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# The Archives of Paul Otlet: Between Appreciation and Rediscovery, 1944–2013

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## ABSTRACT

This paper outlines the life and work of Paul Otlet (1868–1944). Otlet was a founder of the scholarly disciplines of bibliography, documentation, and information science. As a result of the work he undertook with Henri La Fontaine (1854–1943)—specifically, the establishment in 1895 in Brussels of the International Institute of Bibliography, which aimed to construct a Universal Bibliographic Repertory—Otlet has become known as the father of the Internet. Otlet's grand project, as stated in his *Traité de documentation* (1934), was never fully realized. Even before his death, the collections he assembled had been dismembered. After his death, the problematic conditions in which Otlet's personal papers and the collections he had created were preserved meant that his thought and work remained largely unacknowledged. It fell to W. Boyd Rayward, who began to work on Otlet in the late 1960s, to rescue him from obscurity, publishing in 1975 a major biography of the pioneer knowledge entrepreneur and internationalist progenitor of the World Wide Web.

## INTRODUCTION

When Paul Otlet died in December 1944, the exceptional collective and internationalist project he had founded came to an end (fig. 1). While successors undertook to continue his plans for bibliography and documentation, several decades would pass before his achievements were recognized and for his legacy to be preserved and valued.<sup>1</sup> His major contributions at the end of the nineteenth and the early twentieth centuries in helping to elevate bibliography and what he sometimes called *bibliology* to disciplinary status make him a father of these disciplines and one of



Figure 1. Paul Otlet (1868–1944). Reproduced with the permission of the Mundaneum, Mons, Belgium (© Mundaneum).

the major pioneers of the scholarly disciplines of documentation, information, and communication. At the end of the twentieth century, the Universal Bibliographic Repertory that he and Henri La Fontaine (1854–1943) had begun in 1895 was recognized as “Google in paper” and Paul Otlet himself as one of the forefathers of the Internet. Acknowledgements such as this suggest the impact of the work he had undertaken in these domains. However, they reveal only an aspect of his achievements as an entrepreneur of knowledge organization—achievements that range from the foundation of the International Institute of Bibliography (IIB) in 1895 to his major publications, *Traité de documentation* (1934) and *Monde: Essai d’universalisme* (1935). After his death, the problematic conditions in which his personal papers and the collections he had created were preserved meant that his thought and work remained unacknowledged. It was not until the end of the 1960s that scholars would rescue Paul Otlet from the relative obscurity into which he had fallen. In this respect, the work undertaken by W. Boyd Rayward and his publication in 1975 of the first biography of Paul Otlet played a determining role.

PAUL OTLET: BELGIAN ENTREPRENEUR OF KNOWLEDGE  
MANAGEMENT AND AN UNUSUAL FIGURE OF THE  
BELLE ÉPOQUE

Paul Otlet was born in Brussels in 1868 into a well-to-do bourgeois family. During this period, Belgium was undergoing tremendous industrial growth. The *Belle Époque* was synonymous for the country with an economic prosperity unprecedented since independence in 1830. This situation supported the initiatives of King Leopold II, who encouraged Belgian industrial expansion abroad. A spirit of enterprise and innovation was in the air leading to success.

The tramway businesses of Edouard Otlet, Paul's father, benefitted from this favorable set of circumstances and brought in substantial overseas profits. Thus by the 1880s, Edouard Otlet had accumulated a sizeable fortune with which he acquired a major art collection as well as a yacht and an island in the Mediterranean Sea, the Isle du Levant. The exploration of this island would help form Paul Otlet's delight in discovery and preservation. Various figures from the Belgian world of culture and industry, such as Edmond Picard (1836–1924), Jean Linden (1817–1898), Fernand Guillon (1848–1929), and Michel Van Mons (1817–1906), gravitated to the Otlet family and contributed to their artistic and intellectual achievements.

