users scattered in various countries. There was no instant feedback by means of which search statements and strategies could be quickly reviewed and reformulated in a process of increasingly effective iterations. And, of course, there was no down-line loading and

printing of retrieved records. Interrogating the Universal Bibliographic Repertory was inherently cumbersome and slow. Written requests had to be mailed to Brussels. There, subject requests had to be translated into search terms expressed as UDC numbers. Relevant entries retrieved by manual searching had to be physically removed from the file and copied, usually by someone at a typewriter. This duplicated search output was then mailed back to the inquirer while the cards on which the entries had been originally recorded were refiled. Given these limitations, the Universal Bibliographic Repertory and the Universal Decimal Classification constituted an extraordinarily modern experiment.

Otlet also encouraged and reported enthusiastically on experiments with other bibliographical applications of technology, especially microfilm (Otlet and Goldschmidt, 1990a; 1990b). On the basis of these experiments and his more theoretical studies, in the early 1930s he began to speculate about how a wide range of then experimental technology – radio, cinema, microfilm, x-rays and tele-vision – could be combined to achieve a new complexity and variety of functionality in information searching, analysis, restructuring and use. This set of functions he believed would eventually be embodied in new kinds of information machines that would be akin to what nowadays we have begun to call scholarly workstations. In all of this, he was attempting to imagine and describe uses for machines that he considered were simply waiting to be invented (Otlet, 1989, pp.389-391; 1990a, p. 8).

A man of prominence

But, at least at first, he was not merely another unworldly visionary. He was absorbed locally, nationally and internationally by a wide range of quite practical activities related to the work of his institutes and the great Palais Mondial or Mundaneum

in which they were consolidated in 1910 and afterwards. Both before and after the First World War he was a consultant to the International Institute for Agriculture on the development of its library and information services. At home in Brussels he was active in the setting up of a Museum for the Book and served as its president. He was a member of the Council of the Royal Library. He also served for many years as president of the Belgian Union of the Periodical Press and held other local and national offices.

Moreover, he was eldest son of, and for a time successor to, his prominent, influential father in the management of the family's financial empire. This was far flung and highly speculative. It involved mining, the construction of rail and tramways and real estate development (De Ryck, 1989). His business responsibilities were intensely uncongenial to Otlet and, a recent graduate of the Free University of Brussels, he entered on them as a young man with the greatest reluctance. When the family's fortunes declined at the turn of the century and their great wealth was lost, he was eager to shake himself free of what had become an oppressive burden. Nevertheless, in the early years of his career these responsibilities brought him into the highest circles of government and society in Brussels. They gave him both a financial and a social base from which to develop what he regarded as his real work. This was the foundation and development of organizations to facilitate the dissemination of knowledge internationally and to harness all the existing elements of international life into a new world polity. This ultimate goal seemed to be on the brink of fulfilment for him as the League of Nations began to take shape at the end of the First World War. But the League soon failed to live up to his expectations, as ultimately perhaps to expectations more realistic than his, and he turned rather angrily away from it.

While much of what Otlet did and thought was practical, he had a utopian vision of what the world might become if two essential conditions could be met. First, more effective international access than was then the case had to be developed to the rapidly growing store of man's knowledge. Second, all the intellectual and political forces of the world had to be co-ordinated according to plans that he drew up and promulgated. As indicated, these plans essentially embodied idealistic extensions of the international institutional arrangements that had begun to emerge at the time of the First World War, particularly the League of Nations. This vision became increasingly divorced from reality. Indeed, with the passing years, as the external political, organizational and social realities of his life became more and more difficult for him to control and to bear, it absorbed most of his energy. Depending on one's state of mind when one reads his utopian speculations, they can seem to be banal rather than admirably idealistic, foolishly simple-minded rather than of a statesman like simplicity, even threatening to personal freedoms in their prescriptive, highly structured, organizational requirements.

Yet at the end of his life, when all around him spoke of the denial, abandonment and failure of his ideas and the organizations in which they were embodied, Otlet attracted a band of followers, *Les Amis du Palais Mondial*. After his death they were fervently committed to perpetuating his memory and sustaining his vision of a great centre, the *Palais Mondial* or *Mundaneum*, in which the elements of the world organization to which he had devoted his life had been brought together and provided with a single headquarters. And what elements they were! A universal bibliographical database, a universal classification system, an international library, the apparatus of a universal documentary encyclopaedia, an international museum,

what was called an international university (though it was really no more than a high-powered summer school), and the secretariats of a wide variety of non-governmental international associations (Otlet, 1990d; 1990g).

Pioneer of information science

For a time, then, Otlet was prominent in Belgian business and cultural affairs and he became, briefly, an international figure of some importance. His legacy to posterity has an institutional dimension in still active international associations. It also has an important intellectual dimension in a large and diffuse body of writing for, throughout his life, he wrote voluminously about bibliography, classification, librarianship, international co-operation, the organization of knowledge and what he called *Documentation*, a synthesis of elements drawn from these broader subjects (Otlet, 1989; 1990d; 1990f). This work we can now see as providing a very broad-based introduction to important aspects of modern information science. Some of Otlet's pioneering ideas, hitherto much neglected, have recently begun to be examined by Michael Buckland (1990; forthcoming a; forthcoming b).

