World Heritage papers 5

Identification and Documentation of Modern Heritage

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Foreword

Under the **Global Strategy for a credible, balanced and representative World Heritage List,** *adopted by the World Heritage Committee in 1994, the World Heritage Centre is engaged in assisting States Parties that have few or no World Heritage sites to protect, preserve and nominate their heritage of outstanding universal value. Next to this, a pro-active approach is also taken with regard to the identification and documentation of less-represented categories of heritage for inclusion on the World Heritage List. One such category is Modern Heritage, which comprises the architecture, town planning and landscape design of the 19th and 20th centuries. As at May 2003, out of a total of 730 properties and sites on the World Heritage List, only 12 represent Modern Heritage; they are shown in this publication.*

In addition to reasons of representativity, in 2001 UNESCO's World Heritage Centre, the International Council on Monuments and Sites (ICOMOS) and the Working Party on the Documentation and Conservation of buildings, sites and neighbourhoods of the Modern Movement (DOCOMOMO) started a joint programme for the identification, documentation and promotion of the built heritage of the modern era, because properties and sites under this category were considered to be under threat. They are increasingly subject to serious alteration or destruction, without a proper discussion and assessment of the values embedded in them. Next to rapid socio-economic changes in society demanding a different functional use, a poor understanding of the significance of these properties and sites plays an equally important role. In addition to traditional heritage categories, such as archaeological sites and monuments, also modern properties and sites need to be considered that are worthy of preservation and transmission to future generations for reasons of cultural identity in relation to aspects of continuity and change.

In order to gain better understanding, raise public awareness and promote inscription of this category of heritage, study and evaluation of possibilities, establishment of criteria and selection of properties and sites is needed. To continue and complement the work done by ICOMOS in this field, two meetings were held at UNESCO Headquarters in February and October 2001 respectively to define direction and objectives for a **Programme on Modern Heritage.**

The underlying publication contains the position papers that were written to facilitate the debate during the October 2001 expert meeting. Its aim is to present a framework of conceptual thinking on the significance of Modern Heritage, its preservation and some of the pivotal issues concerning identification and valuation. This framework is guiding the various Regional Meetings on Modern Heritage currently under implementation by the World Heritage Centre, and should facilitate further, more concrete studies and exercises. Eventually, the combined results will be presented to the World Heritage Committee and the States Parties for recommendation, and disseminated to the general public for information and awareness building, to aim for a World Heritage List that reflects mankind's heritage in all its diversity.

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Introduction to the Programme on Modern Heritage

by Ron van Oers

In early 2001 UNESCO's World Heritage Centre, the International Council on Monuments and Sites (ICOMOS) and the Working Party on the Documentation and Conservation of buildings, sites and neighbourhoods of the Modern Movement (DOCOMOMO) launched a joint programme for the identification, documentation and promotion of the built heritage of the nineteenth and twentieth centuries – the Programme on Modern Heritage. This heritage is considered to be particularly vulnerable because of weak legal protection and low appreciation among the general public. These problems were recognized in December 1989 by a Council of Europe proposal, which stated a range of activities and recommendations worldwide, partly focused on raising public awareness. With only twelve properties out of 730 relating to modern heritage (as at June 2002), this concept is currently poorly represented in the World Heritage List (see Annex A). An analysis of the justifications shows that these twelve properties are not always identified as modern heritage, they are sometimes listed for other reasons and under different categories. This joint World Heritage Centre/ICOMOS/DOCOMOMO initiative proposes to take stock of what has been done so far with regard to studies, meetings and proposals, to place these within the system of the World Heritage Convention and to define how this process could be further developed in order to increase the representativity of the World Heritage List. This study will then be presented to the World Heritage Committee and the States Parties as advice with recommendations for action.

Context

In 1972 the General Assembly of UNESCO adopted the 'Convention concerning the Protection of the World Cultural and Natural Heritage', usually referred to as the *World Heritage Convention.* During the initial years of the Convention, priority was given to the establishment of the World Heritage List (Article 11), which acted as the most visible aspect of the Convention, while less attention was paid to other aspects in the process such as educational and post-inscriptional aspects and the representativity of the List.

A turning point with regard to these issues was marked by the World Heritage Committee session at Santa Fe (United States) in 1992 with the adoption of the Strategic Orientations. These included:

- identification of heritage and representativity of the List,
- attention to the post-inscriptional process, i.e. proper management and monitoring of the site inscribed, and
- information and education.

In June 1994, an Expert Meeting of UNESCO and ICOMOS was organized, following up many debates by the World Heritage Committee since 1984 and an address on the issue of representativity by Prof. Leon Pressouyre (University of Paris I) in 1992. The meeting noted a severe imbalance with regard to certain categories of heritage and regions being over-represented:[1]

- European-based heritage in relation to the rest of the world;
- historic towns and religious buildings in relation to other types of heritage;
- Christianity in relation to other religions and beliefs;
- historical periods in relation to prehistory and the twentieth century;
- 'elitist' architecture in relation to vernacular architecture.

The conclusions resulted in a *Global Strategy for a Balanced and Representative World Heritage List,* adopted by the World Heritage Committee in December 1994. This strategy aims to work towards the notion of a broader concept of World Heritage with wider criteria and the formulation of thematic studies for a representative World Heritage List, making it possible for other regions of the world to nominate their heritage.

1. WHC-94/CONF.003/INF.6 (Paris, 13 October 1994), p. 3.

Since 1994, the criteria for evaluation of nominations have been reviewed, and now include architecture, technology, monumental arts, city planning and landscapes. Regional Expert Meetings have been held to study possible contributions to the World Heritage List and, since 1998, Global Strategy Action Plans for all regions are being established.

Statement of significance

While not yet distant in time, the twentieth century can already be viewed as having been extraordinary. In fact, from a geopolitical point of view it was not really a century, but lasted a mere seventy-one years: with the end of the First World War the Victorian Age also ended, which launched what is called *modern society.*[2] Yet another new era started with the end of the Cold War, marked by the fall of the Berlin Wall in 1989. Next to this, the twentieth century was above all the century of *modernization.* Although modernization as a technical term was introduced only in the 1950s, its main driving forces were the processes of individualization, democratization and industrialization that started in the late eighteenth and nineteenth centuries. Jürgen Habermas, in one of his lectures on modernity, explains that 'the concept of modernization refers to a bundle of processes that are cumulative and mutually reinforcing: to the formation of capital and the mobilization of resources; to the development of the forces of production and the increase in the productivity of labor; to the establishment of centralized political power and the formation of national identities; to the proliferation of rights of political participation, of urban forms of life, and of formal schooling; to the secularization of values and norms; and so on'.[3] In short, our view of the world, our sense of time and space and our place in the course of history, changed dramatically, bringing about irreversible changes in almost all facets of life.

As an introduction to his already classic book on the history of modern architecture, Kenneth Frampton writes: 'Whereas technological changes led to a new infrastructure and to the exploitation of an increased productive capacity, the change in human consciousness yielded new categories of knowledge and a historicist mode of thought that was so reflexive as to question its own identity. Where the one, grounded in science, took immediate form in the extensive road and canal works of the seventeenth and eighteenth centuries and gave rise to new technical institutions, such as the École des Ponts et Chaussées, founded in 1747, the other led to the emergence of the humanist disciplines of the Enlightenment, including the pioneer works of modern sociology, aesthetics, history and archaeology'.[4] These changing cultural, social and economic processes brought about different expressions in the built environment, which were until then unknown: it resulted in the emergence of the *metropolis,* an urban form resulting from the process of 'the rationalization of social relations',[5] the construction of vast *industrial complexes,* with new modes of *transport* and *communication*; a type of *city planning* necessary to accommodate thousands of people coming to the cities to work; *mass housing* using the *concept of standardization, new building technologies* and *materials*; and the conception of *landscape,* which gained attention because of concerns due to heavy modification and rapid transformation, to mention a few important aspects. Equally significant is that the emergence of modern architectural critique marked the birth of historic preservation. Richard Longstreth remarks that the National Historic Preservation Act came into existence at the time when modernism was dominating federal policy. 'This relationship, among other things, makes it difficult some thirty years later to consider the legacy of modernism itself a valued thing of the past.'[6]

2. B. Goldberg, 'Preserving a recent past', in D. Slaton and R. A. Shiffer (eds.), *Preserving the Recent Past,* pp. 1–11, Washington, DC, Historic Preservation Education Foundation, 1995.

3. J. Habermas, 'Modernity's consciousness of time', in *The Philosophical Discourse of Modernity – Twelve Lectures,* p. 2, Cambridge, Mass., MIT Press, 1995.

4. K. Frampton, *Modern Architecture: A Critical History,* p. 12, London, Thames and Hudson, 1985 (3rd ed., revised and enlarged, 1992).

5. M. Cacciari, 'Dialectics of negative and metropolis', in *Architecture and Nihilism: On the Philosophy of Modern Architecture,* p. 4, New Haven, Conn., Yale University Press, 1993.

6. R. Longstreth, 'I can't see it; I don't understand it; and it doesn't look old to me', in D. Slaton and R. A. Shiffer (eds.), op. cit (note 2).

Through the industrialization process, as the strongest environmental impact, modernity engulfed the world after an initial pioneering period in Europe. Each region reacted differently to this process, resulting in regional expressions and nuances, which were enhanced by the cultural isolation that occurred because of the Second World War. Eventually these different expressions had an impact again on the region of origin, creating a complex pattern of fertilization and cross-fertilization. For reasons of identification and valuation it is important to gain insight into this phenomenon and to establish a chronological overview of the various cultural expressions of the modern era. Within these expressions, characteristics and criteria for assessment need to be developed, eventually facilitating the establishment of regional inventories with statements on key issues of universal significance and authenticity.

In general, assessment of significance is part of a process requiring sufficient distance in time. Apart from traditional challenges relating to quality judgement, this lack of distance in time complicates matters in the case of modern heritage. Furthermore, as the larger part of our surrounding built environment is the direct or indirect result of modernity, there is a tendency to overlook its importance; emotional aspects tend to override objective, critical analysis. Progressively individual architectural masterpieces of the nineteenth and twentieth centuries are now considered for protection and nomination. Although this is a positive trend, equal attention should be given to the many other built forms of these periods, such as urban ensembles and city patterns, infrastructure and works of engineering, or landscape designs. In the case of modern heritage more consideration should be given to cultural processes rather than always taking a monumental approach.

World Heritage listing is a complex process. For heritage to be registered, not only certain criteria have to be met, but also an objective, truly global vision has to be presented on its meaning and importance. Whether or not this stage of understanding and valuation will be reached in the near future, it is essential to start a co-operative process to describe, analyse and document the wide body of modern heritage, if only because the recent past and the subsequent lack of support among the general public for this type of heritage, together with the hyper-dynamics of today's society with new technological innovations and spatial-functional demands, threatens its survival. A coherent framework established in the light of the World Heritage Convention at least guarantees the highest level of attention under the toughest conditions imaginable, thus giving the document a head start in the subsequent discussions following up this initiative.

Meetings on modern architecture and twentieth-century heritage

A brainstorming session was held at UNESCO Headquarters in February 2001 to discuss the preservation of modern architecture and, in a wider context, the heritage of the twentieth century.[7] The meeting originated out of the notion of representativity of the World Heritage List, which in general is seen from a regional or state-oriented basis. Representativity should however also apply to new categories of heritage, hence the Global Strategy Expert Meeting of 1994 mentioned above. Because of the initiatives taken by ICOMOS, the World Heritage Committee and the World Heritage Centre, the categories of 'cultural landscapes' and 'industrial heritage' are now more widely considered for nomination to the World Heritage List. In the next decade similar efforts will need to be further explored and consolidated.

Regarding registration and documentation, the specialized organization of DOCOMOMO (Documentation and Conservation of Buildings, Sites and Neighbourhoods of the Modern Movement) developed standard fiches which were also used to distinguish the important from the less important ('the Icon and the Ordinary'). As the twentieth century was above all a century of the common, it is important to bear in mind that not everything can be preserved: selection is crucial. DOCOMOMO emphasized that the idea, the concept, is more important than physical form. For the greater part of Modern Movement architecture and town

7. Participants were F. Bandarin and M. Yang (UNESCO), J-L. Luxen, H. Cleere and R. Durighello (ICOMOS), J.-L. Cohen (IFA), H-J. Henket (DOCOMOMO), M. de Michelis (Venice University) and R. van Oers (Delft University).

planning, instead of preservation, comprehensive documentation has offered a good alternative to safeguard ideas, heritage and memory.

For the Programme on Modern Heritage, therefore, it was considered necessary to develop a *vision* on how to look at our twentieth-century past. At the invitation of ICOMOS, in 1992 DOCOMOMO conducted a feasibility study into the establishment of a 'tentative list' of Modern Movement properties, which could be considered for inscription on the World Heritage List. In this study the context, the fiches and the criteria were all discussed, resulting in the general conclusion that the World Heritage Convention applies to properties of the Modern Movement also, and therefore to the wide body of twentieth-century architecture and town planning. The only minor adaptation involved the aspect of authenticity, for which a wider definition was proposed including authenticity of the idea, authenticity of form, authenticity of construction and details, and authenticity of materials.[8]

The theme of the programme should focus on the *heritage* of the twentieth century, rather than the architecture alone. For the context of twentieth-century heritage, the nineteenth century after industrialization and colonialism was an important prelude and should therefore be taken into account as well – in fact, the heritage of the nineteenth century is equally under-represented. It was understood that stylistic debates or classical typologies should be avoided; instead, the problematic issues of identification, protection, conservation and restoration should be discussed and addressed in the programme.

A broad view will be necessary and needs to include reconstructed cities (political decisions and backing), landscapes, the planned development of cities and new towns, and all the areas where new rules have been applied leading to a re-evaluation of the concepts of *authenticity* and *integrity.* To this end, it was decided to invite international specialists to write short position papers to introduce questions and identify key issues. Themes should include colonialism, mobility, innovation, new towns, community building and representation, open spaces and landscapes, economic modernization and tourism development. Indeed, a non-Western approach will be essential and efforts should be made to tap from ICOMOS Scientific Committees as well as universities and research institutes around the world.

In 1995 and 1996, after the Global Strategy meeting of 1994, ICOMOS organized international conferences in Finland and Mexico to address issues of critical perspective and international co-operation, among others, and prepare recommendations. Many other initiatives were launched and, in fact, the number of scientific colloquia, meetings and workshops organized by colleagues around the world is too great for all to be listed. Some pivotal conferences that should be mentioned are: 'Il restauro dell'architettura moderna' (Italy, 1992) 'Monuments of the Communist Era' (ICOMOS/Germany, 1993); 'Preserving the Recent Past' (Chicago 1995; Philadelphia 2000); '20th Century Heritage – Our Recent Cultural Legacy' (ICOMOS/Australia, 2001), while in February 2001 ICOMOS/Finland hosted the seminar 'Dangerous Liaisons – Preserving Post-War Modernism in City Centres'. The École Polytechnique Fédérale de Lausanne, Switzerland, organized the colloquium 'Rénover la maison – Le patrimoine bâti du XXe siècle' (June 2001), while recently the Université du Québec à Montréal, Canada, organized the conference 'Le patrimoine moderne: expériences de conservation' (May 2002). Currently, the Finnish Institute of Architects, together with ICCROM, is offering courses in Modern Architecture Restoration (MARC).

UNESCO Expert Meeting on Modern Heritage, October 2001

Amidst these effervescent debates, UNESCO organized an Expert Meeting at its Paris Headquarters in October 2001, at which forty international specialists were invited to participate. The main purpose was to discuss and define a vision on how to look at our nineteenth- and twentieth-century past and to develop a work plan for the identification and documentation of

8. *The Modern Movement and the World Heritage List,* p. 8, Advisory Report to ICOMOS composed by DOCOMOMO International Specialist Committee on Registers, November 1997.

the heritage of these centuries. For this meeting several position papers on significant processes and trends of modernization were used as reference documents to define issues and facilitate the discussion.

Issues for consideration included phenomena that can be characterized as specific for the era of modernization, such as the emergence of the urbanized region – the metropolis. In his contribution on the *catalytic city* Kenneth Frampton explains that the metropolis was first recognized as a more or less universal phenomenon by the British urbanist Peter Hall in his 1966 book *World Cities.* In fact, the phenomenon of urban sprawl was not entirely new, it had already been identified as an environmental threat in 1895. Of course, what had changed over the course of time was 'the sheer magnitude of the conglomeration in question'. In discussing the topic of *urbanization*, its paradigms and patterns, Frampton provides a mind-frame reflecting on issues of urbanity, identity and intervention, which will prove useful to the definition of criteria and strategies for conservation.

Another contribution to the establishment of criteria is made by Louis Bergeron, through a discussion of the perception and appreciation of *industrial heritage.* The author examines industrial heritage in relation to architecture, territory and environment and points out an appreciation problem that requires a new way of thinking; one of the reasons for the deterioration of this heritage is a poor understanding and knowledge of its architecture. Therefore, he suggests evaluating this architecture in reference to the underlying rules and specific criteria that relate to 'production', instead of according to the canon of architecture as part of fine arts. In addition, Bergeron suggests giving priority to the execution of studies meant to change the rooted hostile attitude to the conservation of industrial heritage that is due to early observation of the harmful effects of industrialization on the environment.

On the same theme, Jean-Louis Cohen discusses the issue of preserving the urban ensembles of the industrial era, such as *new extensions of traditional cities and new towns.* The author points out the difficulty of establishing criteria for the preservation of new towns, as their main cultural value resides in the innovation of an urban system. Cohen challenges current thinking on conservation by inviting meditation on the legitimacy of preserving urban ensembles which have been heavily transformed, but where the idea and scope of the initial concept are still perceptible. Related to this is the question of whether urban innovations can be considered as World Heritage, as in fact the idea that presided over the creation of new ensembles is at the crossroads of material and immaterial heritage.

Discussing *community building and representation,* Sherban Cantacuzino examines the creation of capital cities and university complexes as well as new towns and reconstructed cities. He also considers 'the preeminence of planning and the dedication to a social programme' as being a true characteristic of the twentieth century. Describing projects in various parts of the world, the author hints at criteria for assessment of modern heritage properties and, finally, sums up likely candidates for World Heritage listing in places such as Kuwait, Sri Lanka, Bangladesh and Kyoto. He concludes that 'aesthetic merit alone is not sufficient. What matters above all are ideas, the depth of the ideas and the ways ideas are given form'.

Another issue specific to the modern era is *mobility.* Luuk Boelens considers that transport and communication ('unlimited mobility'), after capital, are among the most important factors that determine modern society today. Just as the Industrial Revolution of the eighteenth and nineteenth centuries brought about a depopulation of the countryside, transport and communication are currently reversing this trend. Furthermore, they radically overhauled our society and individual behavioural patterns, our way of thinking, acting and perception of time and space. Boelens proposes a series of abstract archetypes that are connected to a specific spatial realm of thought and that can be replaced by concrete examples, when it comes to the identification of properties and sites.

Regarding *innovation,* Franziska Bollerey explains two approaches to understanding: one chronological, defining innovative advances, and the other abstract, including philosophical and theoretical considerations in examining structural changes. Furthermore, she emphasizes that inventions in general can be neutral, but once they enter upon the public stage their positive or negative exploitation begins – 'the Janus-faced

nature of many inventions'. Therefore, the author stresses that this inherent aspect of the innovative must form part of the selection criteria for modern heritage.

While certain phenomena may be regarded as universal, their origins nevertheless may differ considerably. In this regard, Shin Muramatsu and Yasushi Zenno describe how to *evaluate, conserve and revitalize modern architecture* in the Asian region's heritage mosaic, with ten different types of modern architectural responses, which they consider to be characteristic of East and South-East Asia. Furthermore, they explain that for this region the 'early-modern' world emerged after the break-up of the Mongolian world empire. Since then, and even before the Age of Exploration, when voyagers from Spain, Holland and Britain simply joined this great arena, there had been wide-ranging exchanges of people, goods and ideas, including those of architecture and urban planning, among various non-Western spheres. In other words, Muramatsu and Zenno state that 'the world's modern architecture, especially that of the non-West, did not develop in a vacuum with the Western colonial presence as its only stimulus'. However, when it comes to the evaluation and conservation of modern heritage, in many countries in Asia the climate is still difficult, due to a general negative feeling towards the architectural heritage from the colonial past. With Japan as an example, which had already taken the lead in the 1950s, the overall situation today is improving.

In addressing the *heritage of modernism in South Africa,* Derek Japha concentrates in particular on South Africa and deals with two main issues. The first is the question of whether modern architecture in the region, of which he distinguishes four groups, has been distinctively local in character. The second, on urban planning, discusses planning for apartheid, which he considers is without question the most significant 'contribution' of South Africa to modern planning. Concluding, he explains that modern heritage, which is of colonial origin in South Africa, 'raises complex value issues anywhere in the post-colonial world', although 'they become much sharper in contexts such as South Africa ...'.