Paul Otlet thus grew up in very favorable circumstances that played an important role in the development of his personality. His home environment and the fortune that sustained it made him an unusual figure endowed with an entrepreneurial spirit that would drive him in new directions. His entrance into adult life began with his graduation in law at the University of Brussels. This was intended to prepare him to succeed his father as head of the family businesses. But very quickly his interest in bibliography prevailed and involved him in an adventure that began with the creation, with Henri La Fontaine, of the International Institute of Bibliography in 1895. The rest of this story is well known because Paul Otlet's destiny was intertwined with that of the Institute and its subsequent development. There is now an abundance of historical writing, both Belgian and foreign, about this (a selection is presented in the list of references below).

Paul Otlet's thinking was shaped by progressive and positivist theories. An observer and sociologist as much as a philosopher, he quickly realized, as indicated above, that he would not find professional fulfillment in law but rather in the area of bibliography conceived of as an intellectual tool. His interest in bibliography in this sense was stimulated in a number of ways. First, as an articled clerk in the law offices of Edmond Picard, he worked on the *Pandectes belges*, a vast systematization of Belgian jurisprudence that was not completed until the 1930s, long after Picard's death, and on which all of Picard's articled clerks were required to labor. At the *Société des études sociales et politiques*, established in 1890, he

contributed notices to the bibliographic section of its journal, a section edited by Henri La Fontaine, who became Otlet's lifelong collaborator. In 1891, at the instigation of Picard, Otlet and several colleagues began to publish a periodical bibliography of articles in law journals. The *Sommaire périodique des revues de droit* soon combined with a similar journal for sociology edited by La Fontaine. Finally, Otlet became active in the Institut des sciences sociales, founded in 1894 by the Belgian industrialist and philanthropist Ernest Solvay (1838–1922). When the Société des études sociales et politiques was dissolved in 1894, its bibliographic service was taken over by Otlet and La Fontaine as the basis for what they called the Office international de bibliographie sociologique. But as their disciplinary horizons expanded, an outcome of an International Conference on Bibliography that they organized in 1895 was the creation of an International Institute of Bibliography (IIB) and the incorporation of the Office of Sociological Bibliography by Royal Decree as a semigovernmental agency, the International Office of Bibliography (OIB). The major task of these bodies at least initially was the development of a Universal Bibliographic Repertory (*Répertoire bibliographique universel*—RBU). Subject access to this vast undertaking was to be provided by a development of the decimal classification system that had been invented by the American, Melvil Dewey (1851–1931). This was called the Universal Decimal Classification (UDC—*Classification Universelle Décimale*), sometimes known in English as the Brussels Expansion of Dewey. Securing scholarly collaborators to help elaborate this immense catalog and the minutely detailed subject tables of the UDC would help give bibliography a new visibility and disciplinary status in Belgium and elsewhere.

The recruitment of collaborators to work on developing the universal catalog and the UDC, the creation of propaganda for the new bibliographical methods involved, and the publication by Otlet of a body of theoretical writing went hand in hand during these early years with the development of the International Office and Institute of Bibliography. As he crisscrossed Europe between 1895 and 1897 promoting the innovative technologies represented by the organization and work of the IIB-OIB, Otlet made innumerable contacts. Many were thoughtful observers who became supporters, while there were others, of course, who remained unconvinced.

#### TOWARD AN INTELLECTUAL AND MATERIAL TECHNOLOGY

These bibliographical developments were essentially a response to the enormous growth in the number of publications, specialist congresses, and international exhibitions that began to occur at the end of the nineteenth century. It seemed they could be managed only by the introduction of innovative, “modern” research tools. The need for improved methods for the management of, processing, and making available the “records” of

knowledge had become especially clear within European scholarly circles—those concerned with both the humanities and the hard sciences. Paul Otlet understood this need and responded to it, drawing on the information technologies as they were then available to him. The physical format of the card and the layout of bibliographic and substantive information it typically facilitated provided a strong basis for international standardization. What was needed for the creation of cataloging rules was in place. The UDC met the specifications for intellectual organization and indexing. The new methods of codifying subject statements using the new classification-number compounding processes of the UDC that were devised by Otlet and his colleagues provided not only for the identification and recording of the main subject of a document but also provided for the integration of detailed specifications associated with it such as date, place, language, form of publication, and special substantive relationships. At the end of the nineteenth century, these developments in “information technology” were completely novel and seemed to promise the creation of the possibility of achieving access to the whole of the complex universe of recorded knowledge. At the end of the next century, there would be many who would emphasize the similarities between this approach and the functioning of the World Wide Web.

