

LANDSCAPE URBANISM IN BELGIUM: SOCIOBIOLOGY AND THE EXCHANGE OF METHODS AND METAPHORS

/BRUNO NOTTEBOOM, KOENRAAD DANNEELS

University of Antwerp, Faculty of Design Sciences

bruno.notteboom@uantwerpen.be; koenraad.danneels@uantwerpen.be

KEYWORDS: Landscape Urbanism, Ecology, Metaphors, Sociobiology, Belgium

INTRODUCTION

'Isms' as Landscape Urbanism and Ecological Urbanism claim the notion of landscape as a way of integrating different disciplines into their practices, thus introducing new methods and concepts that are stemming from disciplines other than urbanism, namely sociology, biology, ecology and engineering. This 'disciplinary promiscuity' – as Charles Waldheim describes it – remains a source of confusion within the disciplines of landscape architecture and urbanism.¹ In this paper we attempt to question this disciplinary interaction, and define the (productive) openings and frictions it entails. Concepts from other disciplines are used to insert new methods and metaphors into the field of design, which is both epistemologically and methodologically not unproblematic. Also, the current disciplinary alliances are often approached from an outspoken, 'problem solving' approach, but the question remains – which socio-political agenda and ideological choices underpin the concepts developed in these disciplines?² To investigate these questions more closely, we focus on biology, planning and landscape theory and practices in Belgium at the turn of the 20th century, along with the emerging concept of socio-biology within these fields. The concept was first introduced in Belgian urban planning theory by landscape architect/urban planner Louis Van der Swaelmen (1883-1929) around the First World War.³ However, biologist Jean Massart (1865-1925) and sociologist/politician Emile Vandervelde (1866-1938) had introduced a socio-biological theory in the Belgian scientific and socio-political context almost two decades before. In the paper we will unravel the percolation of methods and metaphors that are derived from biological sciences into socio-political discourses and the fields of urbanism and landscape design. As we shall see, social sciences, but also theory of urbanism has turned to biology to render their study more 'scientific', and thus more credible. Studying how certain terms 'migrate' between disciplines can teach us more about the political and epistemological agendas behind actors and disciplines.

MASSART AND VANDERVELDE: TOWARDS A SOCIO-BIOLOGICAL VISION

At the end of the nineteenth century, Massart and Vandervelde co-authored two books, *Parasitisme organique et parasitisme social* (1893) and *L'Evolution regressive en biologie et en sociologie* (1897), in which they compared biological and social phenomena.⁴ In *Parasitisme* Massart explained the aspects of parasitism inside organisms, while Vandervelde wrote some chapters about the same phenomena in a social context. The chapters were divided between both fields, yet the two disciplines never really integrated their methods. It was mainly Vandervelde who discussed the (small) differences between organic and social parasitism, so as to put the emphasis on the important

similarities. One critic found that Massart and Vandervelde pushed the analogy ‘farther than is desirable’.⁵ The Scottish biologist, evolutionist and urbanist Patrick Geddes wrote a foreword for the English translation of the text, stating that the critical questions readers may pose on these comparisons are ‘a matter of detail’, and they should focus on the more important message of the text that ‘thou shalt not exploit thy neighbour’.⁶ In the introduction to *L'Evolution*, the two authors themselves questioned the combination of their disciplines: ‘To what extent are these assimilations [between biology and sociology] legitimate? Do they have to be understood only in a metaphorical sense?’⁷ Vandervelde was anchored in the political left – he would become the foreman of the socialist party in Belgium – and he interpreted Darwinism in such a way as to scientifically prove that capitalism was a system that was destined to disappear. It is interesting to realize that it was the sociologist who used biological concepts, and not the other way around. Vandervelde clearly aimed at providing a scientific backing for his plea against capitalism. However, Vandervelde was not a revolutionary, but a reformist. Evolution was a gradual process, without revolutionary breaks, and using this theoretical, biological framework allowed Vandervelde to reject the schemes of Marx, paving the way for an ‘organicism’ socialism.⁸ However, Marx also used the biological metaphor in the form of ‘metabolism’ to construct his theories. Erik Swyngedouw claims that Marx, ‘mobilized metabolism in an ontological manner in which human beings, like society, were an integral, yet particular and distinct, part of nature’.⁹ Indeed, theoretical systems of sociologists were influenced by the natural sciences. Following Padovan’s work on social metabolism, this was partly due to the growing accuracy and scientific objectivity of these sciences, and the belief that the nature of society depended on relations with nature that surrounded that society.¹⁰