Otlet was concerned to analyse the nature of Documents and to understand the organizational requirements needed to facilitate access to the information that was their freight. But the document Otlet conceives of in a new way, as being anything that conveys information, principally writings of all kinds but also 'things' as well, depending upon the uses to which conceptually they are put. For him a document was something having 'evidentiary' value and so included objects themselves as well as graphic and other representations of objects and ideas. With this theoretical perspective he conceptualized a field of study and research that is concerned not with separate institutions but with the related functions that a number of

different kinds of institutions perform. He saw libraries, archives, museums and the new kinds of special bibliographical and information services he and his colleagues were defining and attempting to set up, as all related institutional manifestations of a single, central social need. These organizations expressed functions that had devolved upon the 'Document'. Thus for Otlet the document is at the centre of a complex process of communication, of the cumulation and transmission of knowledge, of the creation and evolution of institutions. These notions help produce a coherence and amplitude in what in the English-speaking world are still fairly circumscribed areas of research and education.

The fate of the Palais Mondial or Mundaneum

Once housed in some grandeur in a wing of the *Palais du Cinquantenaire* in Brussels, what remained of the collections, publications and archives of these enterprises, after years of government neglect, were bundled into part of an old anatomy building, situated on the edge of the *Parc Léopold*, that belonged to the Free University of Brussels. This relocation occurred just as the Germans, having ignited the Second World War, overwhelmed Brussels. Restored to some, but incomplete, order during and after the war, distributed in two large workrooms, in corridors, under stairs, and in attic rooms and a glass-roofed dissecting theatre at the top of the building, this residue gradually fell prey to the dust and damp darkness of the building in its lower regions, and to weather and pigeons admitted through broken panes of glass in the roof in the upper rooms.

On the ground floor of the building was a dimly lit, small, steeply raked lecture theatre. On either side of its dais loomed busts of the founders. Annually in this room in the years after Otlet's death until the late 1960s, the busts garlanded with floral wreaths for the occasion,

Otlet and La Fontaine's colleagues and disciples, Les Amis du Palais Mondial, met in a ceremony of remembrance. And it was Otlet, theorist and visionary, who held their imaginations most in beneficial thrall as they continued to work after his death, just as they had in those last days of his life, among the mouldering, disordered collections of the Mundaneum, themselves gradually overtaken by age, their numbers dwindling.

A modern Espace Mundaneum

After a long period of official indifference and the dislocations of another move in the 1970s, this remainder of the life work of Otlet and La Fontaine, now only of historical interest, under the sympathetic guidance of André Canonne was taken over in 1985 by the Centre de Lecture Publique de la Communauté Française de Belgique (CLPCF), a government instrumentality centred in Liège (Canonne, 1985). Canonne's objective was to create a research centre around the archives and other papers that remained, an Espace Mundaneum. Unfortunately, the much hoped-for government support for this has not yet materialized.

In 1989 as one of its Otlet-related activities, CLPCF published, with a substantial biographical introduction by Canonne, a reprint of Otlet's 1934 *Traité de documentation* (Otlet, 1989). Perhaps the republication of this magisterial work may be considered a symbolic act of public restitution after the years of government harassment while Otlet lived and the years of official oblivion to which his memory had been consigned after his death. But it may also reflect the enduring power of at least one aspect of Otlet's vision of the way in which the organization and dissemination of knowledge may contribute to a peaceful, unified world. For, densely written and idiosyncratically organized though it be, it is perhaps one of the first comprehensive introductions to the study of information

as an important social phenomenon.

The sudden, untimely death of Canonne in 1990 has disrupted what had been the slow realization of his more general plans for the rehabilitation of the Mundaneum. The fate of the materials which comprise it, especially the wide range of extremely valuable archives that could contribute to a variety of historical studies relating to Belgium, aspects of international intellectual life and the international movement itself, is once more in doubt. History, in some ironic sense, has repeated itself and once again Otlet is its victim.

ENCOUNTERING THE SUBJECT

But at first I knew nothing of this history. My interest had been sparked not so much by Otlet as by the Universal Decimal Classification. As a student at the University of Chicago I had begun to explore the implication of John Metcalfe's analysis of the UDC (Metcalfe, 1959; forthcoming). No doubt I was prompted in this by a vague memory of the denunciations I had listened to him make in his Diploma in Librarianship classes at the University of New South Wales a year or two before. In effect, his pejorative and parenthetical judgements to one side, Metcalfe had attempted to ascertain the distinctiveness and to evaluate the effectiveness of the UDC as a synthetic or faceted classification which was characterized by an elaborate machinery of number-compounding. This had been devised to encode complex subject statements for bibliographical rather than library purposes. In following this up, I became intrigued by what I sensed to be a strong parallel between the ideas that lay behind UDC and certain ideas of Leibnitz (Rayward, 1967).