Such regional differences clearly show the importance of local circumstances, be they economic, social, cultural, political or climatic, which therefore need to be taken up when assessing and selecting properties and sites of *colonial heritage.* Pauline van Roosmalen suggests a new non-Western oriented approach, taking into account the specific relationship between motherland and colony involving the above aspects, among others, and derives from this the intrinsic values and significance of colonial heritage of the nineteenth and twentieth centuries.

With regard to *landscapes and open spaces,* Charles Birnbaum states that landscape architectural contributions are seldom considered as historic resources requiring special protection. As such, nationally significant works are not only disregarded, but are being altered significantly or destroyed altogether without leaving a trace, or without having been subject to public debate. To illustrate this, he gives an overview of more than twenty properties and sites of modern landscape architecture that very recently have been altered, destroyed or are at risk of being destroyed, ranging from residential designs, roof gardens, squares and plazas, to shopping centres, parks and campus plans. 'Based on current maintenance and management threats, and the lack of public and professional awareness' he proposes a strategy involving eight steps, many of which are already being undertaken in the United States, resulting in 'an increased number of significant works from the recent past now being documented, preserved and more broadly interpreted.'

On the same subject, and typical of heritage of the modern era in general, Marc Treib mentions that the issue of landscape preservation is a crucial one, as under the majority of preservation laws the significance of a site is only recognized after it has acquired a certain age. But in contrast to permanent, durable structures, landscapes 'may fall and disappear within a few seasons', as maintenance is a necessity and change and deterioration are almost instantaneous. Treib considers five realms of landscape design with important works that could serve as references for identification and assessment purposes.

Concerning the *preservation of nineteenth- and twentieth-century heritage,* Fabio Grementieri poses some questions on the preservation of modern heritage 'as seen from the perspective of a country where the most important heritage belongs to the nineteenth and twentieth centuries and from a city whose imagery in music, literature and architecture was shaped between 1880 and 1970' – Buenos Aires. He explains that the identification and documentation of nineteenth-century heritage, 'as conflictive and complex as that of the twentieth century', is lagging far behind and, therefore, increased efforts are needed to have it appreciated and protected at both national and international levels. To achieve this, he considers five issues that need to be addressed, focusing in particular on integrity and authenticity.

Related to this, in examining *continuity and change in recent heritage* Jukka Jokilehto considers in depth the question of quality judgement. He gives an overview of the development of modernity, discussing the many cultural expressions generated at the end of the nineteenth and early twentieth century and arriving at the point 'that our modernity depends on our values and our culture, as well as being based on our inheritance from the past'. Now, to make an assessment of the significance of our recent heritage is being complicated by the fact that the distance in time is still short and that we are really judging ourselves. Jokilehto states that 'in order to evaluate the quality of a product, we must know and understand the criteria and values on which it is based'.

To initiate such quality judgement, in-depth studies and thorough analyses have to be conducted and objective criteria established. The Programme on Modern Heritage has been designed to make a contribution to this. The first international meeting in Paris explored the route that the programme would take. Follow-up meetings with a regional scope are scheduled for the Americas in Mexico (December 2002), for Asia in India (February 2003) and for Africa in Eritrea (October 2003). They are meant to develop and test tools, such as an anthology of significant critical texts on modernity, in-depth studies relating to cultural expressions of the nineteenth and twentieth centuries, comparative studies into properties and sites and the assembly of workshop dossiers to facilitate inductive exercises and test cultural approaches to criteria. The results of these studies and exercises will be used to advise States Parties and will be disseminated to the general public for information and awareness-building. With such a framework in place, it should be taken into account if and how well-represented countries can participate in the establishment of nomination dossiers for under-represented countries, in particular in Latin America, Africa and Asia, to positively work on both the thematic and regional imbalance in the World Heritage List.

Position papers defining visions and trends

Some of the important social, cultural, economic and spatial processes and trends that developed during, and subsequently shaped, the nineteenth and twentieth centuries were selected to define themes for the position papers, including regional visions on modernity.

Themes

- New towns, new settlements and rebuilt towns
- Community building and representation
- Colonial heritage
- Tourism
- Mobility
- Innovation
- Modernity and historical continuity
- Open spaces and landscapes
- Economic modernization
- Modern heritage from an Asian perspective
- Modern heritage from a South African perspective
- Modern heritage from a Latin American perspective

Several position papers (marked*) were distributed by e-mail beforehand for critical review and discussion by the participants to the meeting. The papers deal with a wide range of issues and differ considerably in set-up and scope; it has to be kept in mind that they mainly served as references to shape thoughts and underline certain arguments during the discussion. The original versions of the authors have been maintained as far as possible for this publication. They are presented in alphabetical order.

Position papers

1. L'impact de la modernisation économique et le patrimoine industriel* *par Louis Bergeron*
2. Preserving and interpreting modern landscape architecture in the United States: Recent developments (1995–2001)* *by Charles Birnbaum*
3. Mobility – a story of floating heritage passing by* *by Luuk Boelens*
4. Innovation: A critical view *by Franziska Bollerey*
5. Community building and representation *by Sherban Cantacuzino*
6. Les ensembles urbains nouveaux de l'âge industriel* *par Jean-Louis Cohen*
7. The catalytic city: Between strategy and intervention *by Kenneth Frampton*
8. The preservation of nineteenth- and twentieth-century heritage *by Fabio Grementieri*
9. The heritage of modernism in South Africa *by Derek Japha*
10. Continuity and change in recent heritage* *by Jukka Jokilehto*
11. How to evaluate, conserve and revitalize modern architecture in Asia* *by Shin Muramatsu and Yasushi Zenno*
12. Changing views on colonial heritage* *by Pauline van Roosmalen*
13. Open spaces and landscapes: Some thoughts on their definition and preservation* *by Marc Treib*

1

L'impact de la modernisation économique et le patrimoine industriel

par Louis Bergeron

La place occupée par le patrimoine industriel au sein de l'ensemble des catégories et des formes du patrimoine général de l'humanité s'est considérablement élargie, c'est une banalité de le rappeler, au cours des XIX^e^ et XX^e^ siècles. La « modernisation économique », en effet, s'est traduite essentiellement par le passage au premier plan des activités de production industrielle, accompagnées et servies par des moyens de transport eux-mêmes industrialisés – et par une intensification sans cesse croissante de l'innovation technologique.

Il est vrai – et c'est une réelle préoccupation pour les autorités gardiennes du patrimoine culturel sous tous ses aspects – que le patrimoine des XIX^e^-XX^e^ siècles souffre, aux différents niveaux de la protection, d'une sous-représentation par rapport à celui des périodes plus anciennes, comme si l'accession au statut de « patrimoine » était liée nécessairement à une antiquité, seule gage de respectabilité, un peu au sens où, dans la société d'Ancien Régime, il fallait, dans certaines circonstances, faire ses « preuves de noblesse ». Depuis une trentaine d'années, pour ne prendre que l'exemple de la France, le patrimoine architectural du XIX^e^ siècle a fait l'objet d'une prise en considération toute nouvelle, et depuis une décennie environ c'est au tour de celui du XX^e^ siècle d'en bénéficier. La philosophie et la pratique de la protection ont évolué avec la réflexion sur la notion de patrimoine et sur son contenu : notre patrimoine est un bien précieux qui naît et se renouvelle à chaque instant de la vie de nos civilisations, comme du reste en chacune des aires culturelles qui se partagent notre planète.

Mais il n'est pas moins vrai qu'au sein même du patrimoine « moderne » (selon la périodisation adoptée par l'UNESCO), le patrimoine de la période de l'industrialisation accélérée peine à se faire reconnaître proportionnellement à son importance quantitative, aussi bien qu'en considération des valeurs nouvelles dont il est porteur en termes de travail, de techniques et d'organisation de la production ou de la circulation des biens matériels – ces derniers ayant pour leur part bien du mal à accéder à la dignité d'objets culturels, sauf quand il s'agit d'objets de luxe ou incorporant une part importante de création artistique. La cause générale et profonde de cette difficulté, si pénalisante pour le patrimoine industriel, entré de façon encore bien modeste sur la Liste du patrimoine mondial depuis une vingtaine d'années, est d'ordre socioculturelle, et n'est pas surmontable aisément ni rapidement. Ernest Labrousse, le grand maître de l'enseignement de l'histoire économique et sociale dans la France du milieu du XX^e^ siècle, aimait à rappeler à ses étudiants, pour les aider à comprendre comment naissent les révolutions, que le progrès de l'économie va toujours plus vite que celui de la société et des institutions politiques, et que le « mental », lui (nous dirions aujourd'hui « le culturel »), est toujours à la traîne. Un immense effort de sensibilisation, de familiarisation, de formation, sous des formes et à des niveaux multiples, est encore à accomplir – c'est l'un des leitmotive de l'action de TICCIH (en partenariat avec l'ICOMOS) comme de celle des écomusées, mais les ministères nationaux de l'éducation seraient bien mieux armés que cette organisation internationale ou que ces institutions associatives ne peuvent l'être pour aider à l'accouchement de cette révolution culturelle – c'est du reste ce à quoi va contribuer, pour reprendre le cas français, le plan de cinq ans « Art et Culture » du ministre Jack Lang.

La demande du Centre du patrimoine mondial est de réfléchir et de faire des propositions, en particulier, autour de trois domaines spécifiques : celui de l'architecture, de la planification urbaine et de la création de paysages.

Patrimoine industriel et architecture

À l'aube du XXI^e^ siècle, et en dépit de bien des progrès intellectuels et conceptuels déjà enregistrés, les rapports entre ces deux champs sont encore loin d'être clarifiés, et l'urgence demeure de liquider certaines ambiguïtés ou incompréhensions.
Elles prennent leur source, à n'en pas douter, dans le fait que le patrimoine industriel continue d'être abordé majoritairement comme un patrimoine monumental, d'être compris avant tout comme une expression architecturale. On reviendra plus loin sur le fait que, le temps avançant dans le cadre chronologique retenu ici, les témoignages construits du patrimoine industriel ont glissé vers d'autres catégories que celles du monumental pur : celles du site ou du paysage. Pour en rester, pour le moment, dans le cadre des rapports entre patrimoine de l'industrie et architecture, rappelons, en premier lieu, que le patrimoine industriel ne se résume pas à des collections de témoignages bâtis (c'est, bien sûr, tout un autre débat). Et, deuxièmement, que si l'on peut se réjouir, dans une perspective d'acclimatation auprès du plus large public, que le patrimoine de l'industrie continue à se présenter dans un grand nombre de cas sous les espèces de constructions ponctuelles aisément individualisables, il est cependant beaucoup plus important de faire définitivement admettre que les architectures de l'industrie doivent être appréciées par référence aux règles particulières qui régissent les rapports entre architecture et production, et non pas selon leur conformité (ou absence de conformité) aux canons de l'Architecture considérée comme la reine des Beaux-Arts.

La fin du XVIII^e^ siècle a vu aussi la fin des « manufactures royales » en Europe – cet héritage du mercantilisme de princes absolutistes ou éclairés qui a en même temps offert un berceau aux préfigurations de la concentration moderne du travail. Grâce à elles les monuments de l'industrie ont bénéficié d'une première ouverture sur notre espace moderne du patrimoine – à la faveur de l'heureux

travestissement des lieux du travail, des fibres, des étoffes ou du métal sous les apparences de résidences aristocratiques (à San Leucio, au Dijonval) ou patriciennes (à Monschau), ou encore de véritables établissements d'État (dans le cas des arsenaux, par exemple).
De cet épisode, plus d'un industriel du XIXe siècle devait conserver le souci de manifester sa réussite personnelle et le renom de son entreprise en commandant à un architecte un décor de façade, un habillage stylistique de prestige d'inspiration historisante ou régionaliste – à Roubaix, à Noisiel, à Crespi d'Adda… Pourtant, les grandes usines du XIXe siècle n'ont pas tardé à échapper aux architectes pour confier leurs commandes à des cabinets d'ingénieurs, produisant en série à partir de modèles dont ils assuraient ainsi la diffusion, et contribuant à cette impression d'uniformité que dégagent bien des usines textiles, par exemple, d'un bout à l'autre de l'Europe ou de part et d'autre de l'Atlantique. Parfois l'usine devient l'œuvre, tout simplement, des services techniques de l'entreprise. L'agencement technique interne commande souvent la conception de l'« emballage », les escaliers desservant des niveaux multiples ou les installations sanitaires créant l'illusion de tours ou de contreforts, et le recours à une structure modulaire adaptée à l'extension des unités de production celle d'une recherche de la symétrie. On connaît, aux États-Unis d'Amérique, l'aboutissement, aux premières décennies du XXe siècle, de cette « tyrannie » du fonctionnalisme : c'est la révolution dans la conception des usines véhiculée par l'agence d'Albert Kahn à Detroit, totalement éloignée de toute concession au formalisme esthétique.

Au sein de ces nouvelles générations de bâtiments industriels, il convient de discerner ceux dont la protection et la valorisation s'imposent, en fonction de critères qui, au-delà de la prise en considération de leur rôle historique, technologique, commercial…, ont trait à la généalogie des modèles, à l'innovation en matière de résistance aux charges ou à l'incendie, de facilités données à la circulation ou à l'éclairage, aux combinaisons judicieuses entre les matériaux, etc. Objet utilitaire frappé en apparence d'une certaine banalité, parfois dévalorisé par les économies faites sur sa production, l'usine du XIXe siècle nous contraint à un changement de regard : sa qualité, sa valeur culturelle, requièrent une appréciation d'ordre technique et marginalement esthétique au sens classique du terme.

L'histoire du plus ancien et du plus banal des bâtiments industriels : le moulin hydraulique, illustre bien cette révolution. Depuis la fin du XVIIIe siècle, la petite « usine » au bord de l'eau, dont le style régional souvent très marqué la rend aujourd'hui si recherchée, chargée de légendes et de conflits (autour du meunier ou de l'usage de l'eau), évolue rapidement vers le statut de site industriel à tout faire : filature, forge, papeterie, de plus en plus exigeante en chevaux-vapeur, en perfectionnements touchant le rendement énergétique des roues et des turbines, le système des prises d'eau et des réservoirs garantissant l'entreprise contre les périodes de chômage, ou encore les organes de transmission du mouvement. Les bâtiments anciens sont surélevés ou reconstruits afin d'accueillir le nouveau système de traitement des grains mis au point par l'Américain Oliver Evans, ou connaissent des reconversions au moindre coût à d'autres usages industriels. Ce n'est plus, dans une telle perspective, l'appartenance du moulin à une architecture vernaculaire, ni les caractéristiques propres de sa construction qui lui confèrent une valeur patrimoniale éventuelle, mais bien plutôt sa modernisation technique ou sa remarquable flexibilité.

C'est sans doute autour de l'histoire des matériaux nouveaux et des nouvelles méthodes constructives qu'ils autorisaient, que se déroule l'un des épisodes majeurs de la divergence entre architecture de l'industrie et architecture civile traditionnelle, et c'est aussi à cette occasion que la plus grande attention doit être portée à la qualité particulière de tel ou tel bâtiment industriel. Dans le mouvement général de modernisation de l'art de construire, les architectes ont incorporé, certes, ces nouveautés à leur panoplie de recettes destinées à renouveler leur créativité, en concurrence ou en complicité avec un héritage millénaire qui conférait autorité à leur profession. En revanche, l'industrie, avec le secours des ingénieurs (ou ingénieurs-architectes), a trouvé dans le fer, la fonte, l'acier, le béton enfin, souvent alliés au verre, des instruments parfaitement adaptés à la satisfaction de ses besoins dans le domaine de la production ou dans celui des travaux publics, qu'il s'agisse de résistance aux charges, aux compressions, aux tractions, ou de portées dont les records n'ont cessé de se surclasser l'un l'autre toujours plus audacieusement, en vue d'assurer la couverture de halles ou le franchissement d'obstacles naturels. Les recherches sur la qualité des aciers ou sur la préparation du béton, liées à l'interdépendance croissante de la science et de la technique, comme sur la fonctionnalité des lieux de travail, débouchent sur des créations d'une esthétique totalement étrangère aux règles classiques de l'architecture – dont les extraordinaires qualités n'ont pas suffi, jusqu'en plein XXe siècle, à leur assurer la reconnaissance qu'elles méritent, ni de leur vivant ni à l'issue d'un cycle de vie souvent bref (limité à quelques dizaines d'années) et conclu par des destructions sauvages et précipitées. Si le nom de Gustave Eiffel constitue désormais, grâce au viaduc de Garabit ou au pont Maria Pia, une référence protectrice, ou celui de Sauvestre grâce à la passerelle des usines Menier à Noisiel, peut-on à coup sûr en dire autant d'Eugène Freyssinet (qui parle du pont de Luzancy, en Seine-et-Marne ?) ou de Nicolas Esquillan, ou même des auteurs de ces « Six Bridges » qui ont scellé l'unité des *boroughs* de New York City, et auxquels en 1996 rendait hommage une bien modeste exposition au rez-de-chaussée d'un gratte-ciel de la 6e Avenue ? En France, la caution du nom de son auteur, l'architecte Georges-Henri Pingusson, n'a pas empêché Électricité de France de dynamiter la centrale thermique Arrighi aux portes de Paris, ni Gaz de France et la Ville de Paris d'acquiescer, dans un silence total des moyens d'information, et au profit successivement de l'autoroute A 86 et du Stade de France, à la destruction du superbe ensemble de bâtiments de l'usine à gaz du Cornillon, témoignage, dans les années 1920, à la fois d'un nouveau

procédé de fabrication moderne et d'une remarquable cohérence architecturale calquée sur la fidélité aux exigences de la production, du travail ou de la manutention.

Un mot encore, pourtant, sur ces rapports conflictuels ou mal définis entre architecture « professionnelle » et patrimoine bâti de l'industrie. L'architecture des architectes n'a jamais renoncé à dire son mot en matière d'architecture de l'industrie. Contemporaine de la méthode révolutionnaire d'Albert Kahn est l'expérience du Bauhaus, qui a permis à un Peter Behrens et à ses héritiers de créer en Allemagne quelques-uns des chefs-d'œuvre stylistiques dont s'enorgueillit le patrimoine industriel de ce pays. Dans la seconde moitié du XX^{e} siècle s'est généralisé le recours aux structures préfabriquées du type « prêt-à-jeter » pour accueillir les lieux du travail, ou aux bardages métalliques aux couleurs bariolées pour éliminer le souci d'entretien des murs anciens (tout en les masquant irrémédiablement – ainsi au Creusot a-t-on aujourd'hui le plus grand mal à reconnaître de loin le joyau des usines Schneider du Second Empire : la « Grande Forge », un modèle en son temps de structure métallique innovante qui fut largement imité et exporté). Néanmoins, comme en témoignent des initiatives isolées, ainsi que la réflexion menée à l'occasion d'un colloque qui s'est tenu en 2000 à Arc-et-Senans, l'architecte aujourd'hui n'a pas renoncé à travailler sur l'usine, dans la pratique d'un exercice stimulant qui lui permet de faire la preuve de tout ce qu'il a encore apporté à ses commanditaires, mais aussi dans le louable souci de démontrer que l'industrie n'est pas coupée des autres manifestations et expressions de la culture de son temps. Dans cette reconquête d'un terrain presque perdu, le patrimoine industriel le plus récent, loin de se voir opposer des formes apparentées au placage ou au prétexte, peut se retrouver gagnant du point de vue de son intégration.

Patrimoine industriel moderne et territoire

Rien de plus ambigu que les relations entre l'industrie proprement dite, l'aménagement local du territoire en fonction de ses besoins techniques et économiques, les formes d'habitat et équipements associés qu'elle a engendrées, et l'histoire du développement urbain proprement dit. S'il est vrai que quelques grands utopistes ont pu penser que l'industrie moderne serait à l'origine d'une reconstruction intégrale de la société et de l'élaboration de formes d'inscription au sol et d'organisation du cadre de vie découlant de ces nouvelles structures (ou contribuant à les modeler), il apparaît bien, avec le recul qu'il nous est désormais permis de prendre, que l'industrialisation moderne n'aura été qu'un avatar d'une histoire de l'urbanisation qui la dépasse largement.