Vandervelde’s later work continued this line of thinking about man and his environment and city/countryside relationships. In his book *L'Exode rural et le retour aux champs* he pleaded for a return to the fields and the de-urbanization of the urban proletariat.¹¹ As an answer to the rise of capitalism in Belgium, he proposed to re-organise the territory in all its forms, city and countryside. He did not completely reject industrialisation and the city, nor did he fully embrace the rural way of living. Instead, he proposed a more hybrid scheme, integrating city and countryside. For example, he believed that with the construction of a fine-grained railway network, workers would be able to live in the countryside but work in the cities.¹² In the case of Massart sociobiological thinking fitted in his research on the relationship between organisms (human and non-human)



FIGURE 1

and his study in the field of geobotany. In his later work, for example *Les Aspects de la Végétation en Belgique*, Massart used a series of didactic illustrations depicting the different geobotanical regions of Belgium (Figure 1). Here, he also paid attention to cultural landscapes, showing an interest in a holistic approach of biology and geography.¹³

**LE NOUVEAU JARDIN PITTORESQUE AND PRÉLIMINAIRES D'ART CIVIQUE:
INTEGRATING BIOLOGY AND LANDSCAPE DESIGN?**

In 1913, Massart became an active member of the *Nouveau Jardin Pittoresque*, an association that aimed at popularizing knowledge on gardens and gardening. Both Massart and Louis Van der Swaelmen, who was also an active member, considered gardens and nature as possible agents of social reform. *Le Nouveau Jardin Pittoresque* promoted the *wild garden* defined as a more 'natural' garden, in opposition to the 'artificial' English landscape garden (Figure 2).¹⁴ Van der Swaelmen saw this garden as a pedagogical means to familiarize the public at large with the benefactions of nature. He also considered the garden to be a defining link between architecture and the landscape, thus making the step to urbanism in his professional career. In 1914, Van der Swaelmen left the *Nouveau Jardin Pittoresque*, presumably because the organisation had moved away from their initial strive towards social emancipation. During the First World War, Van der Swaelmen wrote *Préliminaires d'Art Civique*, a book that was both a guide for the reconstruction of the territory and a handbook for urban planning.¹⁵ Inspired by British concepts of garden cities, town



FIGURE 2

planning and survey, Van der Swaelmen proposed a twofold solution to the crisis of the modern city: First, the development of a system of urban planning based on an objective and scientific survey and second, the realization of 'superior harmony between the things of nature and the creations of man'.¹⁶

Van der Swaelmen based his theory on specific cities, such as the city of Amsterdam. In the structure of this city he read the neighbourhoods as the cells of an organism, the infrastructure the as nerves and the parks as the lungs (Figure 3). Mentioning Darwin and Lamarck, he was clearly influenced by evolution theory. His biographer Herman Stynen stated that the work of Félix Le Dantec, a French philosopher and biologist who adhered to evolution theory was the main influence on a scientific level.¹⁷ In his search for an evolutionary explanation of the growth of cities, Van der Swaelmen's work is also reminiscent of the work of the Scottish biologist/urbanist Patrick Geddes.¹⁸ Stynen points out that it was also Van der Swaelmen's own background, and the reading of Unwin's *Town planning in practice* (1909) that were of major importance for his urbanistic thinking. However, Van der Swaelmen also referred to Jean Massart. *Préliminaires* proposed to anchor spatial development in what Van der Swaelmen called the 'physiognomy' of the territory, determined by physical circumstances, in interaction with the need of man. This system was based on the classification that Massart made of the Belgian territory in geobotanical districts.¹⁹ *Préliminaires* was littered with biological metaphors. For example, Van der Swaelmen wrote that the first biological element of the urban phenomenon is *habitation*, the cell that formed the urban