While recognizing that certain common organizational and intellectual aspects of Otlet and Leibnitz's work were extremely interesting, as a student of the history of bibliography, I also became more and

more puzzled by what I had begun to regard as the very checkered career of the International Institute of Bibliography (IIB) itself. This promoted a host of questions about the institute's origins, its achievements, the multitude of collaborators it seems to have attracted (including several Nobel Prize winners), how it actually worked in terms of day-to-day activities of staff – how many of them were there? Above all was the central but gradually displaced role it held in the thinking of Otlet, who was its chief organizer and administrator. Always, as I thought and read about it, I came back to its domination by Otlet and by the riddles he presented, as the balance seemed to shift in his life from practical idealist to utopian visionary.

Surveying the sources

I decided to study the IIB, drawing principally – but not entirely – on the extensive documentation that I discovered had been preserved in the Mundaneum in Brussels. Here was Otlet's personal diary which he had kept from early adolescence to young manhood. Here, too, were the archives of the IIB and a vast mass of publications and papers that I discovered stashed away in various nooks and crannies all over the building.

Almost too late I discovered a cluttered, musty, cobwebbed office into which the rain leaked – and one day flooded while I was in the building. This incident caused the sole attendant then at hand to have a kind of epileptic seizure. Not only had this office been Otlet's; it had an official name and status: it was called the Otletaneum. In it the books, memorabilia, papers, personal files, the general detritus that had accumulated with the passing years of, finally, an old, untidy man ceaselessly at work, had been kept just as they were when Otlet died a quarter of a century before. It had been elevated into an independent legal foundation following a request in his will. Because of limitations on my time, it

yielded up only one of its treasures to me – some pages of reminiscence and self-scrutiny that Otlet had scribbled in his seventieth year as he sat late into the night brooding over his life and work and a crisis that had suddenly arisen in his relationship with his second wife, Cato.

The problem I faced was how to recognize what I needed to know to work effectively. I had time for only one pass, as it were, through the material I both had at hand already and would need to search out as questions arose in my mind as I learned more. Sifting through this voluminous source material, I had to work quickly and ruthlessly in deciding what I would note, try to excerpt, copy in full or simply pass over. The difficulty of the task lay in the fact that there would be little or no opportunity subsequently to revisit the documents when I came to write up the study. Partly this was because I had only a limited time in Brussels before being required to go back to Chicago and then later to Australia. But I also feared (and wrote of my fear in the preface of the book arising from the study) that, given the lack of support for the Mundaneum, the fragility of much of the material in it and the appalling physical conditions of the place, the materials I had identified would disintegrate or be lost. With subsequent dislocations and relocations and with whatever of the contents of the Mundaneum that survived them now inaccessible in storage in an old building in the rue Rogier in Brussels, this fear has been all too fully justified.

The perilousness of this task was a little mitigated by the director of the Mundaneum, Otlet's former secretary, Georges Lorphèvre. He offered to send to Chicago and Sydney duplicates of Otlet's papers (frequently in off-print form) and any other publications and documents I turned up in my 'archaeological dig' in the Mundaneum. They would then be available when I returned from Brussels, so I could be

generous in identifying such material and deferring its consideration until later. As a result, in Brussels itself, I could concentrate on unique manuscript and archival sources.

Moreover the existing accounts of the history of FID and the obituaries of Otlet provided a general picture of his life and of the work of the IIB. I knew why he was considered to be important and what his achievements in and through the IIB – and some outside it – were thought to be. Inevitably, given their nature, there was little or no detail, no complexity in these accounts. They lacked any sustained attempt at analysis or explanation of what had and had not happened.

While here were signposts to provide some initial guidance for research, such signposts present the student with a fundamental problem. How is one to go creatively beyond them to reconceptualize the subject's achievements and the reasons for their importance, to create, where this is feasible and useful on the basis of the evidence, a whole new set of signposts for subsequent researchers. Embedded here is a critical process of reinterpretation that brings the biographer to relate his subject to the biographer's own world in new, perhaps sometimes startling ways that may challenge and overturn conventional wisdom.

Finding Reasonable Limits

An important general decision also influenced what I would both look for and take notice of in what I came across. The study of the IIB would be built around Otlet's life and vice versa. The rationale for this was that, if the focus were to be on what illuminated Otlet's relationship with the institute, should the study's basic assumption prove tenable that his role in its foundation and development was central, then a number of quite reasonable boundaries could be set in place. Beyond these my research and writing need not go – and I could scarcely be criticized for them.

The latter point is important. All scholarly work is prepared and published both to add to what we know and to enable competent, critical assessment to be made of the nature, extent and quality of what the work contributes to knowledge. If the emphasis, for example, were on Otlet then, except in so far as he was directly involved, no attempt need be made to try to follow independently the fortunes of the Institute's national 'daughter' societies that were set up in London, Paris, Moscow and elsewhere. Some, I knew, had briefly flickered into life; some I grew to suspect existed only on paper. Of course, this fundamental assumption of mine gave me a clear *terminus ad quem* for the work, Otlet's death in 1944.