Cela dit, si l'industrialisation moderne n'a guère créé de « villes industrielles » au sens plein du terme, elle a laissé de son passage des traces importantes sous une forme localisée, traces dont la reconnaissance et la sauvegarde requièrent une extrême vigilance, compte tenu de l'« esprit de revanche » souvent aveugle dont les villes, petites et grandes, et les intérêts qui les gouvernent, témoignent à l'égard des friches industrielles. Ces traces consistent en des sites de grande extension, parfois en de véritables quartiers témoignant d'une colonisation dense et homogène – de véritables « districts historiques », en des « colonies » ouvrières conçues, dans leurs exemples les plus tardifs, selon les règles d'un urbanisme simplifié mais consciemment élaboré, etc. Il convient donc d'être particulièrement attentif aux pratiques de « purification territoriale » dont ce patrimoine est le plus généralement victime, et qui expriment un refus ou une incapacité technocratique ou politique de prendre en compte dans la planification ou le redéveloppement urbain des marques historiques et identitaires laissées sur un tissu urbain par une phase majeure de l'histoire locale. Ces traces, du reste, outre la valeur culturelle qui s'attache aux vestiges de caractère proprement technique et industriel, constituent parfois un capital immobilier mal compris et négligé dont l'intérêt de conservation est aussi bien économique que culturel et historique, voire dans certains cas en harmonie avec les exigences de nos contemporains en matière de cadre de vie. On ne doit pas oublier l'attention que les grands architectes modernes ont accordée au logement lié à l'emploi industriel, auquel ils ont associé toutes sortes de valeurs éducatives et sociales (il suffit à cet égard de rappeler leur participation à de grands concours de projets pour des cités ouvrières telles que celles de Zlín, entre les deux guerres, ou leur réflexion sur le logement de masse ou la démocratisation du confort).

Finalement, la protection, conservation ou réutilisation de cités ouvrières répondant à des critères de qualité de la vie (Noisiel, Pullman City, Crespi d'Adda…) s'imposent plus aisément que dans le cas du patrimoine proprement industriel et technique des grandes entreprises des XIX^{e}-XX^{e} siècles, pour trois raisons : la charge de mémoire ouvrière qu'elles véhiculent encore ; l'intérêt intellectuel qui s'attache à suivre dans leur généalogie le progrès indéniable des idées morales et philanthropiques, ou tout simplement des pratiques de gestion du personnel par les grands patrons et les grandes compagnies ; enfin le caractère positif (relativement à d'autres aspects) du legs qu'elles ont laissé à des populations plus ou moins durablement enracinées, ainsi qu'à un tissu urbain auquel elles finissent par s'amalgamer.

En revanche, on reste aujourd'hui dans un contexte de vide conceptuel et de barbarie élémentaire des techniques et des projets en ce qui concerne les « mammouths » du patrimoine industriel des deux derniers siècles. Dans tous les grands pays industrialisés il existe encore aujourd'hui, et sans doute pour plusieurs années, un certain nombre de points chauds (de Billancourt à Uckange, des Asturies à l'agglomération de Naples ou au parc géo-minier de la Sardaigne), autour desquels s'affrontent, dans une incompréhension toujours largement partagée, les propriétaires, les services techniques, les personnels politiques locaux, les promoteurs de projets fonciers ou immobiliers, les défenseurs de la mémoire industrielle appuyés par des minorités

actives de la population. On voudrait renvoyer sur ce sujet à la collection des numéros des dernières années de revues telles que *L'Archéologie industrielle en France ; Patrimoine de l'industrie/Industrial Patrimony* ; et encore aux débats du forum virtuel qui s'est tenu sur le site Internet du Conseil de l'Europe dans le premier semestre de l'année 2001, à l'initiative de TICCIH et de la FEMP.

Patrimoine industriel et environnement

La cristallisation d'une hostilité largement répandue à la conservation d'éléments significatifs ou essentiels du patrimoine industriel de grande taille est le résultat, on le sait bien, d'un long processus de formation de l'opinion qui a débuté vers 1820-1830 avec l'observation précoce des effets nocifs de toutes sortes – physiques, biologiques, sociaux – de l'industrialisation moderne par les précurseurs des sciences sociales et les tenants de l'anti-industrialisme, et qui a connu au cours de la seconde moitié du XX^{e} siècle un apogée sous l'influence de la dénonciation de menaces graves pesant sur l'environnement à une échelle planétaire, et non plus seulement locale ou régionale, du fait, entre autres, des modes de consommation énergétique, du recours à l'énergie nucléaire et des pollutions de toute nature imputables en particulier aux industries « de grande taille » (extraction minière, sidérurgie-métallurgie, chimie, agro-industrie).

Du point de vue patrimonial, la conséquence en a été d'enraciner la conviction que, les effets de l'industrialisation sur l'environnement ayant revêtu un caractère catastrophique, il était souhaitable d'en éradiquer le souvenir plutôt que d'en respecter certains témoignages hautement caractéristiques de l'histoire des civilisations dites avancées. Des évolutions récentes montrent qu'une telle conviction se fonde sur une connaissance insuffisante du passé industriel, d'une part, et sur une conception restrictive et figée du concept d'environnement, ou de ceux de nature, de paysage, d'autre part.

Conclusion

Lorsqu'on examine le patrimoine industriel en relation avec l'architecture, le territoire et l'environnement, on constate qu'il y a une manière d'appréciation préétablie qui requiert, selon nous, une nouvelle perspective. Ces artefacts devraient, en effet, être évalués en référence aux règles et critères spécifiques aux processus de production, plutôt qu'aux canons de l'architecture en tant que branche des beaux-arts. Aussi, faudrait-il appuyer l'élaboration des études qui visent le changement de l'attitude hostile envers la conservation du patrimoine industriel, du au constat des effets nocifs de l'industrialisation sur l'environnement.

Parmi les priorités aujourd'hui figurent donc :

1. la nécessité d'une prise en compte de la dimension paysagère des vestiges industriels des XIX^{e}-XX^{e} siècles, incluant tous les témoignages périphériques par rapport à l'usine ;
2. celle d'une analyse, à la fois historique et actuelle, des modes d'articulation du paysage industriel sur l'environnement préalable à l'industrialisation ;
3. mais aussi de la qualité et de la valeur culturelle de certains paysages industriels, ainsi que de la réversibilité au moins partielle des dommages causés à l'environnement physique et biologique de départ.

Une attention portée désormais à la compatibilité, voire à la communauté de sens et d'intérêts entre patrimoine industriel et environnement pré ou postindustriel peut seule éviter qu'un rejet *a priori* de certaines images de la civilisation industrielle des deux siècles passés ne condamne les générations immédiatement à venir à un déficit irrémédiable dans la connaissance de leur identité, dont le patrimoine est le véhicule et le support indispensable, un support matériel et palpable.

Parque Güell, Palacio Güell and Casa Mila in Barcelona, Spain (C i, ii, iv);

inscribed in 1984

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These works by Antonio Gaudí (1852-1926) may be seen as truly universal in view of the diverse cultural sources that inspired them. They represent an eclectic as well as a very personal style which was given free reign not only in the field of architecture but also in gardens, sculpture and all forms of decorative art.

2

Preserving and interpreting modern landscape architecture in the United States: Recent developments (1995 - 2001)[1]

by Charles Birnbaum

1. This paper updates and expands two papers published by the author in *Preserving Modern Landscape Architecture: Papers from the Wave Hill-National Park Service Conference.* Cambridge, Ma: Spacemaker Press, (1999) and "Contemporary landscape architecture for Western living: Preserving and interpreting an invisible legacy," *Preservation Forum,* Vol. 15, No. 1, pp. 48-56.

Preserving and interpreting modern landscape architecture in the United States: Recent developments (1995 - 2001)

It has been nearly six years since the first Preserving Modern Landscape Architecture conference organized by the National Park Service Historic Landscape Initiative was held at Wave Hill in New York City. At that time, keynote speaker, Peter Walker, FASLA, bemoaned the "invisibility" of this diverse legacy of landscape architecture. The case studies presented at that time primarily focused on East-Coast examples, in addition to the preservation planning efforts undertaken by the National Park Service at the Jefferson National Expansion in Saint Louis, Missouri, or the James Rose residence in Ridgewood, New Jersey[2]. Largely absent from the debate however were Western examples of landscape architecture from California's biomorphic garden designs to mid-Western and West Coast pedestrian malls and plazas that re-ignited and celebrated once forgotten downtown districts. Following the same patterns as the post-WWII historic preservation movement in America which was energized with the passing of the Historic Preservation Act of 1966, this awareness and project work ultimately originated along the East Coast.

While interest and awareness of modern landscape architecture and preserving this unique legacy has begun to increase dramatically over the past six years, much work still needs to be done. Further complicating this mission has been an unfortunate related development the death of many masters of this national movement. In 2000 alone this includes Garrett Eckbo (b. 1910), Hideo Sasaki (b. 1919), Richard K. Webel (b. 1900), and Robert Zion (b. 1921).

In all cases we seldom think of their landscape architectural contributions as historic resources requiring special protection. As a result, their nationally significant works not only remain *invisible*, but they are being significantly altered, or worse rapidly vanishing without a trace, or public debate. (For example, the recent demolition of M. Paul Friedberg's plaza playground at Riis Houses in New York City and Lawrence Halprin's design for the Embarcadero Center).[3]

In their book, *Invisible Gardens*: *The Search for Modernism in the American Landscape*, (1994) Peter Walker and Melanie Simo set out to make visible the work of American landscape architects since World War II, from 1945 to the late 1970s. The authors suggest that during this period occurs "one great surge of collective energies the Modern Movement, an upheaval of traditional values, beliefs, and artistic forms that have evolved over centuries of the Western world." (The authors find limited evidence of this work as early as before World War I, but within the discipline of landscape architecture, they note that this impact was "more gradual and often less striking than in other visual and spatial arts yet no less profound.") Unfortunately, as Walker and Simo note, "reasoned criticism did not follow, and modern landscapes slipped beyond even the peripheral vision of art historians.[4]" To that selected group I would add most other academic communities and the general public.

Surveying the urban design projects of the period, Norman T. Newton in *Design on the Land* (1971), a standard text for the profession, reflects in the conclusion of his chapter on "Urban open spaces" that "all in all, this adds up to a heartening array of kinds of open space for landscape architects to work on in American cities. If Olmsted and Vaux could, indeed, return to inspect the labor of their inheritors on the urban scene today, one can safely guess that they would be happily surprised at their profession's expanded role.[5]" Within this chapter is a survey of projects including a perspective rendering of the "outstanding design" for Copley Square by Sasaki, Dawson and Demay (dated 1966) with the caption, "the famous Copley Square redesigned at last.[6]" Ironically, Newton's book remains in print today, but the re-designed Copley Square he celebrated has seen another design competition (1983) and complete reconstruction (1989). Newton's classic reference book also serves as a catalog of such pioneering efforts of landscape architecture as Foothill College, Los Altos, Ca, (Sasaki Walker and Associates); Ghirardelli Square, San Francisco, Ca, (Lawrence Halprin and Associates); Mellon Square, Pittsburgh, Pa, (Simonds & Simonds) and Paley Park, New York City, NY, (Robert Zion)[7] What fate awaits these cultural landscapes?

At the time of this writing, a substantial number of works of modern landscape architecture have been altered, destroyed or are currently at risk. These range from residential designs by Thomas Church (Church residence, San Francisco); roof gardens by Ted Osmundson (Kaiser Center Roof Garden, Oakland; Thoreau Hall Roof Garden,

2. Presented at the Preserving the Recent Past conference in Chicago in 1995 as Session #21, Contemporary Landscape Architecture, the panel included Charles Birnbaum, FASLA, Mary Hughes, ASLA and Dean Cardasis, ASLA.
3. The lack of scholarly context available to guide new project work, is regrettably well illustrated in the recent demolition of Ruth Shellhorn's landscapes designed for Bullocks Department Stores throughout California. As revealed in a conversation between the author the retired practitioner on June 29, 2000, Mrs. Shellhorn bemoaned that "all of the Bullocks Department Stores were sold – new owners came in and tore out everything in the landscape. The landscape design for the Santa Ana store, in particular, was my pride and joy – they tore out everything and put in a lot of new buildings. I can't even bring myself to go there today. This project was a departure from other shopping mall projects. The design included a park that people would come and use -- even on Sunday's when the store was closed. It was a quiet place. Today it has all changed – it's all about money."
4. Walker, Peter and Melanie Simo. *Invisible Gardens: The Search for Modernism and the American Landscape.* Cambridge, MA.: The MIT Press, (1994) p. 3. Along with *Landscape Architecture:* A *Critical Review,* edited by Marc Treib (MIT Press, 1993) sufficient context exists to begin a thoughtful survey and analysis for works of modern landscape architecture and the designer's who created them from this period.
5. Newton, Norman T. *Design on the Land: The Development of Landscape Architecture.* Cambridge, Mass.: Harvard University Press, Belknap Press (1971) p. 639.
6. Ibid. Newton, p. 653.
7. Ibid. Newton, p. 651, 654.

Davis); streetscapes, squares and plazas (Lawrence Halprin's designs for the pedestrian mall in Charlottesville, Va and Skyline Park in Denver, Colorado; Eckbo, Dean, Austin & Williams design for the eighteen-block Fresno mall); nearly all of the Bullocks shopping center designs by Ruth Shellhorn (Wilshire, Santa Ana, Pasadena, Sherman Oaks, San Fernando Valley); parks (Eagle Rock Park, Pasadena, by Eckbo, Dean, Austin & Williams with architect Richard Neutra; and Simonds & Simonds 1969 redesign of Allegheny Commons in Pittsburgh, Pa); campus plans(the residence halls and humanities buildings at University of California at Riverside, by Ruth Shellhorn; UCLA Campus, north end by Cornell, Bridgers & Troller; and, Ambassador College in Pasadena by Eckbo, Dean, Austin & Williams); institutional designs (Nelson- Atkins Museum of Art by Dan Kiley in Kansas City; Opera House Court, San Francisco by Thomas Church) and the sunken sculpture garden at the Virginia Museum in Richmond by Lawrence Halprin; zoological collections or theme parks (Seaworld and Mission Bay Park by Wimmer, Yamada and Associates). *In toto*, something must be done to reverse this tide.

Today, as these visionary landscape architecture pioneers retire from practice, or pass away, their legacy faces ever-increasing pressures for alteration or destruction. For example, when an expansion plan was proposed for the Salk Institute in La Jolla a few years ago, the architectural community took a leading advocacy role regarding the impact of a new building proposal on Louis Kahn's campus masterwork. As a result, national press brought to public attention the potential obliteration of a section of his central grove of eucalyptus trees. Not surprisingly, the landscape architecture community was absent from this debate – ironic when considering that the landscape design was not by Kahn, but by landscape architect Roland S. Hoyt (1890-1968). According to Hoyt's biographer, Carol Greentree, "in 1960, when the Salk Institute was established, Hoyt designed the campus surrounding Kahn's striking science complex with an arboretum of uncommon eucalyptus varieties."[8] Although Hoyt's *Checklists for Ornamental Plants of Subtropical Regions* first published in 1933 (the same time as his design for Presidio Park) and revised in 1958, is still considered a standard reference text by many California landscape architects and horticulturists, his work at Salk had faded from memory.

I again witnessed this *invisibility* of the original landscape architects design contributions during a recent visit to another Kahn project the Kimbell Art Museum in Fort Worth, Texas. As with Salk, this was the site of a controversial expansion plan in the early 1990s, although in this situation a decision was made not to expand the museum building over the grounds, which would have subsumed a large section of George Patton's (1920-1991) landscape design. The proposed expansion was thwarted by the national attention given the project by a community of architects and historians. Oddly enough, Patton's landscape architectural contributions were never recognized during this debate.[9] It remained, as Walker and Simo have suggested "invisible." How then do we change this situation to reveal and rediscover this legacy?

If we begin with the community of architectural and art historians, reducing the "invisibility" of these designed landscapes can begin with listing modern landscape architectural works on the National Register of Historic Places. Up to now, recognition of landscapes has been inconsistent. Successful National Register nominations in the past have embraced buildings that are less than 50 years old (e.g. The Whitney Museum by Marcel Breuer, 1966), but have not included their associated landscapes. For example, in 1994, the Stuart Company Plant and Office Building in Pasadena was listed on the National Register, but only under National Register Criterion C in the area of architecture. The in-depth nomination noted that the office and manufacturing complex is "an excellent example of early Neo-Formalist design by master architect Edward Durell Stone."[10]

Additionally, landscape architect Thomas Church's contributions are discussed over three pages of text narrative that places this work in the context of his executed works and writings. However, in spite of these findings, the nomination states that "the garden in the courtyard does not possess exceptional significance on its own but may become eligible for the National Register in its own right once it reaches the 50-year mark." Nevertheless, it goes on to suggest that Church's legacy "survives in many intact projects"[11] and notes that Church's "best known large-scale projects include the Technical Center (1956) for General Motors in Warren, Michigan, with architect Eero Saarinen, and the Stuart Company Building in Pasadena, with architect Edward D. Stone (1958)."[12]

8. See "Roland S. Hoyt (1890-1968)" by Carol Greentree in Pioneers of American Landscape Design, edited by Charles A. Birnbaum and Robin Karson. McGraw Hill Companies, New York, 2000. Pp. 175-177.
9. I visited the bookstore at the Kimbell Art Museum in April 2000. Although well stocked with a variety of monographs on Louis Kahn the architect and the design of the museum (including Noguchi's contribution to a sunken sculpture court) no mention of Patton's work can be found in any materials available on-site. After talking with a curator I learned that Patton's landscape plans are housed in their collections.
10. The Stuart Company Plant and Office Building in Los Angeles County was listed on the National Register on November 23, 1994. As noted on the evaluation sheet prepared by Paul R. Lusignan, historian, there is no discussion of Church's landscape architectural contributions. The oversight of Church from this nomination is especially disappointing since pages 22-24 of the nomination include the section, "Thomas D. Church, Landscape Architect."
11. It is not clear what this statement is based on. In the April-June 2000 issue of Studies in the History of Designed Landscapes: An International Quarterly, a theme issue titled "Thomas Dolliver Church, Landscape Architect," with guest editor Marc Treib notes that Church "realized over 2,000 gardens." Was a contextual analysis of executed and surviving work made for this nomination?
12. Ibid. p. 24.

These findings take on increased importance when considered in the context of the recent listing of the General Motors Technical Facility to the National Register on March 23, 2000. The nomination that was originally approved on January 19th overlooked the landscape architecture that the historian who prepared the Stuart Company nomination considered one of Church's most significant projects. Miraculously, this nomination was amended during its final National Park Service evaluation in Washington, D.C. As approved, the nomination was revised to recognize "significance under Landscape Architecture, Transportation, Engineering and Architecture."[13]

The successful registration for the designed landscape at General Motors on March 27th shortly follows the National Historic Landmark multiple property listing of Eliel Saarinen and Dan Kiley's contributions to Columbus, Indiana. Titled, "Modernism in Architecture, Landscape Architecture, Design, and Art in Barthomew County, Indiana, 1942-1965, National Historic Landmark Theme Study," this is a first, giant step in reversing the invisibility of these landscapes to date. By recognizing the significance of the Kiley's landscape architectural design contributions, and even the discipline of landscape architecture in the title of the nomination, a greater opportunity to safeguard their *integrity* and interpret this legacy will result.[14]

Integrity is defined by the National Register of Historic Places as "the authenticity of a property's historic identity, evidenced by the survival of physical characteristics that existed during the property's historic period."[15] Therefore, if features that are critical to the overall significance of the design are removed or altered, the integrity of the design will most likely be compromised. To illustrate this principle, consider the implications of recent management decisions that compromise the design intent to several examples of modern landscape architecture:

1. The addition of a concrete timber-form bridge where one never existed and the non-replacement of three dead olive trees from Ted Osmundson's pioneering roof garden design at the Kaiser Center in Oakland, CA.
2. The need to replace overgrown conifers that no longer serve Fletcher Steele's design intent at the Library Amphitheater in Camden, ME. This 1929 design, may be the first public, modernist garden in America notably, the first to use a revolutionary bent axial relationship. Without question this is a candidate for a National Historic Landmark.
3. The removal of Dan Kiley's "quartet" plantings of sycamore trees at Lincoln Center, New York City, and replacement with solitary Bradford pear trees or groupings of dwarf pine trees coupled with lava rocks.
4. The severe pruning of the historic allee of trees at the San Francisco Opera House Court, altering Thomas Church's intended spatial and visual relationships.
5. The new construction of an unexecuted garden design at Rudolph Schindler's residence by a local Friends group in Los Angeles, CA, contradicts the Secretary's Standards for Restoration.
6. Unresolved replacement challenges posed by the death of two sentinel California Live Oaks at the Dewey Donnell Ranch, from Thomas Church's original 1948-50 design, which framed views out to Sonoma.
7. The introduction of ornamental white stones around a pond when the former design intent was naturalized turf at the water's edge at Concordia Seminary in Fort Wayne, In. Also the introduction of random new tree plantings which alter significant spatial and visual relationships articulated in Dan Kiley's 1953-58 design.
8. The introduction of new, small-scale landscape features such as inappropriate brick paving and recessed lighting at the Salk Institute. Also the unmonitored destruction of significant off-site views of uninterrupted skyline now pierced by athletic field lighting fixtures.