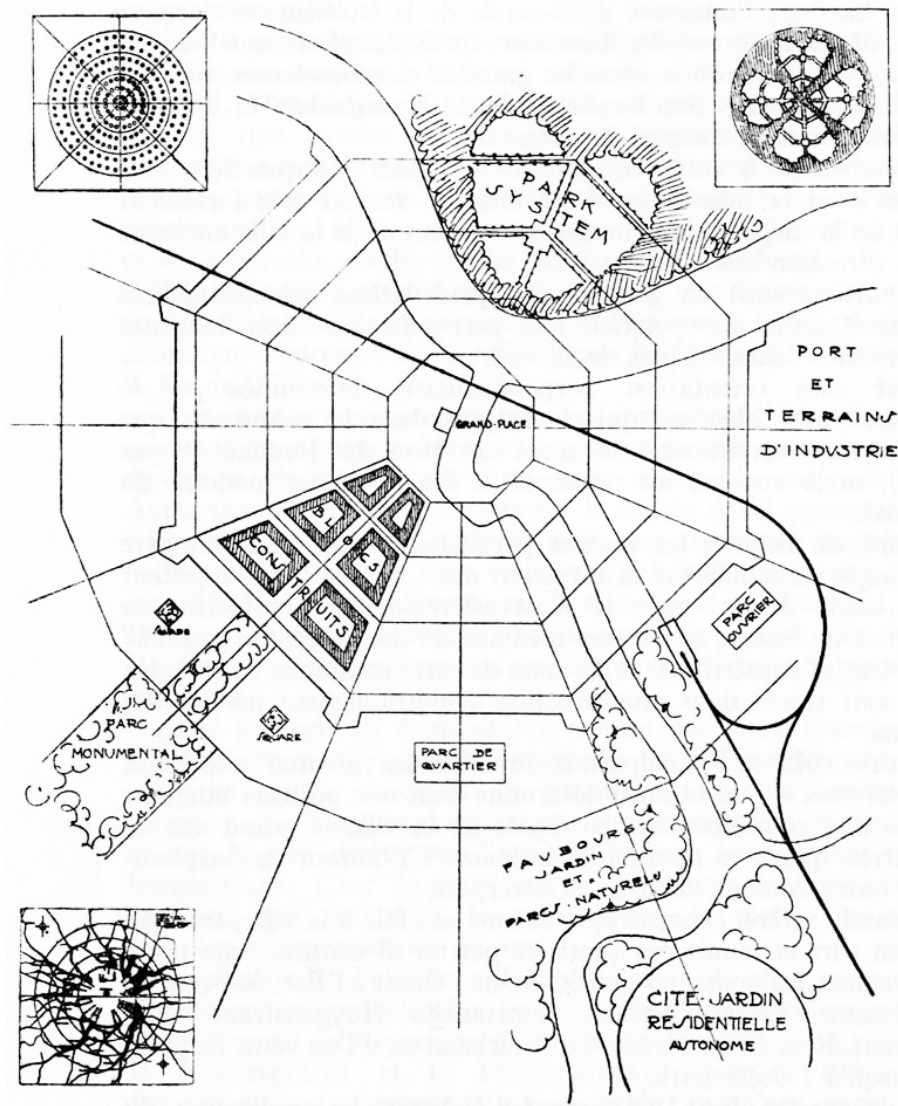


FIGURE 3:
Van der Swaelmen, L.
1916. *Préliminaires d'Art
Civique*: mis en relation
avec le "Cas clinique"
de la Belgique, Leyde,
Sijthoff.