Conversely, while it was necessary to learn something of Otlet's family origins, childhood, education, his own family life as a married man and his early professional career as a lawyer, these were important only in the sense of forming a prelude, and later a background, to what, for the moment, was the primary subject. But in these matters I knew I had to be alert as I went along to recognize what might help me understand and to explain what I might discover at later stages of the investigation. And, of course, one cannot keep strictly separate the public and the private or personal aspects of a single life. Above all was the need to be sensitive to what might reveal Otlet's personality, the development and changes in his attitudes, beliefs and values as his work progressed and the years passed.

ASSUMPTIONS AND ANALYTICAL FRAMEWORKS

The procedural or methodological point here is that one is guided at the outset of one's research by what one already knows. Arising from this knowledge are assumptions that are brought to bear in selecting, organizing and interpreting the materials with which one is dealing. These

assumptions can also be described, given the different ways in which they operate, as points of reference for, or suspicions, hunches, speculations about, what actually happened, who was involved, when, how and why. They help one identify what is likely to be important for one's story as an event, character, circumstance or consequence, a relationship, an explanation or even as documentary evidence. There is unceasing interplay between these tentative assumptions, these points of reference and the always incomplete, sometimes contradictory evidence one discovers as one searches through the documents.

Gradually one begins to change one's opinion about the nature of certain events and relationships. What seems simple can become tangled and difficult as more and more is uncovered. Formerly disparate, isolated events may suddenly seem to be related in quite important ways as evidence accumulates or as a crucial piece of evidence falls into place. The more one finds out, the more one wonders about what an adequate explanation might be. 'Something else must have occurred', one says. 'Surely there is more to this than appears to be the case.' 'Even though he has presented his own view as such and such, is not what occurred only understandable if...?' And so it goes, back and forth, as one builds up the structure of an argument, the outline and details of a narrative, as, brush-stroke by brush-stroke, one creates a picture.

Chronology

Searching through, organizing and analysing the documentary evidence I had begun to assemble in the Mundaneum, and later in Chicago and Sydney where the work was completed, I became aware that I was being guided by a series of what one might call analytical frameworks, though I did not call them this at the time. I want to deal with four of them here. First is chronology.

From what one finds, almost as a form of cartographic exercise one creates a minutely detailed chronological map of the subject's life and times. Any incompleteness or uncertainty in the outline or detail of this map demands whatever expeditions of discovery may be necessary to complete the outline and resolve the uncertainties – or later requires discussion in the biographic work itself. A number of images come to mind in thinking about chronology. It is like the fine steel mesh or grid that gives strength to the concrete fabric of a building. The biographer's chronological expertise should be like the technique of a musician – so practised, fluent and unobtrusive that in performance it is taken for granted, and so on.

The subject's assessment

Another of these analytical frameworks is provided by the subject's own perception of the shape of his life and his experience of those events that influence every human life – births, deaths, marriages, mid-life crises, domestic upheavals, illnesses, accidents, the loss or acquisition of fortune and other manifestations of providential intervention. Important here is to know what the subject perceives as his triumphs and failures, the heroes and villains in his life, and what rationalizations he offers for what is happening, has happened or even has failed to happen to him. While, ultimately, we may not accept these subjective assessments, in so far as we have them (and I had a variety of them to draw on for Otlet), they help to determine what kinds of independent evidence we might seek and how we might interpret what we find.

Differences of opinion between the biographer and his subject help give a narrative counterpoint in the story that is being told. On two occasions in my study of Otlet I came across letters he had written or received that claimed that he had been 'betrayed'. In fact the situation

in both cases was so complicated and the contrary points of view sufficiently convincing that I could not accept the reality of actual betrayal – nor, I think, did Otlet – though the charge signalled something of critical importance for Otlet that I had to explore and evaluate.

The secondary record

A third framework is provided by what others have written – other biographers, memorialists, critics, historians, those for whom one's subject can be of central or perhaps only of peripheral interest. These writings, often called secondary source materials, can range from matters of fact and detail to opinions and assessments of varying degrees of generality. This record helps to provide guidance as one moves through one's study. One draws on this record for what it adds to one's developing understanding, but as one's understanding develops, one becomes increasingly sceptical of what has been reported and more ready to challenge and to test what is thought to have been the case. The tension that arises in this way between the biographer and the secondary record provides another kind of counterpoint for his work that gives it scholarly depth.

When a large biographical and related literature is already available, one's task in preparing yet another study is both easier and harder than when there is little available. It is easier because so much more is known both about the subject and about the various backgrounds that are applicable to him – detailed maps, perhaps of varying degrees of accuracy, already exist. But when so much exists, it is hard to justify something more. What is offered tends to be new in matters of detail and interpretation, in emphasis and narrative thrust.