The system was progressively improved, and in 1905 the *Handbook of the Universal Bibliographic Repertory* [*Manuel du répertoire bibliographique universel*] was published. This huge work (over two thousand pages in length) contained not only the extensively elaborated subject arrays represented by the extended tables of the classification but all of the auxiliary tables along with full explanations of the entire system’s use in the creation of catalogs and indexes. The work was completed by a minutely detailed index of the classification tables. As a form of international and interdisciplinary experimentation, the development of the UDC both then, and indeed later, provided important opportunities for scholarly exchange, cooperation, and interaction.

New information services based on other formats than books were then created by Otlet and La Fontaine as they expanded their field of activities to an area that Otlet began to call *documentation*. Newspapers, photographs, etc. also provided information, often in a more timely way than books. The periodical press created a growing public of specialist readers. Similarly, photography provided a quite separate format of information. Deeply involved with the question of intellectual access to the multimedia formats that were becoming available, Otlet integrated them into independent centralized organizations such as the Collective Library of Learned Associations, The Universal Iconographic Repertory, The Universal Repertory of Documentation, The Museum of the Book, and the International Museum of the Press. These initiatives, based on the idea of cooperation and of accessibility to the resources represented

by books, photography, newspapers, and documentary files, became an important laboratory for experiments in standardization. Research and development in information access would also involve Otlet in technical innovations in information formats. He was to work, for example, with Robert Goldschmidt in the first decade of the century and again in the late 1920s on systems of microphotography designed to lead to a reduction in the physical volume of printed matter, to a new approach to developing a “universal” encyclopedia, and, it was hoped, to easier consultation of the media mentioned above.

### BUILDING PEACE TO ENSURE SCIENTIFIC PROGRESS

Pacifism, which was one of the underpinnings of the creation of the International Office of Bibliography in 1895, became an even more important aspect of Otlet’s work when he, La Fontaine, and colleagues created the Central Office of International Associations in 1907 [Office Central des Associations Internationales]. Three years later, on the occasion of the World Congress of International Associations [Congrès Mondial des Associations Internationales] that they had organized during the Brussels World’s Fair of 1910, this office was renamed the Union des International Associations (UAI), which continues to exist actively in Brussels. The Congress also led to the creation of an International Museum as a symbol of international life.

Otlet and La Fontaine viewed scientific progress and accessibility to and the sharing of knowledge from a political and international angle. Their work, they believed, provided the tools that would allow the realization of their international pacifist ideals. The central element in Otlet’s internationalism was his belief that Brussels had a major role to play in the emerging interdependent nation states. He was extrapolating from the fact that the city was becoming home to an increasing number of organizations and institutions that were international in scope. The task of coordinating the world’s intellectual and moral interests through such organizations and institutions became an important aspect of the work of the Union of International Associations. On two occasions, 1908–09 and 1910–11, the UAI published monumental editions of the *Yearbook of International Life* (*Annuaire de la vie internationale*), which systematically brought together all of the available information on existing international organizations both governmental and nongovernmental. Indeed, the Union of International Associations, which was revived after the Second World War, as mentioned above, continued to publish and still publishes annually a similar directory, *The Yearbook of International Associations*, in print format and latterly also as an electronic database.