In addition to compromising the integrity of many modern landscape architectural designs, the greatest loss of integrity often occurs with the redesign of outdoor regional shopping centers and pedestrian malls thus eradicating an important chapter in the profession's evolution from the mid-1950s to the late-1960s. Usually not outright demolition, these projects are most often "upgrades" involving the removal and destruction of site-specific character-defining pavements, lights and streetscape furnishings that are now difficult to maintain, or are perceived as out of fashion. For example, a cursory survey of California-based landscape architect, Lawrence Halprin's work in this arena includes the 1995 destruction of Old Orchard Shopping Center, Skokie, Il – his first design in the semipublic realm (from the mid-1950s) and a 1990s complete overhaul of the Nicollet Mall in Minneapolis (1967). Alterations to his commissions also include two projects from the 1960s: the Oakbrook Shopping Center outside of Chicago and Ghirardelli Square, San Francisco – Halprin's first opportunity to "recycle" old structures for new uses.

Recognizing a variety of limitations, and both physical and natural pressures, what is the possibility of documenting, evaluating and preserving works of modern landscape architecture – from parks and gardens to shopping malls and college campus designs? Based on current maintenance and management threats, and the lack of public

13. The nomination for General Motors Technical Center in Macomb Michigan was amended "to note that the designed landscape contributes to the property's significance. Section 5 of the form, Number of Resources within Property, is amended to add 1 contributing site (the designed landscape).
14. This nomination has two themes, "Patronage in public architecture" and "Modern architecture and landscape architecture." Under the latter the nomination notes that "the Columbus area hosts an exceptional collection of modern buildings, landscapes and public sculpture that reflect the development of these design idioms on a national basis." With both the registration of the Bartholomew County properties and the GM Technical Facility to the register, in the spring of 2000, prototypes exist for future registration.
15. National Park Service. *National Register Bulletin 16A: How to Complete the National Register Form.* Washington, D.C.: U.S. Dept. of the Interior, NPS, Interagenacy Resources Division, 1991.

and professional awareness, the following strategy should be pursued:

1. Pursue nominations to the National Register of Historic Places for modern landscape architecture.
2. Publish or perish: establish a greater context for modern landscape architecture through published books, monographs and oral history projects.
3. Document threatened work in measured drawings, photography and video. Record the work as existing, as originally designed, as executed and any changes over time.
4. Consult with the original landscape architect, client and caretakers when possible.
5. Educate owners, public stewards and the general public to make these landscapes less "invisible."
6. Establish creative partnerships to ensure their ongoing preservation and management.
7. House, catalog and conserve landscape drawings and related historic materials in accessible archives.
8. Apply the *Secretary of the Interior's Standards for the Treatment of Historic Properties with Guidelines for the Treatment of Cultural Landscapes* to all project work and all ongoing management projects in historically significant modern landscapes.

Many of the steps outlined above are already being undertaken in the United States. As a result, an increased number of significant works from the recent past are now being documented, preserved and more broadly interpreted. Collectively, these initiatives have been multidisciplinary in approach, including outreach, support and education at a variety of professional levels. Today, this growing constituency includes practicing landscape architects, architects, geographers and planners, in addition to art, architectural landscape and social historians many who recognize the benefits of the preservation and/or documentation of these nationally significant works.

Based on the recent successful National Register and National Historic Landmark nominations, which include contributing landscape architecture and new initiatives to undertake Cultural Landscape Reports for landscapes from the recent past, we must begin to share these success stories with a broader public. We must also take the necessary steps to nurture a greater public interest in the future of our heritage of modern landscape architecture recognizing that the public often allows (and supports) the demolition or complete overhaul of modernist work. Research findings about public tastes and perceptions published in Vitaly Komar and Aleksandr Melamid's *Painting by Numbers,* (1997) provides valuable clues and strategies to address this unfortunate dilemma.

Russian immigrant artists Komar and Melamid, assisted by a professional polling firm, conducted a survey of what Americans, regardless of class, race or gender, really want in art. This first-ever, scientific poll surveyed 1,001 American adults. Questions included: What is beauty? Who defines it? And why is high art so remote from most people? Using the survey results, Komar and Melamid painted the works that were deemed "America's most wanted" and "America's most unwanted." The conclusion reached about aesthetic attributes in painting can also apply to works of landscape architecture:

Art should be relaxing to look at	*66% agree/15% disagree*
Realistic or different-looking	*44% realistic/25% different*
Sharp angles or curves?	*2% sharp/61% soft curves*
Colors blended or separate	*45% blended/20% separate*
Favorite color	*24% blue, 15% green*

It is interesting to apply these "values" to two significant American landscapes. The first, the pastoral deer park at Lyndhurst, a National Trust property in Tarrytown, New York, laid-out in the mid-19th century, along side an aerial view of the 1960s Sasaki, Dawson and DeMay Associates design for Boston's Copley Square. A quick look at these images readily reveals that those landscapes of the historic Hudson River Valley or the works of pioneering landscape architects, Frederick Law Olmsted, Sr., or Jens Jensen, possess the same characteristics that appear in art that is "most wanted" in this country. Conversely, the aerial photograph of Copley Square, like Lawrence Halprin's design for Denver's Skyline Park or Dan Kiley's design for the Burr sculpture court in Hartford, all reveal the same commonalities. They each possess many of the same characteristics that appear in the "most unwanted" painting – thus, to the visitor, a monochromatic, architectonic, scene deemed unfamiliar and even unnerving. It's no surprise that the "shelf life" for any of these projects has been less than twenty years and often becomes highly controversial.[16]

In a recent *New York Times* article, columnist Anne Raver noted that, "these invisible landscapes are being taken up by a growing number of landscape architects around the country, who are organizing to protect their work, both as works of art and as vessels of cultural history."[17]

Perhaps Ms. Raver's statement, which echoes the sentiments of Walker and Simo, holds the key to this situation. The future of this irreplaceable legacy lies in the hands of the professional community of landscape architects, who are increasingly doing a better job of educating themselves and must now communicate with the historic preservation community about the significance and uniqueness of these distinctive places. This communication is essential if we are to preserve this distinct body of landscape architecture in the United States. As illustrated by this account and echoed in the conclusion to *Invisible Gardens*, let us work together to safeguard this largely unheralded legacy which "stands alongside the architecture of its age as a selection of useful and beautiful emblems."[18]

16. To illustrate this point, refer to Carl Sanburg terrace housing area in Chicago. This 1960s modernist plaza over a parking structure is now all curves, perennials and Victorian-influenced furnishings where simplicity and minimalism has been the original design intent.
17. Raver, Anne… Design Notebook, "Cherishing landscapes as living art," *The New York Times,* 30 November 1995.
18. Walker, Peter. Ibid. Epilogue by Peter Walker, p. 316.

Brasilia, Brazil (C i, iv);

inscribed in 1987

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Brasilia, a capital created *ex nihilo* in the centre of the country in 1956, was a landmark in the history of town planning. Urban planner Lucio Costa and architect Oscar Niemeyer intended that every element - from the layout of the residential and administrative districts (often compared to the shape of a bird in flight) to the symmetry of the buildings themselves - should be in harmony with the city's overall design. The official buildings, in particular, are innovative and imaginative.

3

Mobility – a story of floating heritage passing by

by Luuk Boelens

Since the invention of capitalism, somewhere during the mercantile revolution, dominant economic forces have always strived to conquer distance by means of time. This, however, has had a paradoxical consequence. Narrowing time made possible an increase in range and therefore an increase in distance. In this sense, time and space, transport innovation and range, were in continuing interdependence. It was also along these lines that David Harvey, some twelve years ago, published in his main work the famous image of the ever-shrinking globe.[1] The revolution in transport systems, which took place primarily over the last 150 years, has caused the world to shrink to the size of only a pinhead among greater galaxies. Next to industrialization, standardization and rationalization, the modern era is therefore particularly characterized by an acceleration that is autonomous and aiming for an absolute, to the naked eye unparalleled, velocity. While velocity or speed was until far into the nineteenth century still measured in day trips and knots, currently we measure in mach numbers (multiples of 1,225 km per hour). Furthermore, we cannot exclude the possibility that through laser technology the speed of light will be reached in the near future. Consequently, our range has increased enormously. The whole world, all its knowledge, possibilities, ideas, expectations, worries and quarrels, are within our daily reach in the blink of an eye. Thanks to telex, telephone, television and telecommunication, we have become tele-present. Certainly, we benefit from this daily: but at the same time we also innocently fall victim to it not only environmentally, ecologically and spatially, but also with regard to the place,[2] our mental map of the world,[3] our social interaction,[4] our political structures,[5] the depth of our thinking;[6] in short the complete dramaturgy of our existence.

Mobile heritage

Mobility, in this way, not only threatens to dissolve the city in a hypercirculation of money, goods and people. Currently, approximately one-sixth of the global population flies around the world yearly, around 1,500 billion tonnes of goods are transported yearly over the European rail, water and road infrastructure and some US$1.6 trillion are moved daily from one account to the other. That is US$15 million per second – how expensively we speak and think! We are also heading for a completely new kind of society, with its own character, culture, mindscape and organization: the network society. According to Manuel Castells, this is a society that exists next to the old and well-known territorial society. Next to the space of places, now a space of flows also exists; next to glacial time, now a clock and timeless time also exists.[7]

For many, therefore, transport and communication (next to capital) are among the most important actors in modern society. Like the phenomenon of depopulation of the countryside brought on by the Industrial Revolution of the eighteenth and nineteenth centuries, transport and communication not only reversed this depopulation trend, but also radically overhauled our social communities, families, individual behavioural patterns, forms of organization, thinking and acting, perception and living environment – whether urban or not.

Transport and communication (or unlimited mobility) in the last 150 years have resulted in a wide array of (literary) reflections, political answers, cultural expressions, plans and designs, etc., within various fields of expertise. All these reflections, answers and plans have something attractive and emotional, as well as repulsive and problematic, about them. One solution or approach quickly results in another problem. Mobility turns out to be a multi-headed monster that cannot be approached by one reflection alone.

Concerning the cultural heritage of mobility, I not only think that it comprises a large part, if not to say the majority, of the modern heritage, but in our necessary reflection and analysis it also ranges far beyond the limits of this essay. It is not enough to identify and name this or that bridge, road, transport building or transport facility, which because of their beauty or cultural significance deserve protection. Because they are, more than any other category of cultural heritage, part of a larger and extremely floating, changing and diffuse network of movement, thoughts and convictions. I do not want to fall into that trap, but in order to deliver something I will confine myself to identifying a series of more or less abstract archetypes, each of which are connected to a specific spatial realm of thought in relation to mobility. Each of these archetypes can be replaced by a series of concrete examples. Moreover, each of these archetypes is crying out for a much deeper analysis, each for a positivist as well as a critical history; for a cultural plea as well as a political, ideological and socio-economic one. Nevertheless, each of

1. David Harvey, *The Condition of Postmodernity: An Enquiry into the Origins of Cultural Change,* Cambridge, Mass., Basil Blackwell, 1989.
2. Mobility generates a new spatial flow (Manuel Castells, *The Rise of the Network Society: The Information Age – Economy, Society and Culture,* Vol. 1, Cambridge, Mass., Basil Blackwell, 1996), but also a non-lieux urban realm (Marc Augé, *Non-Places: Introduction to an Anthropology of Supermodernity,* London/New York, Verso Books, 1995).
3. Speed made the world accessible everywhere, but was also generic (see Rem Koolhaas, S,M,L,XL, Rotterdam, O10 Publishers, 1995).
4. Mobility generates freedom but also creates the possibility of meeting only people of the same kind (see Melvin Webber, 'The urban place and the non-place urban realm', in M. Webber et al., *Explorations into Urban Structures,* Philadelphia, University of Pennsylvania Press, 1964).
5. Speed and mobility create new network alliances, but also undermine the authority of traditional institutions (see Patsy Healy, *Managing Cities: The New Urban Context,* Oxford University Press, 1998).
6. Speed creates a transparent world, but also a shallow one (see, for example, Paul Virilio, 'The overexposed city', *Zone 1,* No. 2, 1987, pp. 40–7).
7. See Manuel Castells, *The Power of Identity: The Information Age – Economy, Society and Culture,* Vol. 2, pp. 125–6, Cambridge, Mass., Basil Blackwell, 1997.

them might be a starting point for in-depth discussion and positioning, because each is also connected to a specific urban or spatial-architectonic way of arguing in relation to mobility. I distinguish at least six of them.

The drive-in – mobility sets free

The first archetype departs from the assumed freedom that mobility is thought to create, the new horizons that are going to open up for us as a result of mobility, the new adventures that we are going to experience, realizing individual development and broadening potential for development. This story indeed starts with the construction of the railways, but really takes off with the introduction of the automobile. While the train had brought new territories within the reach of the masses and the bicycle had also allowed those masses to wander far afield (more so than the section-bound train),[8] it was only the automobile and the construction of freeways and interstate highways that took this to an unknown climax. 'The automobile,' exclaimed Paul Morand, 'has given us back the countryside, the roads, the inns and the adventure. We can re-use the empty spaces between the cities. Freed from switches and rails the horizon is spreading out again before us, free and alone at the steering wheel of the machine'.[9]

That promise, however, was for avant-garde architects and urbanists in particular, a promise to finally throw off the straitjacket of the classical mercantile city. North America, especially, with its colonial networks (Spanish laws) offered a vague pragmatic perspective.[10] Despite this, however, more than the Chicago School of Louis Sullivan or Baron Eugene Haussmann, in my opinion the pioneer in this respect is Ildefonso Cerdá. His 'General Theory of Urbanization', practised in the capital of Catalonia, aimed for an organized extension of the city through impressive and strictly parcelled-out building blocks, diagonally intersected by boulevards into a never-ending landscape. Within the strict rules of the grid (built surface area and building height) the plan offered unknown freedom for everyone, even before the automobile made its appearance.[11] Cerdá's promise became reality more than fifty years later (not in Le Corbusier's Voisin city plan, in my opinion) in Frank Lloyd Wright's vision of a democratic, organic and flowing city of the future, in which everybody (rich and poor) could build their own family home at a short distance from a network of workplaces, facilities and shops; accessible by automobile, helicopter or other (public) transport. His Broadacre City would be the final answer to the omni-sprawling urban periphery, by turning this ad definitum into omnipresent ideal cities.[12] Los Angeles and Edgar Gareau's Edge Cities are only meagre representations of this idea.

Wright's vision was nevertheless strongly present in another architectonic, urbanistic phenomenon, albeit on a much lesser scale, that of the drive-in. The drive-in house, drive-in cinema, drive-in restaurant, drive-in shopping mall, drive-in motel, etc., are after all the functional and cultural expressions of the complete surrender to mobility. They are the ultimate spatial answer to the promise of mobility, whereby it is no longer even necessary to leave the transport vehicle to eat, relax, sleep, make love, communicate, etc. The drive-in is the hardware answer of the network architect, making every contact with the (evil and unsafe) space of places needless and even redundant.

In spite of this, here it becomes clear that because of its own success and massiveness the promise of freedom by mobility has turned against itself. Through the appealing nature of the drive-in and urban sprawl, freeways and airports have long ago ceased to offer unlimited enjoyment, development and adventure, but instead lead to periodic uncontrollable frustrations and stress. The success of the plea of Cerdá, Wright and their ilk has made us meanwhile, instead of mobile and free, rather like prisoners in a daily and ever-growing traffic jam.

The strip – mobility conditions

The second plea is a surprising and not really intentional reaction to the first. The point of departure is the city becoming a network itself, with all its possible traps and defects. The main infrastructure itself is not only the connecting element, but the backbone for continuing urbanization. City and countryside in fact are being fused with movement; the space of places with the space of flows. Instead of the automobile, the point of departure here is public transport or at least (top-down) directed or collective transport. Instead of the sprawl we are dealing with the strip.

A prominent pioneer in this respect was Arturo Soria y Mata. His 440 m wide Linear City would eventually connect Cadiz with St Petersburg and Beijing with Brussels. The knife would cut both ways. Not only it would bring nations together and be the initiator of one global economic system, it would also connect 'the environmental conditions of the countryside with the [logistic] advantages of the big cities'.[13] This made the linear city a fully fledged and progressive network alternative for the more sluggish and reactionary garden city of Ebenezer Howard.[14]

8. See, for example, Catherin Bertho-Lavenir, 'Fantasies on the bike – bicycle and anarchy', in *La Roue et le Stylo,* Paris, Odile Jacob, 1999 (reprinted in Maurice Culot et al., *Dynamic City,* published for the exhibition of the same name organized by the Fondation pour l'Architecture, in co-production with the foundation Brussel Culturele Hoofdstad, Brussels, 2000.
9. See Paul Morand, 'Le retour', in *Le voyage,* Du Rocher, 1994.
10. See also Ernie Mellegers, 'The museum of the network city', in L. Boelens (ed.), *Nederland netwerkenland,* Rotterdam, NAI-publishers, 2000.
11. See Ildefonso Cerdá, *Teoría general de la urbanización y aplicación de sus principios y doctrina a la reforma y ensanche de Barcelona,* Madrid, 1867.
12. See Bruce Brooks Pfeiffer, *Frank Lloyd Wright – Collected Writings,* Vol. 4, New York, Rizzoli, 1994.
13. See Arturo Soria y Mata, *La cité linéaire,* Paris, CERA, 2nd ed., 1979.
14. Following the example of the Garden City Movement, a comparable Association for Linear Cities was established (see Compania Madrilena de Urbanizacíon, *Die ciudad lineal*: Chronicle of the 12th International Congress of Urban Planning and Architecture, Madrid, 1931).

In this notion the Constructivists, the new generation of architects and urbanists that had emerged since the Russian Revolution, embraced the linear city model with full conviction. Here, the city was designed almost as on an assembly line, highly streamlined, everything in the service of maximum production: Stalingrad, Magnitogorsk, Gripogor and Magnitorsk.[15] Even Le Corbusier would likewise, briefly but passionately, be engaged with the linear city: Algiers, Tunis, Buenos Aires, São Paulo, La Cité linéaire industrielle.[16]

However, the most effective linear cities were not those planned, but those that emerged on their own. By the end of the 1980s, the spatial-economists suddenly discovered the corridor, as if it had never existed before.[17] The visibility location was the cultural expression of this (good accessibility and good visibility). In 1958 Kevin Lynch had already made a reference to this: the view from the road. At that time he tried, together with Donald Appleyard, to turn this view into a design for the Boston Loop.[18] Some fifteen years later Denise Scott Brown and Robert Venturi tried the same thing with their compilation of the popular highway architecture in a design strategy: 'Learning from Las Vegas'.[19] In this the strip became the architectonic key concept. Even in the traffic jam something can still be seen and eventually be experienced.

In spite of this, if we look at the current struggles with business parks and hotels, retail-trade department stores on the periphery, and the aesthetics of mobility, this element seems to have drowned under its own success. Satellite imagery at night shows clearly that not only the whole of north-western Europe, but also large parts of Asia, Japan and the United States have already become one big corridor. In other words, the band and the grid have fused into a diffuse field of drive-in houses, visibility locations and strips, without structure and direction, a nuisance everywhere. Because the view from the road also has a negative side, i.e. the view of the road.

The cruise – mobility as a way of life

The third spatial mobility plea neutralizes this question, in the sense that it is actually radicalizing it. In short the attitude here is: we should not whine, because mobility is an integral part of life (including all its positive and negative effects). As far as I have been able to ascertain, the first to express this explicitly was the architectural historian Reyner Banham: mobility as a way of life.[20] He, nevertheless, chose his examples from the (recent) past: Edgar Chambles' Roadtown (1910, designed to react against the uncontrolled growth of the suburban sprawl),[21] Le Corbusier's Plan Obus (not only aiming for maximum individuality, flexibility and mutual exchange, but also to fulfill the intentions of Chambles),[22] Paul Rudolph's Lower Manhattan Expressway project (1970) and Heinrich's/Kreb's Stadtautobahnüberbauung Wilmersdorf Berlin (1975, first examples of constructions over highways that are currently here and there being considered).[23]

The infrastructure, in fact, is taken up in the building itself and with this its physical nuisance is taken away. Furthermore, such infra-buildings almost by nature structure the diffuse environment or they become significant architectural expressions in a sea of low-rise. Mobility is being used explicitly to design, in an architectural sense, the network city.

Nevertheless, Banham's story goes much further. In his main work mentioned above he confessed his particular love for the interaction between mobility and entertainment, which would only develop on real and well-designed freeways. That story in essence goes back much further to Frederick Law Olmsted, who took up the integral design of highways in his picturesque landscape design;[24] to the famous Bronx River Parkway (Westchester County 1907–23) and the Merritt Parkway (Connecticut 1935–50), as good examples of road designs that tried to combine mechanical speed with the rural beauty of the environment; and certainly to Robert Moses, who in the 1920s developed an impressive system of parkways from Brooklyn to Long Island, beautifully designed, bordered by greenery and made unsuitable for trucks and buses by using low viaducts. 'Only urbanites drove here on a recreational day out.[25]

In fact, leaving aside military motives, that *autowandern* was central to the construction of the first German autobahn. As with the American parkways, the routing, design and environmental and architectural setting of the road were so closely interconnected that they gave the automobile driver the illusion of having entered nature, even in such dense areas as the Rhein-Ruhrgebiet.[26] The tyre manufacturer Michelin would later create a complete empire based on this fact, so much so that we may now wonder what its core business is.