Important exceptions are that as the generations pass or where the volume of scholarship has proliferated, the need emerges for accounts from the changed perspectives that

both entail. In our field this is hardly a problem. Though we have a number of excellent biographical studies, there are few individuals for whom more than one exists. For Otlet, the secondary literature is sparse. Moreover there was little in the way of biographies of colleagues or related studies except for the Peace Movement during the war and the League of Nations.

The biographer's background and purposes

The fourth frame of reference is provided by the intellectual equipment and interests, the disciplinary orientations, the mental sets and the social and cultural background of the biographer himself. Some biographers write from a Marxist or psychoanalytic or Christian point of view or perspective, for example. All of us write within the context of the history and traditions peculiar to our times and societies. None is exempt from the cultural conditioning by which the society within which we function achieves distinctiveness and continuity. Each biographer in a sense peers at the world through his own special kind of spectacles. They are ground by his academic training, professional experience, intellectual capacity and imaginative gifts. They are tinted by his personality and the *Zeitgeist*. They determine what he can and will perceive and how he will order his perceptions into a coherent picture. Another way of putting this is to say that, inevitably, the biographer brings to his work assumptions, preconceptions and prejudices that shape his understanding of his task and determine the nature of the outcomes for which he will strive.

THE ROUTINE OF RESEARCH

For a period of slightly more than six months I worked day after day in the Mundaneum in Brussels, sifting through file after file, struggling every morning to decipher and translate Otlet's diary until the task

was done, scrabbling in cupboards and under stairways, turning over piles of publications or documents in the attics. Occasionally, I broke the monotony of this routine by undertaking an excursion to the Archives du Royaume and to the Bibliothèque Royale in 'uptown' Brussels. Gradually my attitude to Otlet changed. I had been sympathetic to the *Sturm und Drang* of his childhood and adolescence, intrigued by his precocious intellectuality and 'classificatory' way of thinking, touched by his burgeoning love affair with Fernande Gloner, who was to become his first wife.

But as time went by impatience began to supervene and then antipathy. I did not like what he had seemed to become in the course of his life. It was not clear, for example, what the source of his income was after the loss of the family's great fortune at the turn of the century – or even quite how it was lost – though family squabbles in the early 1920s suggested that either not all of it had disappeared or that some of it had been recovered or perhaps a bit of both. As an old man Otlet made a reference in a scribbled note of self-reproach (one of the pieces I found in the Otletaneum) to the financial support his second wife had contributed to his work. To what extent did they actually live off her 'little fortune' and her jewels?

Emotional involvement

In the catalogue of negative feelings that my growing knowledge of him aroused were exasperation at his failures, exhaustion from the endless international conferences and meetings he attended (the proceedings of which I had to examine and assess) and a bone-deep weariness of the feuds that occasionally erupted around him, some of which he was involved in directly, others not. Then there was embarrassment at (even sympathy for) the public ridicule his grandiose schemes attracted, especially in his later years. Above all I became infuriated by the vagueness,

the generality, the prescriptiveness of much of his writing, by the absence in it of any attempt at cogent argument or incisiveness of analysis. Rarely did he try to make a persuasive case for his precious schemes; he accumulated detail and wrote of desiderata and in lists.

However, I became aware of something else, that these feelings had a common source in a sense that he was dominating my life and beginning to smother me. Necessarily I had to get as close as I could to him if I were to understand him. But the closer I got, the more my own feelings rose against me. I found it difficult to accept the powerlessness of myself in his life. But there was more. There was so much I did not know but could not begin to find out, so that I had to live with doubt and uncertainty and suspicion – not in the sense of some terrible secret that awaited discovery but in the sense of what more I had to know before I could feel confident of having achieved a 'sufficient' knowledge of him and his work for my purposes. How could any reality I should attempt to recreate for him in those distant times and places be anything but incomplete and distorted by the time and culture - biased circumstances of my own understanding?

A changing relationship

A biographer, I suppose, inevitably becomes absorbed and exhilarated by a process of creative identification with his subject, frustrated by what he cannot find out, uncertain about what he believes he knows, and resentful of the sacrifice of self that the whole exercise demands. But this emotional involvement, with all its limitations, seems to me indispensable if the biographer is to bring his subject to life with a vitality that will engage the sympathetic interest of the reader.

Fortunately the relationship of biographer and subject is not static. It evolves as the life one is studying and recreating unfolds. Because it

usually embraces the whole of a life, it is longer than the relationships of his contemporaries with one's subject. Often, because it is so long and touches on so many public and private aspects, it is perhaps more intimate and inclusive than most. Thus, as one gets to know more and more about one's subject, about the cultural, social and political milieu within which his life was shaped, as one observes the changes the passage of time brings, the patterns of hope, fulfilment and disappointment his life presents at the end, one works through a range of emotions to achieve finally, ideally, a kind of sympathetic detachment.

