

The Analogous Spaces of Paul Otlet (1868-1944)

Wouter Van Acker

Promotor: Pieter Uyttenhove

Co-promotors: Boyd Rayward, Sylvia Van Peteghem, Guy De Tré, Charles van den Heuvel

Abstract □ This research makes a monographic study of the imagery and the theoretical body of thought of Paul Otlet (1868-1944), a Belgian intellectual who played a central international role in the rationalization of information and documentation management in the first decades of the twentieth century.

Keywords □ Paul Otlet, Documentation, Internationalism, Spaces of knowledge, World City

I. INTRODUCTION

This project makes a monographic study of Paul Otlet (1868-1944). Paul Otlet was a Belgian intellectual who played a central role in the rationalization of information and documentation management in the first decades of the twentieth century and implemented these innovations in several internationalist reformist circles. I give special emphasis to his importance for the field of knowledge visualization, museum education, architecture and urbanism, and media studies.

I argue that for Otlet information and documentation management represented a foremost means through which to achieve political and social change. Like many scientists and thinkers of his day – Ernest Solvay, Wilhelm Ostwald, H.G. Wells, René Worms, and others – Otlet believed that the world was one organization of (energetic) forces, one world-brain, or one organism, which however lacked the cooperation and the coordination to function properly on an international level. It was Otlet's endeavor to create an international network of information and documentation as a rationalized basis for scientific activities and decision-making processes.

II. RESEARCH CONTEXT

Until now, the professional and intellectual endeavors of Paul Otlet have been described mainly from a *historical* point of view, pointing out his importance as a visionary theorist of information science and as a utopian internationalist. In 1975 W. Boyd Rayward saved the work of Paul Otlet from oblivion by his biography *'The Universe of Information'*¹ and last year another novelistic biography was published by Françoise Levie.² However these and other historical accounts of Otlet rarely scrutinize the theory or the utopia in itself. When pointing out the visionary character of Otlet's theory, current writings often construct teleological bridges throughout

W. Van Acker is with Department of Architecture and Urban Planning, Faculty of Engineering, Ghent University (UGent), Gent, Belgium. E-mail: W.VanAcker@UGent.be.

¹ W. Boyd Rayward, *The Universe of Information. The Work of Paul Otlet for documentation and International Organisation* (Moscow, 1975).

² Françoise Levie, *L'homme qui voulait classer le monde : Paul Otlet et le Mundaneum* (Bruxelles, 2006).

history in order to position Otlet as the primal father of information science (and sometimes even of the World Wide Web), neglecting Otlet's contemporary theoretical framework.³ Furthermore, in studies of the utopian plans for the *World City* or the *Mundaneum*, the specific meaning of this modernist utopia is passed over, while the collaboration of Otlet with the architect in question, or the program of the architectural plan is reconstructed meticulously.⁴

III. METHODOLOGY

My methodological approach of Paul Otlet will differ from previous works in a number of respects. Generally, in this dissertation, I will try to point out Otlet's scientific and historical importance as a theoretician, by framing and scrutinizing the visual language and the concepts which he employed. The primary source material to identify Otlet from this point of view will be the archive of the Mundaneum in Mons (Belgium). The great variety of imagery in these archives of Otlet (statistics, timelines, tables, charts, diagrams, organization charts, drawings, maps, architectural and city plans, museum configurations, pictures, etc.) visualizes different structures of knowledge (the tree, the grid, the cube, the pyramid, the network, the globe). Those recurring (constellations of) forms are taken as the point of departure to rediscover Otlet's theoretical principles, and will each be linked to one of Otlet's concrete projects. Nonetheless this approach doesn't want to make abstraction of Otlet's historical ventures and accomplishments, but on the contrary aims at deepening the historical understanding of Otlet's work and his social and political philosophy.

Three conceptual issues which I will raise concern:

- The reformist frame of mind or the tension in Otlet's work between reformist action and scientific, theoretical reflection. This notion of reformism is highly useful for the study of the work of Otlet because it enables a combined study of the scientific and historical interest of his work. The historical discourse about the 'social question' was permeated by a scientific legitimization, and this tension between science and governmental action is now frequently used

³ For a valuable exception and a well-reasoned scientific article which positions Otlet as one of the founding fathers of information science, see:

Boyd Rayward, 'The origins of information science and the International Institute of Bibliography/International Federation for Information and Documentation (FID)', *Journal of the American Society for Information Science*, 48:4 (1997) 289-300.

⁴ Giuliano Gresleri en Dario Matteoni, *La Citta Mondiale. Andersen, Hébrard, Otlet, Le Corbusier* (Venetië, 1982).