The outbreak of the First World War destroyed the climate of internationalist and pacifist optimism within which Otlet and La Fontaine had worked for so long. They went into exile. Otlet first travelled to the Neth-

erlands, then to Switzerland, and finally to France. La Fontaine went first to London, then to the United States. Both men remained committed to the idea of peace and to the idea of the need for a Société des Nations (what was to become the League of Nations), but each in a different way, although in the end, their objectives would be aligned. During the War, each published his own personal interpretation of events: for Otlet it was *Treatise on General Peace (Traité de paix générale)* (1914) and *International Problems of War (Les problèmes internationaux de la guerre)* (1916); for La Fontaine, *The Great Solution: Magnissima Charta* (1916), which he published in the United States where he was trying to marshal the forces of the pacifist movement.

After the War, La Fontaine was one of a number of technical members of the Belgian delegation to the Paris Peace Conference, where the decision was made to create the League of Nations, thus realizing one of the main objectives of the pacifists of that era. He also became one of the Belgian delegates to the first meetings of the Assembly of the League of Nations, where he participated in the debates about the creation of the International Committee for Intellectual Cooperation (ICIC) in 1922. He had initially put forward a suggestion for something similar at the Peace Congress. In 1924 a technical organization for the ICIC, the International Institute for Intellectual Cooperation, the precursor of today's UNESCO, was created in Paris, much to the chagrin of Otlet and La Fontaine. In 1919–1920 Otlet had spearheaded a failed movement to have the headquarters of the League of Nations relocated from Geneva to Brussels. Later he and La Fontaine had argued, forlornly, that all of the institutions they had created might be adopted by the League as its technical agency for its work for intellectual cooperation. Among these institutions, all focused on international cooperation, was now an International University (in fact a form of summer school) and an encyclopedia designed to provide an emphasis on international education. In the interwar period, all of these organizations were housed together in the Palais du Cinquante-naire in Brussels and called Palais Mondial or Mundaneum.

Paul Otlet's most ambitious project was that of the World City (*Cité mondiale*), an architectural project for an international city or locality that would be independent of any nation (like the Vatican, it would be "extra-territorialized") and dedicated to knowledge. In its initial formulation, it would also become the site for the much hoped for relocation of the League of Nations. Although the idea had been first mooted before the First World War, had benefitted from the support of various notable people, had been debated positively in the Belgian Parliament in terms of its being erected in Brussels on a site dedicated to the League of Nations, and had been advocated within the League of Nations itself, the project never got off the ground. Its utopian features perhaps even tended to bring discredit upon its underlying pacifist ambitions. During the period

between the wars, the pacifist movement itself was torn in a number of different directions that were difficult to reconcile. Its lack of unity, becoming stronger during the 1930s in the face of mounting nationalisms, no doubt contributed to the lack of interest shown for the *Cité mondiale*.

In 1934, the Palais Mondial lost the moral and financial support that had been provided until then by the Belgian state. When the government decided to close the offices located in the Palais du Cinquantenaire, Paul Otlet took refuge in work of reflection and writing. He immersed himself in his experiments to develop an encyclopedia based on the principle of the visualization of knowledge that had originally been intended to meet the needs of the International Museum (*Encyclopedia Universalis Mundaneum*). He labored on the composition of his *Treatise on Documentation* (*Traité de documentation*), published in 1934, according to Boyd Rayward perhaps one of the first treatises on what we now know today as information science. Otlet also developed his conception of the world and the course it might take in the future in his book *Monde: Essai d'universalisme*, published in 1935, which reveals how much his ideas had been influenced by the sociology in which he had been steeped as a young man in the prewar period.