In my own case, by the time I had finished, I felt immensely sorry for Otlet. Yes, his failures and limitations had made me angry, and I resented the demands he had been making as it were posthumously on me. But eventually anger was dissipated by a kind of tender acceptance arising from having seen him through it all to the end. But there was also a reluctant admiration. Through it all he had been uncompromising, single-mindedly committed to the work he believed was needed if his vision of a new world order were to become a reality. Stoically he had accepted the ridicule and contempt of his peers, the isolation from the elevated social circles into which he had been born and in which he had moved so confidently as a young man, along with all of the other sacrifices his steadfastness exacted.

For some biographers their subjects become extensions of themselves, fascinating companions of whose company they never tire, who present intractable conundrums whose mysteries continue to intrigue. For my part, I never grew to like or respect Otlet much, but I have always believed more study of aspects of his work and other accounts of his life than mine are needed to do him justice. Recently, as mentioned earlier, he has attracted renewed interest (Metcalf, 1959, pp.

141-162; Canonne, 1985; Hermon, 1985; Uyttenhove, 1985; Courtiau, 1987; 1988; Buckland, 1990; forthcoming a; forthcoming b; Metcalfe, forthcoming).

THE BIOGRAPHY AS TRIBUTE

I have come to realize that, by undertaking a biography of Otlet, a man no longer widely known in the professional fields he once dominated in Europe, I had contracted a special obligation of understanding of his life and work. This involved presenting and interpreting his achievements as best I could to that part of his posterity represented by my own generation. This is a comment on the nature of the homage to its subject that a biographer pays – not direct tributes but a complex act of understanding that the biography as a whole attempts.

A distinction is necessary here for there are biographies begun from an already established point of view and with a fixed frame of reference. Perhaps they involve an especially restrictive form of that fourth frame of reference discussed above – the biographer's own background and purposes, his special orientation and motivation – which limit and pre-terminate what will be discovered and how it will be reported. The works that result are inherently and obviously biased. They are usually eulogistic or hagiographic on the one hand or muck-raking and debunking in point of view on the other.

THE PROBLEM OF UNDERSTANDING

The notion of complexity of understanding seems to me to contain the key to what makes biography fascinating to write and illuminating (and gripping) to read. The complexity derives from the fact that the biography represents an attempt at the imaginative recreation of a life in its times. Because of the creative identification of its author with the lives of individuals, it has emotional and dramatic force. As a form of history

and scholarship, it must be organized and conducted in such a way that plausible explanations of matters of importance emerge. While the objective of explanation and understanding may well be primary for the biographer as it is for all scholars, biography has characteristic imaginative, psychological, emotional and cognitive requirements. How well a biography succeeds depends on how well the biographer handles these requirements. His work will take on its own special quality depending on the different degrees of emphasis he gives to them.

The problem of imaginative reconstruction

In attempting to interpret what is of general interest in any subject's life and work, a biographer has to attempt imaginatively to reconstruct that life in its time and place. I am reminded of the way in which a director conjures a movie into existence and of the way in which the movie involves the animation of a series of separate frames. Here, in the foreground, is our subject. He is about to negotiate the difficult crossing from the Avenue Louise to the Palais de Justice in Brussels. His hand is raised towards, but is arrested before it reaches, the brim of his hat. At his side – is it Emile Picard, a great lawyer, *littérateur* and political figure of *fin de siècle* Brussels? To whom is Otlet raising his hat? Why does Picard, if it is he, look – is it angry, disbelieving, disappointed? Or is he about to laugh? The camera rolls and as it does the actions are completed. Otlet lifts his hat to Léonie La Fontaine, Henri's sister. She smiles at the pair and looks over her shoulder as she passes along the footpath (thereby hangs a separate tale). It is Picard. He bursts into laughter: 'Here is your vocation,' he says, pointing to the monstrous domed and pillared palace in front of them. It looms above what were then the mansions of the rue aux Laines, in one of which was located the headquarters of the holding compa-

ny of the Otlet family's commercial empire, L'Enterprise. Placing his hand on Otlet's arm, Picard begins to lead Otlet through the rush of carriages and other fashionable traffic of that busy thoroughfare: 'Forget all that bibliographical nonsense!'

Like the movie director, the biographer at key points has to help his readers visualize what is happening in his story in order to respond to the drama that is inherent in it, for a story filled with drama is being told – not, I hasten to add, by inventing dialogue or other dramatic embellishments as I have just done (though some biographers have done both). But the story and the actors in it have to be brought to life. Like the movie director the biographer selects the incidents he will report, the characters he will introduce and the detail he will present in order to establish the points he wants to make and to tell the story as he believes it must be told.

The problem of selectivity and evidence

But there is a difference. While it is in this selectivity that so much of the biographer's imagination must be exercised, it is subject to a rigorous discipline. Evidence – whose nature and relevance may have to be substantiated – must exist and be produced both to justify what is included and what may have been deliberately excluded. The story is not a literary fiction but part of an act of historical recreation which attempts to achieve accuracy within the bounds of selectivity that all narrative – historical, biographical, literary – requires. There are very large biographical compilations in which the author has decided to put everything in that he has discovered. It is as if such works pass to the reader the biographer's artistic obligation of making something shapely and compelling of the material that he has at hand.