15. See Chan-Magomedow, *Pioniere der Sowjetischen Architektur,* Berlin, Löcker Verlag, 1983; also Luuk Boelens, *Historie, Kritiek en Ontwerp; Stadsontwerp en maatschappelijke ontwikkeling,* Delft, DUP, 1985.
16. See Le Corbusier, *L'urbanisme des trois établissements humains,* Paris, Éditions de Minuit (Jean Petit, Cahiers de Forces Vives), 1959.
17. See G. Linden, *Highway Location: Towards a Framework for Planning Control* (also published as doctoral dissertation), Groningen, Geo Pers, 1989.
18. See Kevin Lynch and Donald Appleyard, 'Sensuous criteria for highway design', in Tridib Banerjee et al., *City Sense and City Design: Writings and Projects of Kevin Lynch,* Cambridge, Mass./London, 1990.
19. Robert Venturi, Denise Scott Brown and Steve Izenour, *Learning from Las Vegas: The Forgotten Symbolism of Architecture,* rev. ed., 1997.
20. See Reyner Banham, *Los Angeles: the Architecture of Four Ecologies,* London, Penguin Books, 1971.
21. See George R. Collins, 'Cities in the line', *Architectural Review* (London), November 1960, p. 344.
22. See Mafredo Tafuri, *Ontwerp en Utopie; architectuur en de ontwikkeling van het kapitalisme,* p. 164, Nijmgen, SUN, 1978.
23. See Reyner Banham, *Megastructure – Urban Futures of Recent Past,* London, Thames and Hudson, 1976.
24. See Albert Fein, *Frederick Law Olmsted and the American Environmental Tradition,* New York, George Braziller, 1972.
25. See Michelle Provoost, *Asfalt; automobiliteit in de Rotterdamse stedebouw,* Rotterdam, O10 Publishers, 1996.
26. Thus in this respect the Michelin mascot could in my opinion be protected as cultural heritage, above all because it represents a striking example of a shifting core business.

The real climax, however, of the fusion between mobility and entertainment was the *cruise*. The cruise ship was for Le Corbusier, it is true, the particular expression of a hyper-functional environment; but it was of course also the phenomenon in which tourism and leisure were fused with movement. The same accounts for the Orient Express, the Blue Train and perhaps even for Rem Koolhaas' floating pool.[27] This fusion of movement and tourism and/or leisure is perhaps the most prominent assignment of tomorrow. Below I venture further into this question.

The caravan – mobility for wandering

The fourth spatial mobility plea basically takes this way of life a step further. Instead of the cruise, still assigned to routes, here everything becomes footloose. The point of departure in this plea is that the previous solutions however progressive are still locked up in the compelling and limited structure of the classical city. The new network society would not only ask for greater flexibility and movement, but would also facilitate and create these, in all spheres of life.

The pioneer was Yona Friedman with his Ville Spatial (1957–60), who opted for a three-dimensional space frame above the city with free choice of furnishing.[28] Around the same time, Constant Nieuwenhuis developed his New Babylon as a critique to the institutional planning of the Randstad (Ring City, the Netherlands). Started as a design for a gypsy camp, in New Babylon the industrialization was enhanced into a leading principle of society: the *homo ludens* and the *dérive* (the kaleidoscopic state that evolves as a result of wandering).[29] Lebbeus Woods made a sociological variety out of this, in which his architecture wriggles itself right through existing cities to create free-zones and freespaces.[30] Later, the group of architects Archigram picked up these themes again to design futurist (Walking City, 1962), technological (Plug-In City, 1964), cultural (Instant City, 1965) or nomadic (Cushicle, 1965) varieties of the mobile city.[31]

This last variety in particular has since taken off. First the tent, then the caravan and now the campervan are after all the cultural expressions of the city adrift. With the ongoing tourist and global flows of migration, this flight will continue. What is more, with increasing automatization and telematization the mobile vehicles of the tourist are also finding an application in other fields. Thanks to the new broadband frequencies, eventually everything seems to come into motion: mobile home, mobile office, mobile shop, mobile leisure. We are being promised the final victory over the worn-out ties with this earth.

But, like all the other answers, this has its downside. Because, even more so than the others, this nomad world not only leaves places unknown, but also the other wanderers. The solutions of Friedman and Nieuwenhuis literarily and figuratively keep hanging above the existing city. With Woods and Archigram, they do become more incorporated, but here especially it becomes clear that the real alien is not the one from another religion, race or language, but the one who is not staying, but only briefly passing by. With this, mobility indeed makes encounters with one another possible, but it also creates a social barrier because it allows socially homogeneous groups to meet only their own kind in secluded domains. Here so-called privatopias emerge which, combined with protected routing and residential, working or recreational spaces, make any contact with others or the downside of urban society, with other ways of thinking or living, impossible and also unnecessary. Here, not so much the city disappears, but in particular the urban: not so much urbs, but especially civitas.[32]

The knot – mobility segregates and reconnects

Here I have arrived at the fifth plea. According to Michel Foucault, opposite the privatopia, the heterotopia are positioned in increasing degree. Opposite the archipelago of one-dimensional enclaves (strikingly shown by computer giant Apple) and opposite not so much the sprawl, but in particular the divided city of islands, the same types of malls, new places to guarantee encounters, development, adventure and confrontation with one another.[33] In the network society, which we have already entered, the focus is in particular on the knots in the net, because it is in these intensively visited and condensed spaces that the various groups of society meet: the residents, the homeless and the entrepreneurs. The knots in the net have the potential to develop into the new city squares of tomorrow: the spot where the space of flows connects with the space of places.

Until now the technical and functional usability of the knots of the net was particularly important: a transfer or money machine as efficient as possible. Nevertheless, they are currently undergoing a rapid evolution. Take filling stations. Only forty years ago, these consisted of two pumps and a garage. Today these functions seem to be almost overwhelmed by other services, according to Ernie Mellegers. They have become complete paradises of consumption where people can eat, rest, bring their children

27. See Rem Koolhaas, *Delirious New York: A Retroactive Manifesto for Manhattan,* pp. 307–10, Rotterdam, O10 Publishers, new ed. 1994.
28. Sabine Lebesque, *Yona Friedman – Structures Serving the Unpredictable,* Rotterdam, NAI, 1999.
29. See Mark Wigley, *Constant's New Babylon the Hyper-Architecture of Desire,* Rotterdam, O10 Publishers, 1989; also Ed Taverne, 'Randstad Holland – Horizons van een verstrooide stad', Archis, No. 7, 1994, pp. 47–9.
30. See Lebbeus Woods, *Anarchitecture – Architecture is a Political Act,* New York, John Wiley & Sons, 1996; *Radical Reconstruction,* New York, Princeton Architectural Press, 1997.
31. Archigram, *A Guide to Archigram* 1961–1974, London, Academy Group, 1994.
32. Melvin Webber, op. cit.
33. See Maarten Hajer, 'Heterotopia Nederland of wat Bunnik mist', S&RO, No. 7, 1998; Luca Bertolini and Martin Dijst, 'Mobiliteitsmilieus; Ankers voor het vluchtende stedelijke leven', in *Nederland netwerkenland,* op. cit.

to the crèche, take showers, sleep, watch television and do the laundry. Oil companies even try to develop the stations into entrances to the surrounding urban area: fuel knots as the point of departure for new urbanity.[34]

The same may be said of airports. Here also we see development from a grass field, via a landing strip and airport, to Airport City. Meanwhile at Schiphol Amsterdam Airport (tax-free) shopping, conferences, food and drinks generate more turnover than the airport taxes and landing rights themselves.[35] Meanwhile, London Heathrow is already the largest selling point of Cuban cigars in the world (larger than Havana itself).[36] And we are not even talking about all the real estate and other facilities surrounding the airport. In this sense Rem Koolhaas suggested a much more efficient time-space design for Schiphol. During the off-peak hours of arrivals and departures, more of other services and facilities are generated within Airport City, while during peak hours Schiphol is fully operational again as a transfer machine.

The question is, however, whether these knots in this sense indeed become the heterotopias, the city squares of tomorrow. There rather seems to emerge here a more or less confined network of endless centres, in which to sleep, confer, shop and consume. Recently Nederlandse Spoorwegen (Dutch Railways) cleansed the Schiphol track of *persona non grata*. Nevertheless, in this rail net we can also see some rudimentary initiatives as to how things can be done differently and improved. Take, for example, Zürich Hauptbahnhof, Madrid Atocha or Kassel Altbahnhof, where commerce, functionality and socio-cultural objectives seem to go more hand in hand. Nevertheless this is still an archetype in development.

The cocoon – mobility in an interior

Finally, the sixth plea. This is about the spatial effects of transport and communication that are in their infancy, not even twenty years old. It is about information communication technology, Intra and Internet; the plea that deals with the socio-economic, spatial, cultural and psychological consequences of the question, 'Where do you want to go today', every time we start our personal computer. For Paul Virilio, mobility (the movement between two places) has already been transformed into motility (hyper-movement on one spot) and the widening of our horizon, realized by modern transport facilities, into a *horizon négative* (horizon turned inwards).[37] For Lieven de Cauter, we have entered some time ago the capsular society; the society that is being structured by enclosed and secured things where we pass by or pass through.[38] Florian Boer recently retranslated that in the archetype of the interior. In movement or not, outside or not, we are again and again in interiors that are extremely individual and that are different for everyone, every time.[39] And with this the human promise of the cyberbot comes into view. Eventually we are promised that it does not really matter any more, in movement or not, we are in permanent contact with the whole world; unless you cannot handle it any more and switch off. Finally, peace and quiet. But, in the meantime, the approach of the far away is coupled with a proportional receding of the near and we ourselves decide with whom we want contact by turning the sequence of past, present and future around at will. Eventually we have all become individual en masse (and perhaps also solitaire).

Epilogue

Here we have six archetypes that, in my view, tell the cultural story of modern mobility in a nutshell. They all have their own story, every one of them is engaged in a specific social phenomenon of mobility. A whole world of architectonic and urbanistic images, social visions, desires and wishes, economic and political powers, poems and artworks, etc., is behind each of these archetypes. It would be worthwhile to run a thorough research programme on each of them. Although I do not exclude the possibility that this series can be further supplemented or widened,[40] for me they have a logical interdependence as has been partly described before. I distinguish below a focus on the surface, line or point within mobility thinking and the more fixed and/or sustainable or more flexible and/or floating solutions.

Orientation direction	Surface	Line	Point
Fixed	Drive-in	Strip	Knot
Flexible	Caravan/ Camper	Cruise	Cocoon

Perhaps this scheme could guide further discussion and research concerning not only the modern cultural heritage of mobility, but also the question of how to proceed with the implicit tension between space and movement, between space and mobility.

34. Ernie Mellegers mentions examples in Lyons, Nîmes, between Vierzon and Brive and at La Bastide-Murat *(Mobiliteit; Reader college reeks Stedebouwgeschiedenis 1998,* Rotterdam, Academie van Bouwkunst, 1998).
35. See Jacco Hakfoort and Maurits Schaafsma, 'Planning AirportCity Schiphol', in *Nederland netwerkenland,* op cit.
36. See J. Thackara, 'Lost in space', *Archis,* No. 2, 1995, pp. 16–25.
37. Paul Virilio, 'Het horizon-negatief – essay over dromoscopie', vert. uit het Frans door Arjen Mulder en Patrice Riemens, Amsterdam, Duizend & Een, 1989.
38. Lieven de Cauter, 'De opkomst van de mobiliteitsmaatschappij', *Archis,* No. 2, 2000, pp. 8–23.
39. Florian Boer, 'Interieur, in High Five-middenkatern', *S&RO*, No. 6, 1999.
40. Friends have advised me, for example, to also take as archetype the residential area with restrictions to slow down traffic. However, I have not yet taken this up because in my opinion it does not represent modern mobility thinking, but rather a restriction of it.

Palaces and Parks of Potsdam and Berlin, Germany (C i, ii, iv);

inscribed in 1990, extended in 1992, 1999

Source: Nomination file

With 500 ha of parks and 150 buildings constructed between 1730 and 1916, Potsdam's complex of palaces and parks forms an artistic whole, whose eclectic nature reinforces its sense of uniqueness. It extends into the district of Berlin-Zehlendorf, with the palaces and parks lining the banks of the River Havel and Lake Glienicke. Voltaire stayed at the Sans-Souci Palace, built under Frederick II between 1745 and 1747.

4

Innovation: a critical view

by Franziska Bollerey

Progress consists not in destroying yesterday but in preserving its essence, which had the strength to create the better today.

(Ortega y Gasset)

We should be wary of ascribing the origins of modern architecture exclusively to technical innovations. Equally determining, as for modern urban development as a whole, are philosophical and cultural criteria, as well as economic and political changes. A chronological (concrete) treatment of the inventions characterizing the innovative, therefore, should be complemented by an abstract approach that sees the intellectual and technological motors of what is described as 'modern heritage' as reaching back to and indeed having their roots in the eighteenth century.

The innovations and technological developments of the nineteenth century, and even of the latter half of the eighteenth, represent the given factors of an infinitely complex reality, which has all sorts of implications. In 1776–79 the famous Coalbrookdale Iron Bridge gave birth to the construction of modern bridges. John Roebling designed Brooklyn Bridge using the strength of large-diameter steel cables. Konrad Wachsmann, one of the early structural experts of our age and architect of Albert Einstein's house near Berlin, wrote in this connection that 'the technique unintentionally inspired a work requiring the concept of art to be employed for judging the value of the technology'. This is something to be borne in mind regarding the achievements of the nineteenth-century engineers and when studying their ideas and theories.

Innovation: abstract approach

As mentioned, there are two approaches to understanding the meaning of the term 'innovation'. One is chronological, i.e. enumerating and defining innovative advances. The other is the abstract approach, which includes philosophical and theoretical considerations in tracking structural changes. The latter can be broken down into philosophical, theoretical, religious and socio-political impulses.

The range of post-Renaissance writings that have had a lasting influence on the future, i.e. that were innovative in character, is broad indeed. They would encompass the works of René Descartes (1596–1650), Thomas Hobbes (1588–1679), Gottfried Wilhelm Leibniz (1644–1716); those of the physiocrat Anne-Robert-Jacques Turgot (1727–81), of the philosophers of the Enlightenment and of science such as François-Marie Arouet Voltaire (1694–1778), Charles-Louis de Secondat, Baron de la Brède et de Montesquieu (1689–1755), Jean-Jacques Rousseau (1712–80), Jean-Antoine-Nicolas de Caritat, Marquis de Condorcet (1737–94) and Morelly (c. 1715 to second half of eighteenth century); the compilation of the *Encyclopédie, ou dictionnaire raisonné des sciences, des arts et des métiers* (1751–72) by Denis René Diderot (1713–84) and Jean le Rond d'Alembert (1717–83); the analyses of political economist Adam Smith (1723–90); the work of Leopold van Rankes (1795–1886), Frederick Winslow Taylor (1856–1915) and Henry Ford (1863–1947); the programmatic pronouncements of the Arts and Crafts Movement; the manifestos of the Congrès Internationaux d'Architecture Moderne (CIAM) and the tenets of the Club of Rome and of the Charter of Rio de Janeiro. Also innovative in the sense of striving for or effecting changes were the writings of Pierre-Joseph Proudhon (1809–65), the ideas of François-Marie-Charles Fourier (1772–1837) and Robert Owen (1771–1858), the work of Karl Marx (1818–83) and Friedrich Engels (1812–95), and Charles Robert Darwin's (1809–82) theory of evolution, *On the Origin of Species by Means of Natural Selection, or The Preservation of Favoured Races in the Struggle for Life (1859).*

Progress: changes in definition

The concept of innovation is inseparably bound to that of progress. And this provides the spark for the theoretical pronouncements, which result in analytical statements according to the political view of society at any given time. In the early stages of the Industrial Revolution, progress became a sort of established religion, a matter of providence (Condorcet). In his work *Mechanization Takes Command* (1948), Sigfried Giedion quotes Turgot: 'The human species remains the same through all its upheavals, like the water of the sea through all its storms, and strides constantly towards perfection.' At that time, the idealistic drive towards the innovative had an almost ethical value and appeared stronger than the motive of material profit.

This interpretation was followed by the more grandiloquent: 'The only progress which is truly effective is dependent not on the goodness of Nature but on the energy of Man', as Henry Thomas Buckle (1821–62) wrote in his *History of Civilization in England* (1857–61). This thesis was echoed fifty years later in the work of Georg Simmel (1858–1918).

The question of whether progress should be viewed as positive or negative was posed by Thomas Henry Huxley (1825–95), the author of *Evolution and Ethics* (1893) and a contemporary of Darwin. In *The Struggle for Existence in Human Society* (1888) he wrote: 'It is a mistake to believe that evolution means a constant striving in the direction of ever greater perfection. This process undoubtedly encompasses a constant transformation of the organism in its adaptation to new conditions; but it is dependent on the nature of those conditions whether the direction will be up or down.'

In his poem *Die Brück am Tay* [The Tay Bridge] (28 December 1879), Theodor Fontane questions the unquestioning belief in progress:

And there comes the train. The south tow'r past,
Gasping towards the tempest's full blast,
And Johnny says: 'The bridge to cross!
But that is no matter, we'll see now who's boss.
A sturdy engine, with full steam an' all,
Will come out victor in such a brawl.
Let the storm wrestle and rage and rent,
We'll have the better of the element.

The bridge is our pride. I have to smile
When my thoughts go back just a little while
To all the trouble and all the fuss
That wretched old ferry gave to us;'
…
The bridgekeeper's men, alarmed and aghast,
Their terrified gaze to the South do cast;
More furious yet is the wild winds' squall,
And now, as if fire from heaven did fall,
Ablaze is the scene in downpouring light
On the water below … and then all is night.
…
'Woe!
Like splinters broke the structure in two!
Vain, vain
Is all the handiwork of man.'

Doubt about progress pervades the analysis of civilization by Oswald Spengler (1880–1936). This doubt led the Austrian writer Marie von Ebner-Eschenbach (1830–1916) to the conclusion: 'Perpetual progress can be bought only at the cost of perpetual discontent.' In 1919, another Austrian, Hermann Alexander Count von Keyserling (1880–1946), noted in the journal of his American tour: 'The world gets worse every day. That this is the true meaning of progress is illustrated with appalling clarity by America, because here the white man seems most strongly typified as existing purely to fulfil a purpose.' Here we see the shift in the meaning of the word 'progress' away from quality and towards quantity. The innovative springs less and less from the idealistic impulse and is increasingly subjugated to the profit motive. Thomas Niederreuther countered with an attempt at a new definition: 'There is only one progress: the sharpening of conscience.' A position that can also be found in Marshall Berman's *All That Is Solid Melts Into Air: The Experience of Modernity* (1982, 8th ed. 1995).
So much for this brief attempt to interpret and classify the term 'progress', which is closely associated with our key term 'innovation'.

How innovation is identified

Before moving on to a brief chronological survey of innovative impulses, let us attempt to specify the objects, conditions and structures in which the key term 'innovation' can be anchored.

1. Objects and materialization

Individual buildings or sets of buildings which are exceptional in their typology (morphology, stylistic argumentation and theories), materialization, including the development and use of new building materials (such as iron, flat glass, prestressed and reinforced concrete, etc.), and the application of new construction methods, such as prefabrication. These would include model towns, cityscapes, residential estates and urban districts (morphology, materialization, planning process and planning ideology).

As regards the preservation of buildings and architectural ensembles representing the innovative, the definitions used in the field of monument conservation are useful:

- Monuments are objects, assemblages of objects and parts of objects, the preservation of which lies in the public interest. The public interest exists if the objects are important for human history, for cities and urban estates or for the development of labour and production relations, and if there are artistic, scientific, folkloristic, landscape or cityscape grounds for their preservation.
- Monument conservation areas are assemblages of architectural structures, including those in which not every architectural structure fulfils the criteria for an individual monument. Monument conservation areas can be urban layouts, towns, townscapes and silhouettes, urban districts and areas, residential estates, building complexes and street segments, as well as whole architectural, landscaped, horticultural and agricultural complexes. Individual buildings and their immediate surroundings are to be included if they are important for the overall appearance. Also included are premises of trade and industry, transport facilities and religious centres.

2. Conditions

A revolution takes place in the experience of and attitudes towards time and space.

The concept of time

In his *Advice to a Young Tradesman*, written in 1748 and published posthumously in 1793, Benjamin Franklin formulated the exhortation: 'Remember that time is money.' This harked back to a statement by Francis Bacon (1561–1626) in his essay *Of Dispatch* (1601): '… time is the measure of business, as money is of wares; and business is bought at a dear hand, where there is small dispatch.'