Catherine Courtiau, 'La création d'une ville internationale autonome selon Paul Otlet', *Transnational Associations*, 2-3 (2003) 60-71.

as the crux for historical studies of the rise of the welfare state in the Belle Époque.⁵ I argue that the rationalization of information management, in which Otlet played such an important role, was essentially part of the reformist project.

- A second issue I raise is concerning the definition of the scientific field addressed by Otlet's theoretical writings. Up till now, Otlet as a scientist has been confined to the field of what we call now information science. By contrast I argue that Otlet's theoretical writings were belonging to very different scientific disciplines but nonetheless coherent. I argue that Otlet perceived his very different objects of study – as for example the book, the library, the society, the city, the building, the museum, the bank, etc. – in the same way, namely as media or as technological means for organizing the communication of information.
- A third major concern I try to raise is the value of a sometimes small-scale examination of imagery accompanying Otlet's reflections. By analyzing his drawings, diagrams, architectural plans and his museum configurations this research gives special attention to his spatial visualization of knowledge organization.

IV. OUTLINE RESEARCH

The themes treated by the research project will cover material that has largely been ignored or under-researched by other scholars.

A first theme traces Otlet's understanding of the *tree* diagram and its relation to linguistics and logic. In this theme I argue that Otlet subscribed to the Objectivist theory of meaning. According to Objectivism, meanings "are mental objects (contents) which are exchanged between speakers as expression-tokens (containers)."⁶ Otlet used the image of the *tree* to depict this process of expression of real objects through documentation. The choice of the tree, accompanied by the key, as the stamp for the *International Institute for Bibliography*, covers all these different meanings. It expresses at the same time the 'mental representations' of the objective reality, the 'index', and the ramification of knowledge according to the decimal classification system.

A second theme will study the multiple dimensions of Otlet's classification system and the museum as a means for its visual representation. In Otlet's opinion, all documents were part of one universal data bank, which he often represented by means of a *cube*. The *World Palace* – the institution of which Otlet was the director and which was hosted in the *Palais du Cinquantenaire* in Brussels – was the embodiment of this universal database. The *World Palace* joined different

knowledge institutions under one roof as if they were analogous to each other, copies from one medium to another.

The third theme examines Otlet's project of an international encyclopedia, and the correspondence in this regard with Otto Neurath and Patrick Geddes. In the 1930s especially, Otlet worked on the project of a *Universal Encyclopaedia of the World* (*Encyclopedia Universalis Mundaneum*), an encyclopedia which had the ambition to arrive at an extreme degree of synthesis. In Otlet's view the synthesis arrived at in the encyclopedia was not only a process of semantic concentration, but also of spatial condensation. Otlet expressed the hierarchic progression towards synthesis by means of the *pyramid*.

A fourth theme examines Otlet's role in the foundation of three international organization: the *Union of International Associations* (UIA), the *International Union of Local Authorities* (UIV or IULA), and the *International Institute of Administrative Sciences* (IISA). In each of these three organizations, Otlet played a major role in the setup of the organization structure, of the central office and its documentation centre. The *network* diagram expressed most adequately the idea of cooperation between organizations and individuals.

The final theme traces the history of the *World City* and the *Mundaneum*, and Otlet's use of architectural plans or city configurations to spatially represent the international organisation of knowledge. The *World City* constituted the vision of a total centralization of all international institutions in one city, such as the *League of Nations*, the *International Labour Organization*, the *World Bank*, etc. The *Mundaneum* would time and again be the centre of the designs for the *World City* and represent the interests of all 'intellectual workers' by organizing the cooperation between all the intellectual institutions. The utopia of the *Mundaneum* and the *World City* uses the architectural plan to create a panorama of the universal database of knowledge.

V. CONCLUSION

This monographic study of Paul Otlet will focus on the way Otlet thought about knowledge organization in a spatial and geometrical way, following the versatile logic of the analogy. By scrutinizing these spatial representations of knowledge organization, this research project traces the characteristics of the episteme or the knowledge theory in the first decades of the twentieth century, between the age of encyclopedism and the age of mass media.

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⁵ C. Topalov, 'Les "réformateurs" et leurs réseaux : enjeux d'un objet de recherche', in : Christian Topalov, *Laboratoires du Nouveau Siècle : la Nébuleuse Réformatrice et ses Réseaux en France, 1880-1914* (Paris, 1999) 42.

⁶ Chris Sinha, *Grounding, Mapping and Acts of Meaning* in: Theo Janssen en Gisela Redeker (red.), *Cognitive Linguistics: Foundations, Scope and Methodology* (Berlin & New York, 1999) 223-255.

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