#### CONTINUING AND MAINTAINING PAUL OTLET'S WORK

Paul Otlet's funeral in 1944 turned out not to be the moment one might have expected for celebrating the intellectual and technical contributions that characterized his long career. "International life" had moved on. After 1945, the dissemination of his work became the responsibility of a small isolated group of devotees, the Association of the Friends of the Palais Mondial (Association des Amis du Palais Mondial). The world was now governed by new international institutions that had succeeded the widely criticized League of Nations. It was a period of reconstruction. Culture occupied pride of place in the new international relationships, education having become a new and integral dimension of them. Everything might have led one to believe that Paul Otlet's utopian project, begun in 1895, would now be fully realized as a result of the institutional processes of dialogue and collective collaboration now set up between countries. But while the role accorded to education and to culture were hallmarks of the Otletian project, the postwar outcome corresponded only imperfectly to the complex pacifist and internationalist web of aspirations of which Otlet and La Fontaine had been a part in prewar Belgium. However, the two men deserve credit for pioneering experimentation with knowledge exchange and standardization on an international scale. Their experiments, coupled with a fierce desire to change "mentalités," and their deep conviction that their ideas would take root in the future no doubt led those who shared their positive vision of political and cultural relationships between peoples to continue their work.



After 1934 the development of the UDC was no longer the responsibility of the Mundaneum but of the International Federation of Documentation, which had grown out of the International Institute of Bibliography. As for the Mundaneum's collections, after 1945 they had been essentially orphaned. The domains in which Paul Otlet and Henri La Fontaine were not quite forgotten were those of the information and communication sciences, documentation, and library science. This was the result in part of the international conferences of the International Federation for Documentation that were held almost annually until the disappearance of the Federation in 2000. Also in Belgium, Otlet and La Fontaine's successors André Colet (1896–1978) and Georges Lorphèvre (1912–1997) were responsible between 1950 and 1980 for training large numbers of librarian–documentalists.

The history of the discipline of bibliography, which would become information science in the middle of the twentieth century, remains to be written, but its development and modernization make a retrospective view difficult. The *Traité de documentation*, published in 1934, remains a major reference work for this professional domain both in Belgium as well as internationally. However Otlet's abstract approach to technology and technological developments made the contents of the *Traité* difficult for his contemporaries to understand. Nevertheless he is, in a sense, the founding father of documentation, a neologism he introduced to denote the new approaches to bibliography and related disciplines that he was developing.

#### THE LEGACY AND LAST WISHES OF THE FOUNDERS

Before they died, both Paul Otlet and Henri La Fontaine had, of course, made their wills. They both thought that it was important to preserve their personal documents as well as the archives that were a natural outgrowth of the associations and collections that they had created. In the midst of the Second World War, they raised the question of how this legacy would be managed in the future. Otlet would once again demonstrate a curious originality of thought when he revealed a desire to make sure that his life's work of study and writing would have a permanent existence beyond any concern for immediate recognition by his contemporaries. He wrote at least sixty-seven different versions of his will. As early as 1913 he had brought up the issue of archiving and conserving his papers. There was even an agreement drawn up in the last years of his life to create a foundation, which had a short-lived existence, to ensure the future of the estate. The mission of the executors of his will was to ensure that his final wishes were respected: that all of his papers be kept together in order to make it easy for them to be studied after his death. He even imagined that there would be a delay of about thirty years before their possible exploitation. Les Amis du Palais Mondial had thus to protect the entire collection with

this clearly stated objective in mind. But support was scarce and obstacles abounded. The isolation in which this organization existed subjected it to a difficult existence that could be maintained only by the energy of a committed leadership. After 1941 the collections were moved to a building that had once housed an anatomy theatre belonging to the Free University of Brussels but now owned by the city of Brussels, which donated it to Otlet and Les Amis du Palais Mondial. Here, before Otlet died and long after his death, Les Amis du Palais Mondial organized cultural activities featuring exhibits and small publications that made use of the unique collections at their disposal. Lecture-debates were also held regularly, but the lack of impact of so small and precarious a group was obvious. The physical environment was also not appropriate to the value of the heritage that had to be preserved. As André Canonne observed, the collections “in this drafty building were stained with pigeon droppings” (Canonne, 1985, p. 9).