Transport and traffic
Transmission (information and communication). Goods and people on rails, above and below the earth, on and below the water and in the air. Infrastructural networks. Together with horizontal networks, vertical access plays an essential role (lifts). Transmission and reproduction of written, spoken and pictorial information. From traditional transmission via telegraph and telephone to electronic communication. The result is a change in the spatial conception of the world, as alluded to above: a shift in the experience and perception of time and space.

Production processes and new technologies, organization of work
Mechanization, new building materials and methods of construction. Industrialization, computerization.

Structures
Political, economic and social structures in their interdependence and their varying configurations from the nation-state to the global network (e.g. United Nations), the formation of political parties and trade unions, the parliamentary system, the development of the service society. The legal framework for structuring modern society and its living space. The transformation of living conditions (changes in working conditions, the work/leisure relationship).

We have been interpreting innovation so far not as something eruptive but as part of a development process, which has a history and a future. In the more recent past, historians have distanced themselves from the deus ex machina idea. Inventions can be more or less fixed both geographically and chronologically, although they too are part of earlier and later developments. The innovative defies any specific dating. Of late, the talk has been of invention and diffusion. The determining components of the innovative are previous development, publication and effect as parts of a longer-lasting process.

Innovation: chronological approach

Innovation as our key word is related to invention. Any list of inventions since the mid-eighteenth century and accompanying analysis of their effects – something which is not being attempted here – should focus on the following:

- building materials, building techniques
- transport and traffic
- war technologies
- production techniques, new technologies, heavy industry, the textile industry, energy provision
- infrastructure: gas, electricity, drinking water, sewerage, hygiene, medicine
- food and agriculture industries
- communications, media, measuring practices.

Innovation: invention and diffusion

If the determining concepts of the innovative are invention and diffusion, we can speak of the consequences of theoretical, ideological and philosophical ideas (see above on the abstract approach to innovation) and from their material manifestations, i.e. inventions. As far as cultural impact is concerned, decisive for the classification of the cultural heritage, we must work from movements of innovation. These can be classified into various periods between 1750 and 2000, whereby each period always includes invention and diffusion.

In its catalogue *Inventing the Modern World, Technology since 1750* (2000), the London Science Museum sets the following thematic and periodic focal points: 'Inventing Accuracy', 'Manufacture by Machine', 'The Industrial City', 'The Age of the Engineer', 'The Second Industrial Revolution', 'The Age of the Mass', 'Defiant Modernism', 'The Age of the Consumer' and 'The Age of Ambivalence'. The ambivalence referred to in this last section is, as shown in the chapter 'Progress. Changes in definition', by no means a new phenomenon. As we have seen with the shift from idealistic to purpose-oriented motivation, invention can be neutral but once it enters upon the public stage (diffusion) its positive and/or negative exploitation begins. One prominent example is nuclear fission.

This inherent aspect of the innovative must – for example, with regard to ethical and moral values – form part of the selection criteria for inclusion in a worldwide modern heritage list. That is why I included 'war technologies' in the previous section.

Any critical examination of the innovative must underscore the Janus-faced nature of many inventions, which often did not reveal their negative potential until the point of application and dissemination – their diffusion. We can take the example of the Suez Canal to stand for many others.

Typologically it cannot be termed an invention (man-made waterways have existed since Antiquity; in 1761 the Worsley-Manchester Canal marked the beginning of a veritable fever of canal-building in Great Britain), but in terms of the diffusion of the invention, in other words the further development of artificial waterways, it was an innovation in the sense that it shortened the sea route between Europe and Asia (see above on the concept of time).

Last but not least, we should note that, as far as innovative impetuses are concerned, a shift can be identified in the main focuses of innovation. In the early days of the Industrial Revolution, the focus was on manufacturing requirements in heavy engineering and the textile industry, as well as on transport and traffic systems. Later it moved to the fields of energy and infrastructure and is currently centred on information and media technologies, as well as on the technologies of war.

Skogskyrkogården, Sweden (C ii, iv);

inscribed in 1994

Source: Nomination file

This Stockholm cemetery was created between 1917 and 1920 by two young architects, Asplund and Lewerentz, on the site of former gravel pits overgrown with pine trees. The design blends vegetation and architectural elements, taking advantage of irregularities in the site to create a landscape that is finely adapted to its function. It has had a profound influence in many countries of the world.

The Committee, in debating the universal value of this property, concluded that the merits of Skogskyrkogården lay in its qualities as an early 20th-century landscape and architectural design adapted to a cemetery. The Committee in inscribing this site stressed the importance of explaining to the public the criteria for which it was accepted as a World Heritage cultural property. (18th Committee session)

5

Community building and representation

by Sherban Cantacuzino

To define the term 'community building' it is necessary first to answer the question 'How does the twentieth-century architectural heritage differ from that of earlier centuries'? There is little doubt that the general values embodied in the ICOMOS charters are as valid for the twentieth century as they are for earlier periods. But when it comes to the actual conservation of modem buildings, principles and rules often have to give way to an empirical approach, to judging each case on its own merits where the key to success is good judgement.

The differences apply mainly to the second half of the century when traditional construction and the use of traditional materials were almost entirely replaced by new ways of building and by the use of new materials that do not accept the patina of age. Traditional load-bearing masonry construction gave way to reinforced concrete or steel-frame construction, and on-site craftsmanship to the assembly of factory-made parts. The distancing witnessed in the construction process with prefabrication was paralleled in the architect's office with individual mind and hand designs and drawings increasingly replaced by computer programs.

Perhaps the greatest difference is sheer quantity, number and absence of rarity. Eighty per cent of the total building stock of the United Kingdom is from the twentieth century and more than half of this dates from after 1950.[1] This profusion can also be seen as one of the reasons why modernist architecture is unpopular. There is just too much of it. Rarity, after all, not only arouses interest and admiration, but is often a criterion for identification and listing. It is easy to agree with Andrew Saint that the question about numbers was a simple one, and one that was well understood: 'we list fewer modem buildings, we preserve fewer of them, and we bear less hard on alterations intended to made to them…'.[2] Alan Baxter believes that we should celebrate primarily the abstract intellectual achievement of modern buildings and not focus on the tangible steel and glass, concrete or plastic. 'When the materials are in difficulty,' he writes, 'if it is economic, replace them with better-detailed materials without any philosophical qualms, but with good design and skill'.[3]

A further difference is the fact that a substantial proportion of modernist buildings were conceived and built with short life cycles, the determining factor being 'not only what architects and clients wanted, which at its most utopian was that they did not want to saddle future generations with costly, obsolescent buildings of the type from which they felt their generation had suffered, but also, and perhaps more often, the loan repayment period for the capital borrowed for constructing the building.[4] The frequent incidence of unsatisfactory performance of buildings in use, whatever their architectural merit, presupposes rapid redundancies and adaptation to new uses. In assessing post-war buildings for listing, English Heritage has tended to base its evaluations on architectural merit conceived in terms of intention, and quality of design and original execution. Performance is only considered in the context of the alterations the building has suffered and the extent to which these alterations have damaged the original concept. 'Yet the intentions of much modern architecture go more clearly beyond aesthetics than they do for earlier periods, to embrace technical and social ends'.[5] At the Seminar on 20th-century Heritage held in Helsinki in 1995, the importance was stressed of including, among the selection factors, 'not only aesthetic aspects but the contribution made in terms of the history of technology and political, cultural, economic and social development.[6] There was a need, the seminar concluded, 'to look at the historical and anthropological value of monuments which are the expression of political and societal changes ; to acknowledge the emergence of new types of monuments which mark economic and social history, and fulfil new societal needs concert halls, stadiums, highways, airport terminals, office buildings, new housing schemes, etc.; to take into account the new functions and amenities of public spaces and of urban buildings; to include the town planning aspects, the urban schemes, the management of natural resources (such as water, etc.); and to acknowledge the role of cars and modern transportation which have shaped new urban landscapes'.[7]

What distinguished the twentieth century from any other was the pre-eminence of planning and the dedication to a social programme. At the very start there was Ebenezer Howard's Garden City Movement and its widespread and critically important aftermath, not only with the building of Letchworth, Welwyn Garden City and the garden suburbs of Bedford Park and Hampstead in London, but all over the world from numerous examples in the United States to Pasarét in Budapest, Heliopolis in Cairo, Vällingby in Sweden and Tapiola in Finland. In the UK the culmination was the New Towns Act (1946) followed by the construction over the next fifty years of, first, fourteen new towns (eight of them satellites of London), then another ten, of which only two, Telford and Milton Keynes, were conceived as real cities with projected populations of 200,000 or more.

France followed in 1965 with the Schéma Directeur d'Aménagement et d'Urbanisme de la Région de Paris, which projected the extension of the Parisian agglomeration along two major east-west axes and included eight (later reduced to five) new towns. These were conceived on an altogether different scale to the English new towns, each one incorporating several existing towns and with population projections of at least 250,000 by the end of

1. Alan Baxter, 'Twentieth century buildings', *Journal of Architectural Conservation,* July 2001, p. 27.
2. Andrew Saint, 'Philosophical principles of modern conservation', in *Modern Matters, Principles & Practice in Conserving Recent Architecture,* p. 17, Shaftesbury, UK, Donhead, 1996.
3. Baxter, op. cit., p. 29.
4. Saint, op. cit., p. 22.
5. Ibid., p. 23.
6. Seminar on 20th Century Heritage, Helsinki, 18–19 June 1995. Working papers collected by ICOMOS, p. 14.
7. Seminar on 20th Century Heritage, op. cit., pp. 80, 82.

the century. They were never intended to form forty-three compact settlements separate from Paris, but part of an eventual Greater Paris with a population of 14 million and connected to the capital by an efficient transport system. Today neither the French nor the English new towns have many admirers, but the transport system of the Paris region is the envy of the urbanized world and something the twentieth century can be justly proud of.

Remarkable, too, is the legacy of planning and building in the Soviet Union in the 1930s. N. A. Miliutin's *Sotsgorod The Problem of Building Socialist Cities*, a linear industrial plan with all the social and economic reasoning that lies behind it, followed in the wake of Tony Garnier's 'Cité Industrielle', but anticipated Le Corbusier's Cité Linéaire Industrielle of 1942. When Sotsgord was published in 1930, teams of engineers and architects of several nation alities, mainly American and German, were actively engaged throughout the Soviet Union in planning and building 38 new cities, among them Novosibirsk, Magnitogorsk and Stalingrad (renamed Volgograd), which would industrialize the country, providing employment and improving the economy. They built for the full range of social functions: not only factories, housing and an infrastructure of roads and railways, dams and power stations, but also social clubs, theatres, offices, libraries, sports stadia, market halls and department stores.

In his book *Russia: An Architecture for World Revolution*, El Lissitzky declares his faith in technology and acknowledges the significance for the Soviet Union of the Western European Modern Movement experiment: 'It is through technology that we can build a bridge to all the most recent achievements, which is what made it possible for our country to pass directly from the hoe to the tractor without having to travel the long path of historical development. That is why we want to introduce the most modern methods of building and construction into our country and why we see the works and designs of both the "formalists" and the "constructivists" as a radical experiment in the manipulation of construction'.[8] By 1932, however, modern architecture had ceased to be acceptable to the Communist Party, which issued a decree 'Concerning the Reorganization of literary and artistic Societies'. The Union of Soviet Architects (SSA), which was placed under the newly created Union of Artists and made to disband all other existing architectural associations, imposed its own interpretation of architectural expression socialist realism or classical eclecticism – on all aspects of Soviet architecture. In identifying the twentieth century architectural heritage for better understanding and protection, it is important to include traditional architecture, whether freely demanded or imposed for ideological reasons. Thus in the Russian Federation identification should include the so-called Stalinist as well as the short-lived avant-garde architecture which preceded it. In the Russian Federation as well as in the former 'Iron Curtain' countries it should also take account of the return to modernism after Stalin's death, even if much of that legacy is unloved urban systematization and substandard, poorly built housing.

The importance of planning in the twentieth century is evident not only in the number of new towns built as part of a visionary but precise planning policy, but also in the creation of capital cities such as Canberra, New Delhi, Brasilia, Islamabad or Pyongyang, and in the reconstruction of towns destroyed in the two World Wars, Reims, Le Havre, Rotterdam, Coventry, Hanover, Dresden and Warsaw among others. Brasilia is already inscribed on the World Heritage List. Canberra and Islamabad need to be reassessed, especially Canberra since the completion of the new parliament buildings. Pyongyang needs to be examined if only because it inspired Nicolae Ceausescu's systematization of Bucharest.

It will have become clear by now that 'community building' means any building type or building programme which formed part of the socia1 programmes that have been such a dominant characteristic of the twentieth century. Tony Garnier in Lyons was able to translate part of his Cité Industrielle of 1917 into reality with his municipal slaughterhouse (1909–13) and Quartier des États-Unis (1920–35). In south Amsterdam, between 1902 and 1920 H. P. Berlage brought order to the chaos of a rapidly expanding city 'with the help of grand avenues defining major pieces of massive and substantial character; these were in turn penetrated by secondary systems of roads and quiet squares containing shops, schools, and public institutions. The main unit of collective dwelling was the perimeter block, set around large internal courts containing gardens'.[9]

Under the Weimar Republic in Germany, there was state control over the use of land as well as the intention to provide homes for all. In 1925 the mayor of Frankfurt, Ludwig Landmann, appointed Ernst May as city architect. Over the next five years[10] May built numerous *Siedlungen*, the layouts of which were based on garden city principles, but making full use, in the construction of the buildings, of industrial mass production[11] 'The Romerstadt, the Bruchfeldstrasse, and the Praunheim housing schemes were widely published and eagerly upheld by left-wing champions as examples of what could be achieved when modern architecture was allowed its "true" destination; not the aggrandizement of chic middle-class Bohemia, but the emancipation of the working class from bondage, the amelioration of environmental conditions on a wide front, the harmonization of mechanization and nature.'[12]

8. El Lissitzky, *Russia: An Architecture for World Revolution,* p. 31 (English translation by Eric Dluhosch), Aldershot, UK, Lund Humphries, 1970. Originally published in 1930 by Verlag Anton Schroll & Co., Vienna, as *Russland, Die Rekonstruktion der Architektur in der Sowjetunion.*
9. William J. R. Curtis, *Modern Architecture since* 1900, 3rd ed., p. 24, Harrisburg, Pa./London, Phaidon, 1996.
10. May and his German team left Frankfurt on 1 September 1930 to take charge of a gigantic building programme at the new city of Magnitogorsk in the Soviet Union.
11. From this emerged, for example, the compact and exceptionally functional 'Frankfurt Kitchen', designed by Grete Schütte-Lihotsky.
12. Curtis, op. cit., p. 251.

Berlin, too, built some remarkable housing schemes, the most famous, perhaps, being the Siemenstadt (1930) by Walter Gropius[13] and the Britz-Siedlung (1928) by Bruno Taut and Martin Wagner. These and many other social housing programmes, in Breslau, Hamburg and Celle, for example, were preceded and probably influenced by the work of J. J. P. Oud at the Hook of Holland (1924) and by his very large Kiefhoek housing project at Rotterdam (1925), a city whose chief architect he had been since 1918.

The Weissenhofsiedlung (1927) in Stuggart, an exhibition of housing ideas sponsored by the Deutscher Werkbund, 'was an affirmation that a shared language had at last been achieved'.[14] In fact a great deal of public housing continued to be built in a traditional manner, for example, Welwyn Garden City and Hampstead Garden Suburb, the 'workers' fortresses' of Vienna, the Karl-Marx-Hof (built the same year as the Weissenhofsiedlung), and the London County Council (LCC) estates, at least until the Second World War. The original LCC (established in 1887) was a reforming organization which set up in 1893 a Housing of the Working Classes Branch of its Architects Department and recruited a group of gifted, dedicated and idealistic young architects to staff it. 'The first two important projects to be designed by the branch were both the result of slum clearance and road-widening schemes. They were the Boundary Street Estate in Bethnal Green (1893–1900) and the Millbank Estate behind the Tate Gallery in Westminster (1897–1902). Between them they housed nearly ten thousand people.'[15]

The 1890 Housing of the Working Classes Act had allowed local authorities to buy land for housing but only within the municipal boundaries. A second act, passed in 1900 and allowing the purchase of land outside municipal boundaries, meant that the branch, whose architects were garden-city men by temperament, to build cottage estates of two-storey houses. There followed the estates at Tooting (after 1900), Roehampton and White City (1905–13), 'designed under the influence of Unwin and Adshead in the best Hampstead manner and using the best available red brick.'[16]

In the United States there was little or no public housing, and scant regulation of private provision of urban housing. The trolley-car created a geographical revolution of the city when it burst on American cities in the late 1880s, using the zoneless 'nickel fare' to open vast areas of cheap peripheral land to the housing of all but the lowest economic classes. The Federal Housing Administration Act of 1934, part of the New Deal, brought the government into the business of guaranteeing mortage repayment for the private housing of most Americans, even those of modest means, ensuring that in the post-1945 years the American suburb became the home of the greatest number of Americans.[17]

At the 1945 General Election the British electorate returned a Labour Government, the first with a clear majority. Its manifesto 'Let Us Face the Future' was the clarion call for a welfare state, promising full employment; public ownership of the fuel and power industries, the iron and steel industry and of inland transport as well as of the Bank of England; the establishment of a national health service and the improvement of social insurance; building upon, and making the most of, the Education Act of 1944; and the realization of an ambitious building programme with emphasis on houses to be let at reasonable rents.

Since the theory and development of the garden suburb, England made little contribution in the housing field and paid scant regard to continental example; as late as 1949 housing by the LCC was designed in the valuer's department and consisted largely of five-storey blocks with balcony access. In the next two years a revolutionary change came over the Council's housing. By 1951 a new architects' department, headed by Robert Matthew with Leslie Martin as deputy, was ready with plans for the development of the Ackroydon Estate at Wimbledon, and by the following year the stage was set for one of the largest housing schemes in Europe the Scandinavian-inspired Alton East (1952–55), followed by the Le Corbusier-inspired Alton West (1955–59) at Roehampton which, together with the Hertfordshire schools, was to raise English architecture once again to international importance.

Among other low-cost housing schemes of international renown which English Heritage nowadays considers worthy of protection, are Churchill Gardens in Westminster, won in competition in 1946 by Powell and Moya, and built over the next twenty years, 'no village, but an anglicized Gropian *Zeilenbau* [which] seemed to show that in the right conditions even the 500-persons-per-hectare density could be made to work';[18] Park Hill at Sheffield (1953–60) by Jack Lynn and Ivor Smith, a megastructure of angled slabs served by raised 'streets in the sky' which the long slope of the site made it possible to walk on to at one end and find oneself fourteen floors up at the other; the Holford Square and Priory Green estates in London by Skinner, Bailey and Lubetkin, and the Hallfield Estate by Tecton, Drake and Lasdun (Lubetkin and Tecton were the architects of the 1935 Highpoint One flats in Highgate, 'the first canonical master work of the thirties in England'[19]); and Denys Lasdun's Keeling House (1954), a high-rise cluster block in London's East End which was listed but very nearly demolished when it failed to win public funding.

13. Gropius also designed the Törten estate (1928) in Dessau, and the Dammerstock estate (1928) in Karlsruhe.
14. Curtis, op. cit., p. 259.
15. Mark Girouard, *Cities and People,* p. 357, New Haven/London, Yale University Press, 1985.
16. Lionel Esher, *A Broken Wave, the Rebuilding of England 1940–1980,* p. 93, London, Allen Lane, 1981.
17. James E. Vance, 'Workplace and residence', in Lisa Taylor (ed.), *Housing, Symbol, Structure Site,* p. 105, New York, Cooper-Hewitt Museum, 1982.
18. Esher, op. cit., p. 105.
19. Ibid., p. 40.