tissue. He explained that the *cité embryonnaire*, the embryonic city, consisting only of *habitation*, already possessed the urban features that develop when urban agglomerations grow more extensively, thus embracing the biological, organicist view that embryos already hold the promise of a grown-up.²⁰ Donna Haraway stated that ‘organicists stress the teleological behaviour of organisms’ and there is ‘at least the appearance of goal-directedness and design in biological phenomena’.²¹ Indeed, Van der Swaelmen believed that the city moved towards an *état de perfection*, an ideal that was both good and beautiful.²² This view was at odds with that of other evolutionists, like Massart, who didn’t believe in any form of finalism.²³ In an article of 1921 Van der Swaelmen wrote that urbanism should rest on two “poles”. First, *la socio-biologie des cités*, which would focus mainly on the housing issue. Second, a social culture which visualises itself in the *paysage urbain*, the urban landscape.²⁴ In another text, he went even further, writing that the *paysage urbain* was an expression of the organic synthesis of functional elements.²⁵ André De Ridder, a contemporary of Van der Swaelmen, considered Van der Swaelmen to be the first to apply the method of the biological sciences to urbanism. After the use of the *méthode historico-narrative* and the *méthode esthétique*, he wrote, Van der Swaelmen adapted the *methode scientifique et biologique* to the urban sciences.²⁶

TESTING GROUND: LE LOGIS-FLORÉAL

From the 1920s onwards, Van der Swaelmen became active as a designer of a number of garden cities.²⁷ The programme d’urbanisation for the Brussels region was a clear expression of his earlier visions on urbanization (Figure 4). He proposed to expand the city by implementing a ring of garden cities around the Brussels core, by which the city would grow in an ‘organic’ way.²⁸ The garden cities of the 1920s came into being in a sociopolitical context that picked the fruits of the rising power of Emile Vandervelde and his colleagues. The umbrella organization of social (rental) housing companies was lead by socialist senator Émile Vinck, as an attempt to evacuate workers’ housing from the sphere of capitalist speculation, and in this context urban planning