The problem of psychology

The biographer is dealing with persons whose characters and personalities are expressed in their lives, whose motivations reach through all the layers of the mind, who have been shaped by hereditary, family circumstance and society into the psychologically opaque creatures that we all are. To the extent necessary for his purpose, a biographer must be ready to delve into these hidden regions, but here understanding the evidence is difficult and confusing, and caution imperative.

The problem of emotional involvement

Then there are the emotional tensions that shape the biographical work. They arise in part from the lives and characters of the protagonists with whom the biographer is dealing. Underlying his selection and presentation of detail is his own changing emotional response as he draws his story on through all the drama of the lives over which he presides.

The problem of judgement

Finally there is the cognitive aspect. The biographer's task is to analyse, comment on, assess, adjudicate between conflicting views, finally to shape a story. He is concerned with complex events, situations, characters and ideas and the meaning or significance that can be teased from them for his readers. He is responsible for assembling, collating, interpreting and presenting evidence about them. Like other works of history and scholarship, a biography is a kind of extended argument elaborated through and about the events and achievements of the subject's life and the existing evidence for them.

The context of relationships

A life and work do not occur in a vacuum. The biographer's subject is

surrounded by family, relatives, friends, enemies, colleagues. He works with and for and against others. They appear in the foreground of his life along with the institutions and other collectivities through which he exerts influence, achieves his ambitions, perhaps makes the contributions that have inspired his biographer's interest in the first place. They also limit and confine all that he aspires to do. The inter-actions arising from the various configurations of these relationships provide both the drama of his life and the stage on which it is played out.

There is also a middle ground and a background to the drama. In the middle ground is the cultural and intellectual life of a city and nation, a milieu of politics both local and beyond, 'a world of telegraphes and anger'. Those in the foreground of the story can participate in this directly as actors or indirectly as victims. In the background yet larger designs can be discerned. They involve the growth of knowledge, the social efficacy of professions, the political and cultural fate of nations and the survival of civilization. These too bear on the biographer's subject and influence the biographer's approach to understanding and depicting his subject's life and work, albeit sometimes indirectly and perhaps remotely.

Thus, the subject's life, like all our lives, is embedded in an intricate, multi-layered network of relations: personal, family, professional, institutional, local, regional, national and international. Through this network the action of reciprocal influences creates a complex and bewildering pattern. To make sense of it all is the biographer's task. He is a historian but only of one life and those lives that are satellite to it. In these lives are mirrored aspects of the larger history of the times.

BRINGING HISTORY TO LIFE

The biographer brings history to life in the life of his subject. He does this

in different ways. He can use a long focus lens and his scope is then highly restricted. His concern is with the minutiae of his subject's life and work. His aim is to move perhaps deeper and deeper within the personality and thought of his subject, eschewing surfaces and general causes and the world beyond the office or study. An opposite approach employs a wide-angle lens. This places the subject against a larger background – professional, social, political, cultural, intellectual, industrial, historical, in whatever combinations are relevant. Depending in part on the nature of their subject's achievements or contributions, most biographers use a zoom lens. This allows them to move backwards and forwards between the personal and public, the particular and the general as they provide an appropriate context for the story of the life they are telling and attempt to make the explanations for what has happened in it interesting and plausible. If they are effective, their accounts make vivid and comprehensible aspects of the times of their subject's life. Through the picture biographers present of the times, they provide a new basis for explanation of, a new perspective for, their subject's achievements.

THE BIOGRAPHY OF PAUL OTLET

The original biographical study which prompted these reflections was limited in various ways. The author was relatively young and inexperienced. His purpose was deliberately narrow. He included lengthy excerpts of documents, partly to ensure that enough evidence was presented to establish his case, partly for fear that the documents themselves might disappear so that what he gave of them would be all that would be left both as record and for re-evaluation by others – and, indeed, effectively the documents are no longer available. There was also the difficulty all those years ago, when time and other resources were

limited, of building up a rich store of detail from which to create dramatic action in vivid settings.

Nevertheless, now set in Brussels, now set on a corner of a wider European stage, as the scenes and acts in which the author sought to capture the drama of Otlet's life succeeded each other towards the final curtain, his hope was that glimpses could be had of grand themes. How are we to improve the effectiveness of general access to the universe of knowledge on which the maintenance, development and enjoyment of our civilization so critically depend? How are the barriers that are thrown up by our current practices of publicly disseminating, collecting, storing and retrieving this knowledge to be overcome? What organizational structures, technological apparatus and professional understanding and skills are needed? How are we even to comprehend the meaning of such questions and to begin systematically studying them to find appropriate answers?

These are the questions that underlie the quiet drama of Otlet's life. Such a life allows us to begin to understand how powerful and urgent such questions are. In their turn these questions cast a glow that helps us rescue his life from obscurity and neglect. They provide a basis for allowing us to appreciate how important its achievements were.