Park Hill was unusual in being conceived as a complete community. It is also traditional in construction, having a concrete frame and cross-walls, which were then clad in brick. 'It is important,' Elain Harwood warns, 'to distinguish these one-off constructions from the rash of system-built tower blocks built in the early 1960s as part of a drive to meet housing targets of up to 400,000 new homes per year (1963). "Urban renewal" through system building was seen as a vote winner by an incongruous alliance of Macmillan's last Conservative Government with the most traditional, secure Labour authorities. These vast developments built with prefabricated systems, many imported from abroad, which repeated standard designs across the country, have failed to interest the conservation world, and there is no indication, in England, that this will change.'[20]

The school building programme begun by Hertfordshire County Council soon after the Second World War was the direct result of the 1944 Education Act which embodied two fundamental principles: the need for a great many new school buildings and the recognition of a new attitude towards education. This new attitude could be summarized under four headings: social responsibility of the state to provide free education for everyone, teaching methods which can adapt to the needs of individual children, an enhanced status for education and the recognition that surroundings are a basic influence in the education of a child. The County Architect, C. H. Aslin, who was in charge of the programme, wrote at the time: 'The modern conception of the school as a social, cultural and recreational centre for the local community changes the whole policy of site acquisition.[21] Large, important and often beautiful sites were acquired and so the first basic requirement for providing the right surroundings was fulfilled. For the sake of speed, Hertfordshire developed a system of prefabrication and mass production in conjunction with a firm of construction engineers who later also became the suppliers of standard parts. 'By 1947 ... the first of the post-war schools, with their "light and dry" meccano structures and relaxed planning and airy internal spaces, were spreading themselves in the elmy fields of Hertfordshire.'[22] Ten primary schools were built in the first year (1947) and about 170 schools (nursery, primary and secondary) were completed or begun between 1947 and 1958. Later development resulted in the modular co-ordination of three methods of construction, light steel frame, concrete frame and traditional load-bearing brick, with components and details that were interchangeable. The use of these methods extended beyond the boundaries of Hertfordshire to other counties and the Ministry of Education itself. '[They] were more than a technology: they were an ideology. Research, team-work and feedback were seen as the triple key to a new England, with anonymity its pride, and with the architect's unique contribution, his capacity to visualize, no more than one component in a totality that included the user's enlarging capacity to think about human need and the councillor's power to get things done. Thus emerged, it was thought, the twentieth-century equivalent of the anonymous craftsman who had perfected the eighteenth-century terrace house.'[23]

The importance of the post-war Hertfordshire schools programme, however, should not blind one to the fact that the revolution in school design took place before the Second World War, in France with the schools at Villejuif[24] and Suresnes[25], and in England with the News Chronicle schools competition in 1937, the winner of which, Denis Clarke Hall, later designed the school at Richmond in Yorkshire as a direct outcome of the competition.

Virtually the whole of the twentieth century witnessed the expansion of higher education in all but the poorest countries of the world – the building of institutes, colleges and faculties, and the establishment of entire new universities. The university campus, a nineteenth-century American conception, was adopted universally in the twentieth, often to the detriment of the city. In the United States at the beginning of the century the architecture was traditional and eclectic: classical at the Massachusetts Institute of Technology[26] (1912–15); neo-Georgian for Sweet Briar College;[27] neo-Byzantine for the Rice Institute[28] at Houston (1912); and neo-Gothic for the Graduate College,[29] at Princeton (completed 1913) and for the Harkness Quadrangle[30] at Yale (1917). 'The technical competence of American architects in this period,' writes Henry-Russell Hitchcock, 'was very great, the sums of money available almost unlimited, and the avowed standards of design only the vague ones of "taste" and "correctness", by this time little more than schoolmasterish respect for precedent in detail, though rarely in overall composition.'[31]

Aarhus University in Denmark, built in the 1930s in brick and tile, is one of the first campus universities in Europe. The architects Kay Fisker, C. F. Moller and Povl Stegmann made good use of an attractive rolling site, taking maximum advantage of the changes in level and the freedom of space. In complete contrast, the buildings of the Illinois Institute of Technology are a series of rectangular steel-framed boxes set on a podium, which were probably inspired by Albert Kahn's steel-frame factory designs. One of Mies van der Rohe's first commissions on arriving in Chicago in 1939 was to redesign this campus. In what is arguably his masterpiece, Crown Hall (1950–56), at the head of the campus, the image of the factory is dominant: 'The idea for this vast, uninterrupted "universal" space seems traceable directly to Albert Kahn's Bomber Assembly Plant of 1939, which employed a dramatic truss

20. Elain Harwood, 'This is tomorrow, the story of post-war architecture in England', in *Preserving Post-War Heritage,* p. 20, Swindon, UK, English Heritage, 2001.
21. C. H. Aslin, 'Primary schools: the contemporary planning approach?' The *Architectural Journal,* May 1948.
22 Esher, op. cit. p. 48.
23. Ibid., p. 56.
24. Architect, André Lurçat.
25. Architects, Beaudouin & Lods.
26. Architect, Welles Bosworth.
27. Architect, Ralph Adam Cram.
28. Architect, Ralph Adam Cram.
29. Architect, Cram and Ferguson.
30. Architect, James Gamble Rogers.
31. Henry-Russell Hitchcock, *Architecture, Nineteenth and Twentieth Centuries,* pp. 401–2, Harmondsworth, Penguin Books, 1958.

system.'[32] Crown Hall has strong representational qualities with its axial symmetry, monumental exposed truss system and grand flight of steps leading up to the entrance.

In Latin America they favoured the 'university city', 'intended to symbolize the liberalizing and secularizing intervention of the state: "integrating the thought, the hope and the labour of everyone through culture". These "micro-cities" of greenery, crystalline towers and official modern art, with their message of social emancipation, were like minature Utopias hypothetical urban models confronting the ever more daunting problems of the actual city undergoing the crisis of mass immigration from the countryside.[33] The Ciudad Universitaria to the south of Mexico City[34] (1946 onwards) was a competent version of Le Corbusier's *Ville Radieuse,* adjusted to the climate, institutions and technology of Mexico. 'The overall plan combined free-standing slabs, stadiums, open green spaces and transitional courts; bands of glazing, *pilolis*, curved entrance-ways, roof terraces, hovering horizontals and public murals completed the imagery of a "progressive" educational ideal.'[35]

The Ciudad Universitaria in Caracas (1950–59) was inscribed on UNESCO's World Heritage List in 2000. It is reassuring to read William Curtis' description of the Plaza Cubierta or lobby of the Aula Magna: 'Here the blending of inside and outside allowed the passages of breezes but also took on a social meaning to do with democratization of institutions of learning. … Villanueva's architecture relied upon a poetic sense of structure, an intimate understanding of the interweaving of natural and climatic forces, a sense of the human figure moving through warm air, and a spatial concept which synthesized the discoveries of Cubism with cultural "substructure" in his own land.'[36] There are here at least six criteria: response to climate, response to socio-economic needs, sense of structure, sense of scale, conception of landscape and fusion of international influences with local traditions.

In the United Kingdom, 1957–65 was an exceptional period in terms of the number of buildings constructed 'and the ambition and high quality of many of them … more churches were built in these few years than in any Victorian decade save the 1860s. Twenty-four universities and a university college were founded between 1961 and 1968, if one includes those that were upgraded from technical college status, and the number of further education places was almost doubled'.[37] Seven entirely new universities were approved between 1957 and 1963, and all found attractive parkland sites outside historic towns. A reassessment of teaching methods led to a demand for flexible teaching spaces, resulting at the University of East Anglia[38] in a 'ten minute university' with parallel ranges of residential and teaching buildings linked by pedestrian walkways above the level of cars. At Essex[39] the Vice-Chancellor preferred a few very large departments creating economies of scale for purchasing equipment and large-scale buildings. The final design was a series of raised courtyards with residential towers to the north and south. At York[40] discrete system-built structures were carefully sited in a beautiful landscape, which became the dominant element.

Within the social programme of the twentieth century must be included health and sport, culture, transportation and government administration and representation. Community building, therefore, must encompass sanatoria, hospitals and medical centres; stadia and sports centres; museums, art galleries, theatres and concert halls; railway stations, airport buildings, viaducts and bridges; and government administration buildings, town halls, law courts and parliament or national assembly buildings. Of these only the last category and conceivably museums, art galleries, theatres and railway stations have been associated traditionally with representational qualities. Sullivan and Adler's Auditorium Building (1886–89) in Chicago, which combines the public function of an opera house and hotel with the private function of offices, rates high for its representational qualities, with its rusticated stone podium carrying a monumental four-storey high arcade and tower to one side, recalling a medieval *Palazzo publico* 'one of several buildings to extend Richardson's seminal lessons for ennobling "industrial civilization".'[41]

Representational qualities are considered to be the prerogative of traditional eclectic, especially classical architecture. No one would deny the representational qualities in Henry Bacon's Lincoln Memorial (1917) in Washington, or in Edwin Lutyens' Viceroy's House (1920–31) in New Delhi. Modern architecture, on the other hand, is considered to lack representational qualities and to be unsuitable for civic monumentality.

The architects of the Modern Movement were supposed to be more interested in making their architecture dynamic, informal, often impermanent, always welcoming. Representation tended to be seen as a problem for totalitarian regimes intent, for propaganda reasons, on expressing the spirit of fascism, nazism or communism through their architecture. Representation is to do with appearance as distinct from content or matter. It implies permanence, formality, dignity, ceremony and conceivably monumentality. In Guisseppe Terragni's Casa del Fascio in Como (1932), a prime candidate for the World Heritage List, 'frame and walls are juxtaposed in a manner which suggests that the architect has rigorously redefined the fundamental meanings of such perennial elements as "support", "opening" or "enclosure".'[42] A deep sense of

32. Curtis, op. cit., p. 402.
33. Ibid., p. 494.
34. Designed by several architects including Enrique del Moral, Mario Pani, Carlos Lazo, José Villagrán, Juan O'Gorman and Teodoro Gonzalez de Leon.
35. Curtis, op. cit., p. 493.
36. Ibid., p. 503.
37. Harwood, op. cit., p. 21.
38. Architect, Denys Lasdun.39. Architect, Kenneth Capon of the Architects' Co-Partnership.
40. Architect, Andrew Derbyshire of Robert Matthew, Johnson-Marshall.
41. Curtis, op. cit., p. 44.
42. Ibid., p. 364.

history enabled Terragni to reinterpret classical architectural elements such as the plinth, the column and thecornice with an entirely modem vocabulary. The building contains within it a courtyard, the *cortile* of a Renaissance palazzo and a space for public assembly, open and related to the piazza outside 'no encumbrance, no barrier, no obstacle between the political hierarchy and the people', as Terragni himself has written. William Curtis wonders whether Terragni, had he been a German, 'would have surmounted the strictures of ideological prejudice and created a similar rich mix of meaning under Nazi patronage'. One has to agree that, by contrast, Speer's architecture was banal and obvious; and this was surely due not to its trumped-up content but to the artist's lesser talents.

Representational qualities are subtly evident in the Casa del Fascio: the discipline imposed by the use of classical elements, the grandeur of the frame, the beauty of the finely cut marble. They are evident, perhaps in an even subtler form, in Mies van der Rohe's unique German Pavilion, a temporary structure built for the 1929 International Exposition in Barcelona, demolished afterwards and reconstructed in replica in the 1980s. Representational qualities are not what one would normally associate with dynamic asymmetry and free-flowing space, yet the pavilion was a *Reprasentationsraum*, having the honorific function of a space for the reception of the King and Queen of Spain by the German Ambassador. The pavilion was also intended to represent the cultural values of a new Germany that wanted to project an image of openness, liberality, modernity and internationalism. All this the pavilion did superbly. Even more, it projected an image of quality: marble and onyx walls, tinted semi-reflecting glass, sharp-edged stainless steel and travertine. Referring to European industry as a whole, Mies van der Rohe wrote: 'The path must lead from quantity towards quality, from the extensive to the intensive.'[43]

If Casa del Fascio at Como deserves, I believe, special priority in its designation for World Heritage status, second only are Le Corbusier's Capitol buildings at Chandigarh (1951–63), Louis Kahn's National Assembly Buildings in Dhaka (1962–75), Jorn Utzon's in Kuwait (1972) and Geoffrey Bawa's in Colombo (1980–83). Le Corbusier's Capitol at Chandigarh, consisting of Parliament, High Court and Secretariat (the Governor's Palace was never built because Nehru considered it undemocratic), stands symbolically at the head of the new city's grid-iron plan. The sculptural forms of Parliament, a tilted pyramid for the Senate, a funnel for the Assembly, rise behind a monumental scoop-shaped portico on massive lateral piers. 'The genesis of Le Corbusier's monumental vocabulary,' according to William Curtis, 'seems to have involved a prodigious feat of abstraction in which devices from the classical tradition the grand order, the portico were fused with his own general system of forms in concrete and in turn cross-bred with Indian devices like the "chattri" (a dome on slender supports), the trabeated terraces, balconies and loggias of Fatehpur Sikri. In turn, this architectural language, rich in references and associations of a public institutional kind, was suffused with the artist's private cosmological themes…'.[44] No shortage here of representational qualities.

The formality, dignity and monumental grandeur of the National Assembly Building in Dhaka it sits on a vast brick platform surrounded by water reflects a new Asian country's belief in government as a fundamental type of social order and the need for free and democratic, yet enduring, post-colonial institutions. At the heart lies the circular assembly surrounded by other functions, in a compact plan which has a principal axis, but which is virtually symmetrical about four axes, and which has been compared to 'a crystal with resonances of a cosmic diagram or mandala'.[45]

In Kuwait, Utzon had to give shape to an unusual system of government consisting of regal, tribal, oligarchic and bureaucratic components. To make all the departments visible and accessible from the entrance, he created a central street leading to the great hall open to the sea, and with access on the right-hand side to the main assembly and on the left to the individual departments which were restricted to two storeys in height and arranged around their own courtyards. 'These "cellular" units could be added bit by bit, so that in plan the Assembly Building was like an abstraction of a Middle Eastern city with a main bazaar as a spine, but with amorphous edges extending towards the rectangular boundary. The entire complex was covered by a spreading roof, and in the case of the main chamber and hall there was uncanny resemblance to the billowing forms of a tent, though seen from a distance the bowing parasol over the entrance also triggered associations with a dhow, the national symbol of Kuwait.'[46]

Both Utzon's National Assembly Building in Kuwait and Geoffrey Bawa's in Colombo are rare examples of successful monumental statements with clear representational qualities. If Utzon was able to combine local references and generic traditional types with a wholly modern sense of space, Bawa remained more overtly traditional in a country where building still had a genuine vernacular basis. Combining industrial materials with handicrafts, he monumentalized by increasing the scale of the vernacular. The Parliament Building, which is set on an island approached formally over a causeway, has the feeling of an Oriental shrine, yet the chamber itself was modelled on that of the House of Commons in London. The wide roofs and deep overhangs recall the image of a collective meeting-house in a village.

Other candidates for World Heritage status in this category of public buildings are Edwin Lutyens' Viceroy's House at New Delhi, official residence, centre of administration and focus of the new city, a building of Roman grandeur yet

43. Quoted in Curtis, op. cit., p. 271.
44. Curtis, op. cit., p. 428.
45. Ibid., p. 526.
46. Ibid., p. 585.

adapted to the climate and recalling the Indian architectural past in its forms and features; the Supreme Court in Mexico City (1987–92) by Teodoro Gonzalez de Leon, a worthy descendant of Le Corbusier's High Court in Chandigarh in its monumentality and reliance 'upon ancient types to do with idealization of social order: the portico, the platform and the hypostyle hall'[47] ; Kunio Mayekawa's Kyoto Town Hall (1958–60) in which rough wooden patterns in the concrete and precast beams were used in a manner similar to the 'kit-of-parts' system in traditional Japanese construction, Mayekawa and Tange being among the first in Japan to grasp the relevance of the rugged blend of Asian and European traditions at Chandigarh to a language of monumentality for their own country; and the incomparable Saynatsalo Town Hall (1949–52) by Alvar Aalto, a group of buildings (library, Council Chamber, Administration Department) constructed of local materials (brick and timber) arranged informally around a raised courtyard. It has been called 'a sermon of the fundamental institutions of democratic self-government'.[48] Its scale, like its scope, is small but of fundamental importance, truer perhaps to Athenian democracy than to the unwieldy democracies of our time. 'Who is to look out for the little man?' That is Aalto's very personal and very human statement.

In conclusion, and as this paper has made abundantly clear, the twentieth-century architectural heritage is vast, varied, enormously rich and inevitably of uneven quality. In identifying what merits protection, selection processes and therefore criteria for selection need to be established. And 'selection factors', to quote once more from the 1995 Helsinki Seminar on 20th-century Heritage, 'must include not only aesthetic aspects but the contribution made in terms of the history of technology and political, cultural, economic and social development'. Aesthetic merit alone is not sufficient. What matters above all are ideas, the depth of the ideas and the ways ideas are given form. The Indian architect, Charles Cornea, has written of the need to make 'transformations' of the 'deep structures' of the past rather than just 'transfers' of images. Post-modernists did little more than make transfers. Art Deco is styling, so superficial. Assessment and selection must probe deep beneath the surface to unravel ideas and look for lasting qualities.

47. Ibid., p. 647.
48. Frederick Gutheim, *Alvar Aalto,* George Braziller, New York, 1960.

Bauhaus and its Sites in Weimar and Dessau, Germany (C ii, iv, vi);

inscribed in 1996

Source: Nomination file

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Between 1919 and 1933, the Bauhaus School, based first in Weimar and then in Dessau, revolutionized architectural and aesthetic concepts and practices. The buildings put up and decorated by the school's professors (Walter Gropius, Hannes Meyer, Laszlo Moholy- Nagy and Wassily Kandinsky) launched the Modern Movement, which shaped much of the architecture of the 20th century.

The Committee decided to inscribe the nominated property on the basis of cultural criteria (ii), (iv) and (vi) considering that the site is of outstanding universal value since these buildings are the seminal works of the Bauhaus architectural school, the foundation of the Modern Movement which was to revolutionize artistic and architectural thinking and practice in the twentieth century.

The Committee also noted that this type of inscription testifies a better recognition of the 20th century heritage. (20th Committee session)

6

Les ensembles urbains nouveaux de l'âge industriel

par Jean-Louis Cohen

Dans son introduction à la réédition de 1945 des *Cités-jardins de demain* d'Ebenezer Howard, Lewis Mumford assure que ses idées « ont posé les bases d'un nouveau cycle de civilisation urbaine », qu'il envisage avec optimisme (Howard 1969, XLIX). Il est vrai que le principe de la décentralisation métropolitaine imaginée par Howard a déjà généré à cette date plusieurs cycles d'ensembles neufs et que beaucoup suivront dans la seconde moitié du XX^e^ siècle.

Le corpus urbanistique et architectural dont il s'agit de penser la protection et la conservation est donc extrêmement vaste, à partir du moment où sa délimitation inclut non seulement les villes nouvelles, mais aussi les cités-jardins et les ensembles urbains constituant un fragment autonome et identifiable de ville. De manière très large, ces formations peuvent être définies comme constituant des communautés limitées et volontaires, en opposition aux relations spatiales sédimentaires issues de l'histoire longue des agglomérations à croissance continue.

Les quartiers nouveaux

L'extension planifiée des villes existantes résulte au XIX^e^ siècle, dans un premier temps, du développement de la production industrielle et des échanges, autour des pôles nouveaux que sont les fabriques, les ports et les gares. Avec la destruction des fortifications, notamment en Europe occidentale, et le mouvement de l'urbanisation, des projets délibérés et des principes de régulation apparaissent, comme dans le cas de la *Stadterweiterung* encadrée par la loi prussienne de 1875. À Barcelone, la création d'un véritable système urbain nouveau est fondée sur les théories d'Ildefonso Cerdà et instaure une géométrie en rupture avec les tracés et les échelles de la ville ancienne.

Les premières générations d'extensions procèdent en général d'un principe de régulation publique de la construction privée et ne débouchent pas sur la constitution d'un tissu homogène formant à lui seul une architecture cohérente. En revanche, certains de ces quartiers offrent un paysage architectural contrasté et en tant que tel représentatif du concept d'« œuvre d'art totale » que Camillo Sitte élabore en 1889. L'extension wilhelmienne de Metz illustre bien cette démarche dans l'assemblage pittoresque d'immeubles historicistes ou Jugendstil.

Un deuxième type d'extensions, totalement maîtrisé dans sa matérialité architecturale, découle des politiques patronales de logement ouvrier. Les ensembles de Saltaire, puis ceux de Bournville et Port-Sunlight en Grande-Bretagne, ceux de Mulhouse ou de Noisiel en France, ceux d'Essen en Allemagne sont des entités autonomes, dont la protection est en général assurée aujourd'hui. Les types architecturaux utilisés procèdent d'une rigoureuse économie sérielle. Ces quartiers bénéficient d'équipements collectifs dont le placement obéit à des principes de composition assez élémentaires.

Un troisième type d'extensions se rattache aux politiques réformatrices, qu'elles soient portées par le mouvement coopératif, les syndicats ou les municipalités. Ces politiques s'appuient sur le principe de la décentralisation interne aux aires métropolitaines, tel qu'il est formulé dans les théories de la cité-jardin d'Ebenezer Howard. La première génération des cités-jardins réalisées avant 1914 résulte en fait de la rencontre du principe de la croissance suburbaine planifiée selon un plan pittoresque, qu'avaient déjà mis en œuvre des projets comme celui du Vésinet, à côté de Paris, ou de Riverside, à côté de Chicago, et des formes d'une architecture sensible aux modèles ruraux. Les cités-jardins pleinement autonomes, comme Letchworth, sont exceptionnelles, et la règle est la création de faubourgs-jardins comme Hampstead, Hellerau à Dresde, le Stockfeld à Strasbourg, Prozorovskoe, près de Moscou, Vreewijk à Rotterdam ou Forest Hills Gardens à New York. Raffinement architectural et soin du traitement paysager vont de pair dans ces ensembles.