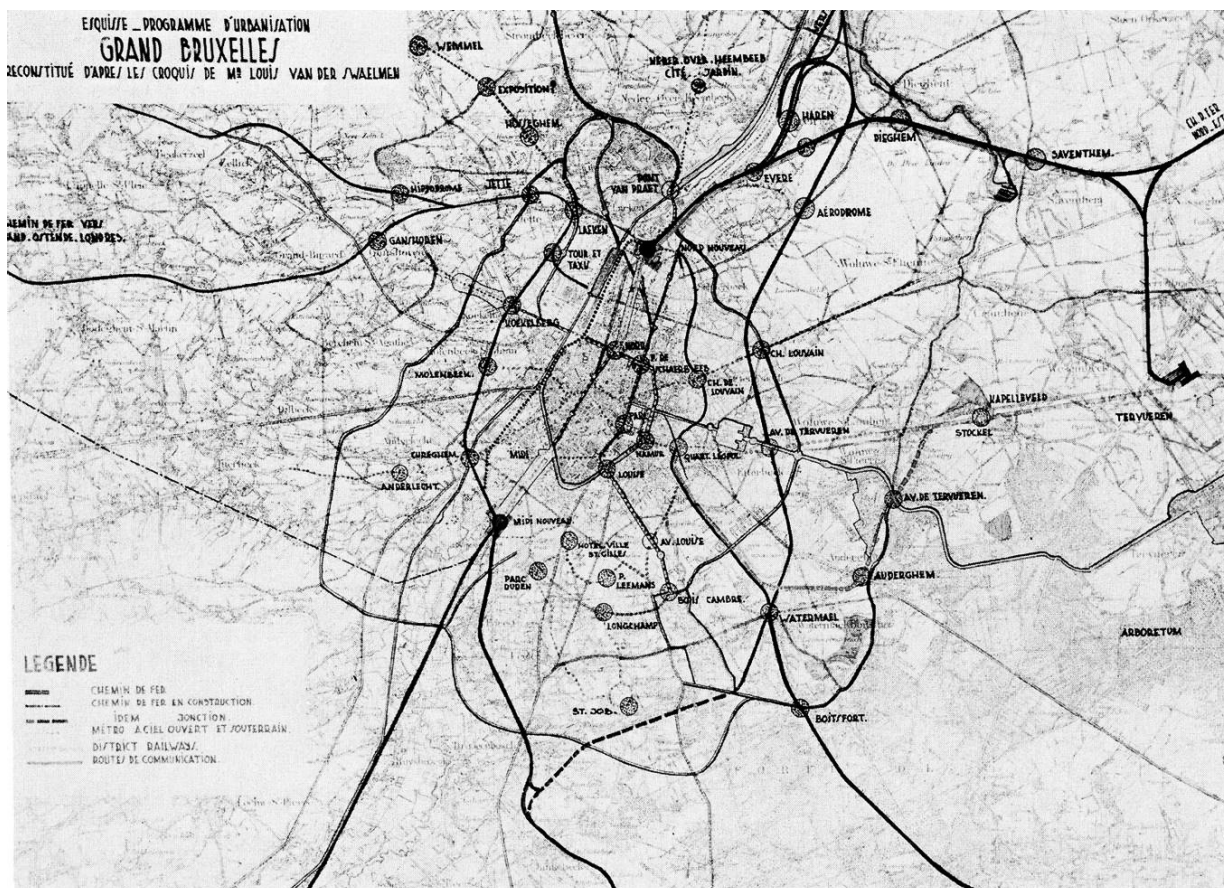


FIGURE 4: Stynen, H. 1979. Stedebouw en gemeenschap: Louis Van der Swaelmen (1883-1929), bezieler van de moderne beweging in België, Bruxelles, Mardaga