With as much imagination and creativity as Les Amis du Palais Mondial could muster, they sought to carry on Otlet’s important achievements, but they really understood only their basic outline, tending to emphasize their bibliographic elements. In addition, budgetary issues determined the choices they made. Unlike Otlet and La Fontaine, whom they succeeded, they did not come from comfortable socioeconomic settings where the issue of money could be pretty much ignored. Furthermore, at the time they took up the torch, there were problems not only of housing and promoting the collections but of the internal reorganization of the work as a result of the evolution of institutions that had been created in 1895. Indeed, in 1945 these looked completely different and were no longer centralized in one place as they had been before the War.

Nevertheless, Les Amis du Palais Mondial, a nonprofit organization headed by Otlet’s devoted collaborators, Georges Lorphèvre and André Colet, participated in the activities of the International Federation of Documentation (the successor organization to the Institut International de Bibliographie), helped to update the Universal Decimal Classification, organized thematic exhibitions as well as cultural outings, and did their best to preserve the heritage bequeathed by the founders.

#### ENTER A PHD STUDENT PURSUING HIS THESIS

During this dark period of the history of the institution, a researcher came along who was to strongly influence the future of the historiography related to Paul Otlet and the archives that he had left behind. Otlet’s papers were to be examined some twenty years after his death, not the thirty he had envisaged. W. Boyd Rayward, a student from the University of Chicago, took up the study of Paul Otlet’s work for his doctoral thesis. In the mid-1960s during his initial studies in librarianship at the University of New South Wales in Sydney, Australia, Rayward had become interested

in the UDC through the critiques that his professor, John Metcalfe, had leveled at it. Recognizing that it was one of the first of the great general synthetic classifications, Metcalfe believed that there were major flaws in its construction. Later as a doctoral student at the University of Chicago, Rayward explored the relationship of the UDC's combinatorial mechanisms for creating subject statements to Leibniz's theories of a calculus of reason manipulating a special kind of linguistic element, the *characteristica universalis* (Rayward, 1967). For his doctoral thesis, however, Rayward undertook a biographical study of Otlet that focused principally on his work for documentation and international organization. He spent the summer of 1967 and eight months in 1968 in the Mundaneum as it had been reassembled during and after the War in the old anatomy building in the Parc Léopold. Now twenty years or so after Otlet's death, it was still being managed by George Lorphèvre and André Colet with the help of Les Amis du Palais Mondial.

He has in several places described what he found there:

Every nook and cranny of this building, including the glass-roofed dissecting theatre at the top, were crowded with documents of various kinds, not least piles of copies of the many publications of the Institut International de Bibliographie (IIB, then IID then FID) and the Union des Associations Internationales, but also with the seemingly never ending "notes" in typescript and manuscript that Otlet wrote on the multifarious subjects that interested him. Many of these notes have been collected and inventoried today as *Notes numérotées* in the Mundaneum in Mons. The numbered files of the formal archives of the Institut and Office International de Bibliographie, however, had been carefully set up in the main office of the building. I went through these archives one after the other from beginning to end. They are what today have been inventoried as *Dossiers numérotés* in the Mundaneum in Mons. Almost at the end of my stay in Brussels all those years ago, I stumbled upon what had been Otlet's office. It was as though he had just got up and left it, as we see it in the photographs we have of him sitting at his desk behind piles of papers, a teapot in front of him, M. Colet standing behind, though the office had gathered dust and cobwebs and there were several baskets overflowing with documents beside the desk. (Rayward, 2012, p. 71)

In the preface to the book that arose from his thesis, he tells us that he "relied heavily, almost exclusively, on these masses of original documentation. It is carefully, perhaps overly, documented, and much of the documentation is quoted at length. This has been deliberate and stems from a fear that some of this original material, already much disorganized, in a fragile condition and hitherto maintained in appalling physical surroundings, might disappear" (Rayward, 1975, p. v).