May 1990

NOTE

I am indebted to Professor Michael Buckland of the University of California at Berkeley for the notion of information as evidence and his highlighting of Otlet's interest in 'the thing' as document. A version of this paper was presented to the 4th Australian Library History Seminar, Monash University, Melbourne, 1989. Published in 1991 as *Peopling a profession* edited by Frank Upward and Jean P. Whyte, Melbourne: Ancora Press

REFERENCES

- Buckland, M. (1990) Information retrieval and the knowledgeable society. In American Society for Information Science, *Proceedings of the 53rd Annual Meeting*, 27, 239-244
- Buckland, M. (forthcoming a) Information as more than text. *JASIS*
- Buckland, M. (forthcoming b) Information as thing. *JASIS*
- Canonne, André (1985) Regards sur 'Mundaneum', classification décimale et C.L.P.C.F. [Centre de la Lecture Publique de la Communauté Française]. *Lectures*, May-June, 5, 2-20
- Courtau, Catherine (1987) La cité internationale. 1927-1931. In *Le Corbusier à Genève. 1923-1932*, pp. 53-69. Lausanne: Payot
- Courtau, Catherine (1988) L'Épopée de la cité mondiale de Paul Otlet. *Lectures*, (41), pp. 13-17
- De Ryck, L. (1989) Otlet en zonen en bouwheren van een internationaal imperium in het openbaar vervoer (1864-1914). Unpublished doctoral thesis, Free University of Brussels
- FID (1975) Index to UDC editions. In *FID publications: an 80 year bibliography, 1895-1975*, pp. 87-90. FID Publication 531. The Hague International Federation for Documentation
- Hermon, Elly (1985) Regard sur les ONG dans le mouvement international de coopération intellectuelle et d'éducation pour la paix pendant l'entre-deux-guerres: le cas de l'union des associations internationales. *Canadian Journal of History*, 20, 337-367
- La Fontaine, Henri and Otlet, Paul (1990) Creation of a Universal

- Bibliographic Repertory: a preliminary note. In Otlet (1990a), pp. 25-50
- Metcalf, John W. (1959) *Subject classifying and indexing of libraries and literature*. Sydney: Angus and Robertson
- Metcalf, John W. (forthcoming) The crisis in subject indexing and synthetic classification with suggestions for a general enquiry. In *Organising a library profession in Australia: some unpublished diaries and papers of John Wallace Metcalf*, ed. W. Boyd Rayward. Metuchen, N. J. : Scarecrow Press
- Otlet, Paul (1916) *Les problèmes internationaux et la Guerre: tableau des conditions et solutions nouvelles de l'économie, du droit et de la politique*. Union of International Associations Publication no. 50. Geneva: Librairie Kundig; Paris: Rousseau et Cie
- Otlet, Paul (1989) *Traité de documentation: le livre sur le livre: théorie et pratique* (with Avant-propos: Otlet, *La Fontaine et le Mundaneum*, by André Canonne). Liège: Centre de la Lecture Publique de la Communauté Française de Belgique (reprint of the original 1934 edition)
- Otlet, Paul (1990a) *International organisation and dissemination of knowledge: selected essays of Paul Otlet*, ed. and trans. W. Boyd Rayward. FID Publication 684. Amsterdam: Elsevier
- Otlet, Paul (1990b) On the structure of classification numbers. In Otlet (1990a), pp. 51-62
- Otlet, Paul (1990c) Rules for developing the Decimal Classification. In Otlet (1990a), pp. 63-70
- Otlet, Paul (1990d) The international organisation of bibliography and documentation. In Otlet (1990a), pp. 173-203
- Otlet, Paul (1990e) The organisation of the society of nations. In Otlet (1990a), pp. 148-156
- Otlet, Paul (1990f) The science of bibliography and documentation. In Otlet (1990a), pp. 71-86
- Otlet, Paul (1990g) The Union of International Associations: a world centre. In Otlet (1990a), pp. 112-129
- Otlet, Paul and Goldschmidt, Robert (1990a) On a new form of the book: the microphotographic book. In Otlet (1990a), pp. 204-210
- Otlet, Paul and Goldschmidt, Robert (1990b) The preservation and international diffusion of thought. In Otlet (1990a), pp. 204-210
- Rayward, W. Boyd (1967) FID-UDC: a historical perspective. *Library Quarterly*, 37, (3), 259-278
- Rayward, W. Boyd (1975) *The universe of information: the work of Paul Otlet for documentation and international organisation*. FID Publication 520. Moscow: VINITI
- Rayward, W. Boyd (1976) *Universum informatsii zhizn' i diatel' nost' Polia Otle*, trans. R.S. Giliarevsky. Moscow: VINITI
- Rayward, W. Boyd (in preparation) *El universo de la documentacin: la obra de Paul Otlet sobre documentacion y organizacion internacional*, trans. Pilar Arnau Rived. Madrid: Universidad Complutense
- Uyttenhove, Pieter (1985) Les Efforts internationaux pour une Belgique moderne. In *Resurgam: la reconstruction en Belgique après 1914*, ed. Marcel Smets, pp. 36-68. Brussels: Crédit Communal de Belgique