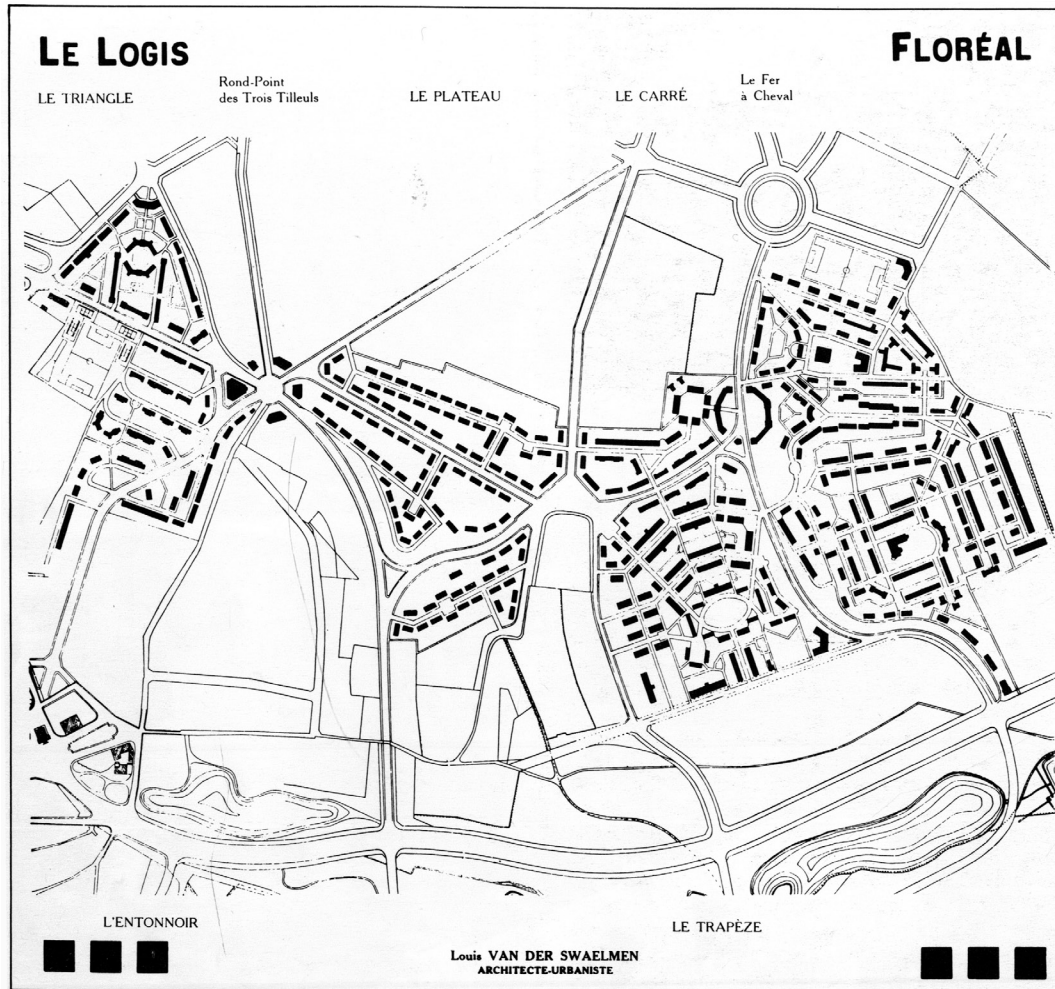


FIGURE 5



FIGURE 6

and landscape design served 'the creation of the material environment for a new social order'.²⁹ The garden city in which the spatial concepts of Van der Swaelmen's thinking are best expressed is *Le Logis-Floréal* (Figure 5,6). This design is not a garden city following the model of Ebenezer Howard, he wrote, rather 'a methodical urban expansion, an *organic* urbanization, under the form of [adding] garden neighborhoods to the city'.³⁰ The plan for the neighborhoods of *Le Logis-Floréal* was strikingly heterogeneous, and this was, according to Van der Swaelmen, due to the topography: 'The road network was, to remain organic, dictated by the conditions of the terrain,' which lead to a 'spontaneous, unsearched and picturesque layout'.³¹ Van der Swaelmen believed that the juxtapositions of different 'garden quarters' around the capital would culminate into a real 'garden suburb', where the different nuclei would be connected by planted avenues and where free space would be transformed into parks, creating a real 'park-system'.³²

CONCLUSION: METHOD AND METAPHOR

In this paper, we made a first attempt at tracing a historical lineage of terms and concepts through a close reading of the term *sociobiology*. We tried to demonstrate that socio-biological thinking was used by actors in the fields of landscape design, sociology, biology and urban planning at the end of the nineteenth and beginning of the twentieth century. The voices discussed in this paper used the disciplinary exchange between biology, sociology and design to back their ideologically loaded discourses and researches, so as to create a 'scientific' reading of their visions and ideas.

However, the question remains whether this 'disciplinary promiscuity', that also exists today, surpassed the use of terms and concepts as a metaphor, and shifts to an actual transfer of methods. In the cases under study the level of the metaphor was not surpassed, however the result was an exchange of terms and concepts that allowed Massart, Vandervelde and Van der Swaelmen to think of the landscape in terms of hybrids of nature and culture. Massart conceived cultural/natural landscapes in his geobotanical research, as well as in his plea for protection of nature in Belgium, Vandervelde envisioned an urban/rural territory and Van der Swaelmen constructed a socio-biological urban theory, in which cities could be studied as scientifically known entities, or organisms. Lastly, Van der Swaelmen designed garden cities on the premise of a natural underground and an organic building pattern, in accordance with the natural growth of the city. This dialectical, (hybrid) relationship between man and nature is perhaps best exemplified by Van der Swaelmen's plea in *Préliminaires d'Art Civique* for a planning that is based on both scientific survey and the 'harmony between man and nature'. This plea situates planning and design as a discipline that is on the one hand determined by nature, but also expresses human control over nature. So in fact, the socio-biological metaphor was used to mentally and conceptually surpass the duality between 'things nature' and 'things social', and look at socio-natural processes that transform both city and countryside. We argue that, even if metaphors are not used "correctly", they have a strong agency. Benedikte Zitouni wrote on the issue of metaphors in the case of urbanism that they 'are not models, not analogies, not simulations, not comparisons. They are vague, unstable and literary sometimes. [...] In other words, it doesn't matter whether the metaphor is true or not – of course we all know that the city is not an organism – but to posit that it is might help us to investigate one specific subject with a little more imagination.'³³ However, the issue of the exchange of metaphors and methods remains a complex phenomenon that requires further study. As terms and concepts act as agents that transfer ideas and meaning from one field to another, it is important to investigate when they are used as a method or as a metaphor, and what these notions entail. As André De Ridder's wrote, Van der Swaelmen *adapted* the biological method into his work, highlighting that the biological methods were not merely *copied* into the design discipline. Following this argument, we should further investigate what this adaption then signifies, and what the meaning behind the use of biological concepts in design really implies.

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