Rayward's book was published in 1975 in Moscow by the Russian member of the successor organization to Otlet and La Fontaine's Institut International de Bibliographie, the Federation International de Documen-

tation, whose headquarters were now located in the Hague. The book appeared at the height of the Cold War under the imprint of the All Union Institute for Scientific and Technical Information (VINTI) of the USSR Academy of Sciences in Russian and English editions. The English title was *The Universe of Information: The Work of Paul Otlet for International Organisation and Documentation*, and it is now freely available in digital format for download from the Internet.<sup>2</sup> It was later translated into Spanish (Rayward, 1996). Widely reviewed in the professional press when it was first published, this work had little immediate outcome, and for a number of years, Rayward turned his attention to other matters and to an academic career that took him from the University of Chicago to the University of New South Wales and after retiring from the latter institution in 1990, to a new career at the University of Illinois.

With the advent of computing and the emergence of computer-based networks and eventually of the Internet and the World Wide Web, Rayward became aware that much of what was happening in the world of scholarly communication had been foreshadowed in the work of Paul Otlet. He began to explore these connections in a range of publications beginning in 1990. Among them was Otlet's *The International Organisation and Dissemination of Knowledge. Selected Essays of Paul Otlet* (1990), edited and translated by Rayward, which made a selection of Otlet's papers available in English. Two papers that systematically made the case that Otlet's struggles to create new forms of knowledge management, to conceptualize new kinds of integrated information formats and their distribution through a worldwide communications network, were harbingers of the Internet and the World Wide Web: *Visions of Xanadu: Paul Otlet (1868–1944) and Hypertext* (Rayward, 1994), and "The Origins of Information Science and the Work of the International Institute of Bibliography/International Federation for Documentation and Information (FID)" (Rayward, 1997).

Interest in Otlet at this time was also beginning to be stimulated by the knowledge that efforts were underway as early as 2000 to create a "modern" Mundaneum that would bring together at last all of the now scattered papers and archives related to Otlet and La Fontaine into a Museum and Archive in Mons. This was formally opened in 1998. In 2002 Françoise Levie's important documentary film on the life of Paul Otlet, *L'Homme qui voulait classer le monde*, based on research involving boxes of hitherto unorganized but important Otlet archives in Mons, appeared. The research for this film became the basis for a major biography (Levie, 2006). At the time of the opening of the Museum-Mundaneum, Ijsbrand van Veelen's 1998 documentary film for Dutch Television on Otlet was screened using Rayward and the then director of the Mundaneum, Jean-François Fuëg, as the narrators (Van Veelen, 1998). Alex Wright's Boxes and Arrows blog of 2003, "Forgotten Forefather: Paul Otlet," based in part on Rayward's work

(Wright, 2003), and later publications by Wright helped create interest about Otlet in the Internet and “blogosphere” communities.

In 2001 Rayward was contacted by Pieter Uyttenhove, today professor of the Theory and History of Urbanism and Head of the Department Architecture and Town Planning at the University of Ghent, and Charles van den Heuvel, today Head of the History of Science and Technology Research Group at the Huyghens Institute of the Royal Dutch Academy of Arts and Sciences, with the idea of holding a symposium to discuss Otlet’s work in the context of the concept of the architecture of knowledge that was gaining such currency in the world of information science and computer design. The idea was supported by the emerging Mundaneum beginning to find its feet in Mons. A small intensive two-day invitational meeting, *The Architecture of Knowledge: The Mundaneum and European Antecedents of the World Wide Web*, was the occasion of perhaps the first sustained modern interdisciplinary discussion of aspects of Otlet’s work (Heuvel, Rayward, and Uyttenhove, 2003). Rayward undertook to try to organize a follow-up meeting but one on a more general conceptual base that would help place Otlet in a broader historical and intellectual context than that of the meeting in 2002. With funding from the University of Illinois and the Delmas Foundation in New York, he assembled an international group of scholars whose work at their meeting at the University of Illinois in 2005 became the basis of the volume of edited papers entitled *European Modernism and the Information Society* (Rayward, 2008). Two further meetings occurred in this series following international calls for papers. “Analogous Spaces: Architecture and the Space of Information, Intellect, Action,” was held at the University of Ghent in May, 2008. Organized by Pieter Uyttenhove and Wouter Van Acker, a selection of its papers have just been published (Van Acker and Uyttenhove, 2012). The final meeting in the series so far was “Transcending Boundaries in Europe in the Period of the Belle Epoque: Organizing Knowledge, Mobilizing Networks, and Effecting Social Change.” This was organized in 2010 by Rayward at the Mundaneum in Mons, which sponsored it and offered major staff support for it. A selection of its papers is in press (Rayward, 2014).

These meetings were important in creating a network of scholars from various historical and other disciplines. Most of their research, while not exploring Otlet’s work directly although often touching on it, help to suggest the dimensions of the complex historical, cultural, and social contexts within which Otlet and his colleagues functioned. These contexts touch on matters of information infrastructures, knowledge management, international organization, international arbitration, pacifism, urban planning, modernist architecture, and a series of related matters.

Interest in Otlet and La Fontaine has been growing in recent years. At least three hundred texts, involving authors from many countries and

using many languages, and indeed involving many disciplines, have appeared. The architectural approach to Paul Otlet's work undertaken by Pieter Uyttenhove, initially in a study of the reconstruction of Belgian cities devastated by the First World War (Uyttenhove, 1985), has been taken up and broadened by his student, Wouter Van Acker. Rayward was co-promoter (cochairman) of Van Acker's thesis at the University of Ghent and singles out this thesis as perhaps the most important recent scholarly contribution to have been made on Otlet. In Rayward's view, Van Acker broke new ground in his exploration of the Belgian social sciences traditions in which Otlet's thinking was formed and in his intensive analysis of the work of a number of prominent architects, not least of whom was Le Corbusier, who were stimulated to work with Otlet on his World City and Mundaneum plans (Van Acker, 2011). Several other important theses and the books that have grown out of them have touched substantially on Otlet and La Fontaine though focused elsewhere (e.g., Vossoughian, 2008; Chabard, 2008; Csiszar, 2010; Laqua, 2013). Charles van den Heuvel (Royal Academy of the Netherlands) has become a major figure in the emerging body of Otlet scholarship in studying the correlations between Otletian networks and the semantic Web (Heuvel, 2008, 2009). He has collaborated with Rayward on a number of articles related to the idea of "interfaces" and Otlet's conception for a new kind of scholar's workstation, the Mondotheque, to help provide access to the Otletian universal documentary network (Heuvel and Rayward, 2005, 2011a, 2011b). There has also been much commentary in the "blogosphere" about Otlet and a number of popular accounts in the periodical press.

To try to categorize all of the contributions that have appeared, some with personal input from Rayward or drawing on his publications, but many increasingly based on quite independent studies of documentation in the Mundaneum in Mons, is not a task for this paper. Suffice it to say that the legacy of the archival materials that have come down to us from Otlet and La Fontaine—materials that are being brought into ever increasingly rigorous order by the archivists within the Mundaneum—has helped scholars to throw a new light on many subjects of interest. The archival staff welcome and support the new perspectives that have been emerging. As Rayward himself has said:

I can also testify to the extraordinary riches of . . . [the Mundaem's] collections. For the Belgian student and historian, they are simply a treasure trove awaiting much fuller exploitation than has hitherto been the case, though use has been rapidly increasing. But I suspect that anyone who is interested in almost any area of European history in the first half of the twentieth century might well find something of value in these collections so extraordinarily ramified and various were the networks in which Otlet and La Fontaine took an active part. And of course the two men tended to retain compulsively the documentation arising from these interactions. (Rayward, 2010, p. vii)

## NOTES

1. The account of the work of Otlet and La Fontaine given below draws principally without further reference on Rayward (1975, 2010); Levie (2006); Mundaneum (2008); and Gillen (2010).
2. Since this was digitized in 2007 it has been downloaded 5251 times. Retrieved August 31, 2013, from <https://www.ideals.illinois.edu/handle/2142/651>. It is also available in digital form from the University of Ghent Library: <http://search.ugent.be/meercat/x/view/rug01/000952713>

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