Après la première guerre mondiale, un quatrième type d'extensions dérive d'une sorte de dilution du modèle de la cité-jardin et de sa rencontre avec les politiques sociales publiques. Les *Siedlungen* de Francfort, de Berlin ou de Hambourg et les cités néerlandaises, françaises ou russes, ou encore les ensembles de *Höfe* viennois conservent dans un premier temps les modes de composition antérieurs, et dérivent très vite vers une esthétique de la série informée par les préceptes du « Mouvement moderne ». En effet, les stéréotypes vernaculaires antérieurs sont balayés par des édifices tendant à la répétitivité et à l'abstraction. Certains de ces ensembles comme la *Weissenhofsiedlung* de Stuttgart ou la cité de Baba à Prague, manifestes adressés à l'opinion publique, ont une authentique dimension expérimentale et condensent en quelque sorte les attentes d'une architecture sociale rédemptrice.

Enfin, un quatrième type d'extensions résulte de la rencontre entre certaines des solutions les plus radicales élaborées dans l'entre-deux-guerres et les politiques étatiques d'après 1945. Avec les grands ensembles d'habitations, la question de l'extension change de dimension. Parfois réservés à la classe moyenne, comme à Lafayette Park (Detroit) ou aux Grandes Terres (Marly), ces ensembles sont censés résoudre la question du logement des classes populaires, et constituent souvent d'authentiques terrains d'innovation technique et esthétique. Ils témoignent aujourd'hui d'une sorte d'enthousiasme collectif, le destin ultérieur de certains de ces lieux ne pouvant effacer la convergence d'efforts et d'idéaux les ayant suscités.

Certaines rénovations urbaines des centres peuvent être assimilées à cette catégorie, et font figure d'injection dans le tissu de la ville existante de configurations élaborées dans la périphérie. En général destructrices et brutales, ces rénovations sont exceptionnellement des contributions architecturales méritant protection et conservation et doivent être défendues, au même titre d'ailleurs que les « grands ensembles », contre une « humanisation » qui n'est bien souvent qu'un travestissement nostalgique.

Les reconstructions consécutives aux guerres ou aux catastrophes naturelles constituent un autre ensemble important d'entités urbaines nouvelles. Le phénomène n'est pas en tant que tel inédit. Il suffit à ce propos de penser à la renaissance de Londres après l'incendie de 1666, de Lisbonne après le tremblement de terre de 1755, ou celle de Hambourg après l'incendie de 1842. Mais l'ampleur des destructions de la seconde guerre mondiale et la productivité de l'industrie du XX^{e} siècle aboutissent à des entreprises de grande ampleur, dans lesquelles des efforts architecturaux sont déployés. C'est le cas de Rotterdam à Coventry, du Havre à Saint-Malo, de Stalingrad à Minsk, de Hildesheim à Rostock, de Varsovie à Hiroshima, pour des villes de taille et de fonction très différentes. Les reconstructions y décrivent tout le spectre des attitudes allant de la reconstitution littérale à la table rase totale et constituent un des épisodes les plus importants de l'urbanisme et de l'architecture contemporains.

Ces ensembles urbains constituent, en tant que tels, un corpus de paysages différents à la fois des fragments antérieurs des agglomérations et le vestige de politiques déterminées, appuyées sur le déploiement de savoirs nouveaux en matière de génie civil, d'architecture et d'art des jardins. Ils ont le plus souvent une présence très claire à la conscience de leurs habitants, qui ont développé un très fort sentiment d'appartenance, dans le cas des cités-jardins, mais aussi parfois de rejet, dans le cas des reconstructions, au travers desquelles le sens de la perte se réactualise sans cesse. Ils appartiennent donc à la fois à l'histoire et à la mémoire collective.

Les villes nouvelles

Pas plus que les quartiers nouveaux ou les reconstructions, les villes nouvelles ne sont une production typique des XIX^{e} et XX^{e} siècles. La création d'entités préconçues, s'opposant aux villes issues de la croissance lente d'un noyau villageois, est une pratique antique, qu'illustrent par exemple en Occident les colonies grecques, les bastides anglaises ou françaises et les villes régulières de Catherine de Russie. La classique *Histoire de l'urbanisme* de Pierre Lavedan est fondée sur la distinction entre les villes anciennes ou spontanées et les villes nouvelles ou de création.

Ces dernières ont selon les cas des origines commerciales, religieuses ou militaires et font office de jalons dans l'extension et le bornage d'espaces nationaux. Les villes neuves sont difficiles à repérer dès lors qu'elles ne sont pas définies seulement par leur régularité géométrique. Léon Pressouyre note à propos des formations urbaines de l'Orient ancien que, « pour l'historien, le concept de ville neuve est clairement définissable à partir de paramètres simples : l'intervention d'un fondateur, le caractère délibéré de la création, des dispositions juridiques impliquant une stricte organisation de l'espace et de la vie en commun » (Huot 1988, p.268).

Cette définition très générale reste valide à l'ère de la révolution industrielle et du colonialisme moderne, même si les villes nouvelles changent de nature. Elles accompagnent désormais la mise en valeur de gisements miniers ou la création d'ensembles industriels, mais aussi la déconcentration des grandes agglomérations, en écho à la théorie des cités-jardins. Ainsi Galantay peut-il ajouter dans sa nomenclature aux « nouvelles capitales », aux « villes coloniales », et aux « villes industrielles » les villes liées à la « décongestion » (Galantay, 1975). Pierre Merlin a proposé quant à lui un « essai de typologie » qui mérite d'être rappelé (Merlin 1969, p.247-248) :

1. « villes réalisées hors des régions urbaines pour des raisons économiques, soit par suite de la présence de matières premières, soit pour créer un nouveau foyer d'industrialisation dans une zone rurale » ;
2. « villes nouvelles visant à créer un cadre de vie complet avec des fonctions de résidence, de travail, d'enseignement, de loisirs, de commerce, etc. » ;
3. « quartiers nouveaux qui sont conçus en continuité avec la ville ou même dont ils ne sont que des satellites » ;
4. « on mentionnera pour mémoire les opérations de construction importantes dans le cadre des agglomérations existantes, dont les grands ensembles français constituent l'exemple typique, qu'on ne saurait en aucun cas qualifier de villes nouvelles mais plutôt de cités satellites ».

Recoupant cette typologie, on peut identifier assez clairement des campagnes de construction liées à des conjonctures spécifiques de la modernisation et du changement social.

Sur le versant frivole et bourgeois, le développement des chemins de fer donne ainsi naissance au XIX^{e} siècle à des villes de villégiature, comme Cabourg sur la côte normande ou Palm Beach en Floride, mais aussi à des centres nouveaux comme Dalny dans l'Extrême-Orient russe et bien évidemment à la plupart des villes de l'Ouest américain. La colonisation par les puissances européennes suscite la création de capitales ou de métropoles manifestant la présence de la puissance impériale, souvent l'occasion d'innovations urbanistiques notables, comme New Delhi, Canberra, Pretoria ou Casablanca. La création de Tel Aviv dans la Palestine du mandat britannique, selon le plan de Patrick Geddes, se situe dans cette logique, en dépit des intentions éclairées de ses inspirateurs.

Dans l'entre-deux-guerres, les politiques d'État tendent à créer parfois des réseaux de villes nouvelles. Près de neuf cents villes sont ainsi implantées dans l'Est du pays pendant les deux premiers plans quinquennaux soviétiques, souvent avec l'aide d'urbanistes occidentaux tels Ernst May ou Hannes Meyer, dont certaines comme Magnitogorsk sont devenues des villes importantes. Plus modeste, le programme du fascisme italien permet la création d'une grappe de villes nouvelles dans les marais Pontins, la politique nazie se limitant aussi à quelques opérations fondées sur un principe industriel. Les ensembles

lancés aux Etats-Unis d'Amérique grâce aux moyens du New Deal rooseveltien transcrivent sur le terrain le principe de la « Green Belt » développant les idées d'Howard. Un cas à part est celui des agglomérations nouvelles créées dans le monde par l'entreprise Bat'a à partir de son berceau de Zlín.

Chacun des grands cycles de transformation politique ou économique du monde depuis 1945 semble depuis s'être accompagné d'une floraison de villes nouvelles. Les villes nouvelles anglaises, imaginées depuis les années 1930, s'articulent avec les reconstructions et constituent en trois phases successives le réseau sans doute le plus cohérent, dont les villes nouvelles de la région parisienne dériveront dans leur dispositif d'ensemble à partir des années 1960.

Les « démocraties populaires » d'Europe de l'Est sont aussi dotées de villes nouvelles à dominante industrielle comme Stalinvaros, Stalinstadt ou Nowa Huta, censées illustrer le primat de la classe ouvrière. Parallèlement, l'émergence de nouvelles puissances comme le Brésil conduit à son terme le dessein ancien de créer une nouvelle capitale libre du passé portugais et, de manière générale, la décolonisation conduit à la création de nouvelles villes à dominante politique (Chandigarh, puis Islamabad) ou économique. Ce phénomène trouve un écho aujourd'hui avec le projet de la nouvelle capitale du Kazakhstan post-soviétique, Astana.

Si l'on observe en définitive l'ensemble des territoires urbanisés, les dispositifs des villes nouvelles de ces différentes générations sont plus « étalés dans l'espace » qu'ils ne sont « échelonnés dans le temps », pour reprendre l'analyse de Claude Lévi-Strauss dans *Race et histoire* (1952). Les différentes phases historiques en sont perceptibles simultanément en des points distants du globe.

Questions et perspectives

L'émergence des villes nouvelles modernes est liée à un ensemble de questions de divers ordres. Une question importante est celle de leur implantation, en fonction de critères rationnels, symboliques ou d'opportunité. Une autre question est celle de leur dimensionnement – elle a fait couler énormément d'encre –, que leur taille soit « idéale » comme dans toutes les utopies, ou qu'elle soit élaborée en écho à la théorie des *neighborhoods* (unités de voisinage).

Ici, les villes nouvelles rencontrent les théories sociales et représentent l'idée d'une « communauté » autonome et planifiée, opposée à une société oppressive et anonyme. De ce point de vue, elles n'ont pas manqué de susciter les critiques, comme celles de Patrick Geddes, attaché à la notion d'eu-topie qu'il oppose à l'utopie des créations urbaines, ou celles de Gaston Bardet, hostile aux villes « préconçues », incapables de croître organiquement.

D'une manière générale, un caractère fort des villes nouvelles modernes est précisément leur rôle dans le changement social, qu'il soit démocratique, négocié ou imposé par une collectivité tyrannique entendant précipiter l'industrialisation ou l'urbanisation. Les villes nouvelles font ainsi figure de standard tout à la fois de la modernisation et de la modernité…

Comment hiérarchiser ces ensembles et comment les préserver ? Le problème de Brasília aujourd'hui est emblématique des difficultés qu'ils présentent. En quelque sorte et paradoxalement, les villes nouvelles sont victimes de leur succès, lequel conduit à la prolifération d'édifices entrant en contradiction avec les principes fondateurs et qui dénaturent le paysage urbain et l'économie formelle du projet initial. Peu de villes nouvelles ou d'ensembles urbains ont conservé intactes leur limite et leur emprise, à l'image de Fathepur Sikri, ville abandonnée, ou de Montpazier, bastide rurale entourée de champs.

La protection et la conservation des extensions planifiées semblent être désormais en bonne voie et les principales cités-jardins et *Siedlungen* ont fait l'objet de campagnes rigoureuses de restauration. Ces ensembles sont identifiés comme des valeurs culturelles par la population et certains d'entre eux sont des cas exemplaires de convergence entre projet urbain, projet social et projet esthétique. Il est vrai qu'ils sont parfois bien conservés du fait de la nature collective de la propriété immobilière, souvent liée aux municipalités, aux coopératives ou aux associations… Cela s'applique partiellement aux villes nouvelles, plus composites dans leur structure, mais en général issues de l'initiative publique.

Il est clair que la valeur patrimoniale de tous ces ensembles est, comme en règle générale, mesurable à leur importance historique, à leur authenticité et à leur intégrité. Il s'agit en l'occurrence de paysages urbains définis par la qualité croisée des tracés, des espaces extérieurs et des édifices. Il est possible, en conclusion, de se poser une question incidente : est-il concevable dans un ensemble urbain transformé par le cours même de la vie de préserver l'idée, le dessein, même trahi, mais encore perceptible de la ville initiale ? La trace de l'innovation urbaine pourrait-elle être considérée comme patrimoine mondial ? Car c'est en effet au carrefour du patrimoine matériel et immatériel que se situent les idées de villes que cristallisent les ensembles nouveaux.

Palau de la Música Catalana and Hospital de Sant Pau, Barcelona, Spain (C i,ii,iv);

inscribed in 1997

Source: Nomination file

These are two of the finest contributions to the architecture of Barcelona by the Catalan Art Nouveau architect Lluís Domènech i Montaner. The Palau de la Música Catalana is an exuberant steel-framed structure full of light and space, and decorated by many of the leading designers of the day. The Hospital de Sant Pau is equally bold in its design and decoration, while at the same time perfectly adapted for the needs of the sick.

The Committee decided to inscribe these two properties on the basis of criteria (i), (ii) and (iv), considering that the Palau de la Música Catalana and the Hospital de Sant Pau in Barcelona are masterpieces of the imaginative and exuberant Art Nouveau that flowered in early 20th-century Barcelona. (21st Committee session)

7

The catalytic city: Between strategy and intervention

by Kenneth Frampton

I have opted for this somewhat cryptic title, along with its equally ambiguous subtitle, as a way of approaching the rather intractable topic of urbanization and even more perhaps as a way of responding to our seeming incapacity to arrive at a pattern of land settlement that is sustainable, not only ecologically but also culturally. The much-vaunted mediatic globalization of the contemporary world, combined with that which Geoffery Jellicoe, long ago characterized as *motopia*, has engendered, as we know, much of the restless, volatile character of our telematic age. It is the British urbanist Peter Hall, in his book *World Cities* of 1966, who recognized, now some thirty years ago, the de facto emergence of the urbanized region as a more or less universal phenomenon, to which the French geographer Jean Gottmann had already given the name *Megalopolis* in his book of this title published in 1961. While this term allowed Gottmann to discriminate between the relatively self-contained *metropoli* of the late nineteenth century, predicated on the railway, and the automotive urbanized regions that came into being after the end of the Second World War, the two phenomena were none the less related. There was, in fact, nothing entirely new about the phenomena of urban sprawl for this had already been identified as an environmental nemesis as early as 1895, with the publication of Émile Verhaeren's *Les Villes Tentaculaires.* What had, of course, changed in the interim was the sheer magnitude of the conglomeration in question. The great wen of London, as characterized by C. R. Ashbee in 1917 in *Where the Great City Stands,* could hardly be compared with the scale of the Boston-Washington corridor on the east coast of the US or to that of the continuous urbanized region running between Hokaido and Osaka in Japan or to the equally dense autoroute network feeding the Los Angeles Basin, the Randstad (Netherlands) or the Ruhr-Gebiet (Germany). Some idea of the apocalyptic scale of megalopolitan urbanization may be obtained from Charles Correa's *The New Landscape* of 1985 wherein he remarks that between 1965 and 1985 the squatter population of Bombay increased from 0.5 million to 5 million.

Other French intellectuals besides Gottmann were to prove to be particularly sensitive to this new phenomenon, most acutely perhaps the French urban theorist Françoise Choay, who was one of the first to point out that unlike the pre-industrial walled city, the urbanized region would not be negotiable at all were it not for the ubiquitous signs with which we are able to navigate through its labyrinth. Similarly, the French anthropologist Marc Augé, who with his perceptive analysis of universal 'placelessness' in his book *Non-Places* of 1995, characterized the unavoidable psycho-social displacement of the subject in the late-modern world in the following terms:

In the concrete reality of today's world, places and spaces, places and non-places intertwine and tangle together. The possibility of non-place is never absent from any place. Place becomes a refuge to the habitué of non-places (who may dream, for example, of owning a second home rooted in the depths of the countryside). Places and non-places are opposed (or attracted) like the words and notions that enable us to describe them. But the fashionable words those that did not exist thirty years ago are associated with non-places. Thus we can contrast the realities of transit *(transit camps or passengers in transit) with those of residence or dwelling; the* interchange *(where nobody crosses anyone else's path) with the* crossroads *(where people meet); the passenger (defined by* destination*) with the traveller (who strolls along his route significantly, the SNCF still calls its customers travellers until they board the TGV; they then become passengers), the* housing estate *('group of new dwellings',* Larousse says*), where people do not live together and which is never situated in the centre of anything (big estates characterize the so-called peripheral zones or outskirts), with the monument where people share and commemorate; communication (with its codes, images and strategies) with language (which is spoken).*

Irrespective of whether one comes to the pessimistic conclusion after reading Augé that, given this universal placelessness, urban design is no longer possible or even relevant, one certainly has reason to believe that the nineteenth century was more adept at realizing a culturally inhabitable urban fabric than anything we have been able to achieve over the past century. The sheer conviction with which the French polytechnical elite were able to push through the Haussmanization of Paris in the second half of the nineteenth century immediately comes to mind, as does Ildefonso Cerdá's gridded expansion of Barcelona over virtually the same period, not to mention those gridded colonial cities that were coherently laid out and occupied throughout the Americas over the same period: Manhattan, Chicago, Buenos Aires, Montevideo, etc. While these cities, as opposed to the bounded and highly differentiated fabric of the European city-state, were unquestionably 'space-endless' in character, they were none the less still decidedly urban in terms of their multi-layered, heterogeneous density and their capacity for pedestrian movement and face-to-face interaction. Fed by electrically driven streetcars throughout the last decade and a half of the century, they were able to sustain a sense of civic identity and culture that continues to prevail even today, despite the relentless onslaught of the automobile.

We should also simultaneously admit that the garden city, set up in opposition to the congested metropolis, was by definition incapable of generating anything like the same level of urbanity. That which was so inherently anti-urban in the case of the garden city and the commuter suburb, reiterated ad infinitum throughout the twentieth century, would also lead to much the same result in the case of the low-density British New Towns, realized between 1950 and 1975. The last of these, Milton Keynes, would prove to be particularly anomalous as it was the arbitrary superimposition of a 'value-free', 1 km grid over the idiosyn-

cratic contours of a well-established agrarian landscape, in accordance with the 'non-place, urban realm' ideology of the American planner Melvin Webber who served, however unofficially, as an adviser to the urban planners Llewelyn Davies, Weeks, Forestier and Bor. Apart from the graphic indication of its legal boundary, one has no sense of arrival in Milton Keynes and for the casual visitor it seems to be nothing more than a random collection of more or less well-designed housing estates, virtually exclusively fed by bus and car. This motopian diffusion could hardly be in greater contrast to the first plan drawn up for the same town, to wit an extremely dense, neo-Radburn layout, capable of being accessed to an equal degree throughout by the automobile and light rail; that is to say, by public as much as by private transport. These two totally antithetical paradigms successively proposed for the layout of Milton Keynes exemplify the interrelated poles of the conceptual panorama that I am attempting to evoke with the metaphor of a catalytic city, that is to say, on the one hand, the impact that the intrinsic structural character of any intervention must have on the pre-existing landscape and, on the other, the degree of urbanity engendered by the selfsame intervention within its own confines, both aspects being equally diffuse, so to speak, in the case of Milton Keynes. In retrospect, it is possible to see that Milton Keynes was only the beginning of the ideological abandonment of any notion of true urbanity in British town-planning practice. As the last British New Town of any consequence, it ushered in twenty-five years of post-modern provisional development, most of it highly suburban and of a kitsch character that has come to be regarded as quintessential to the marketing protocols of the real estate industry.

The last forty years of urban sprawl have led, in the United States at least, to a reaction formation inaugurated by the founding in 1993 of the Congress for the New Urbanism; an essentially neo-conservative position that seeks to upgrade received suburban models so as to simulate the mythical small town as this was to be hypostatized in Disney's model town, Celebration. Leon Krier was oddly implicated in all this, as his work at Seaside, Florida, suggests. All in all, the results of this new (sub)urbanism, as Vincent Scully has called it, have not been encouraging. As Peter Marcuse has written:

… despite the often progressive rhetoric, what the New Urbanism has in fact produced thus far is a series of insulated, homogeneously middle and upper class communities, exclusionary in practice and gated in concept if not in fact walled, appealing to a nostalgia for a past never experienced, reflecting a fear of the urban, rather than a new urbanism. It is not thus far, an achievement to be proud of.

I will not belabour the argument with further dispiriting accounts of late-modern urbanism, save in so far as it becomes necessary to touch on certain past paradigms in order to give some indication as to what I intend by evoking a potentially effective interplay between global strategy and local intervention and thus, in passing, to focus on the varying implications one might attach to the term the catalytic city. In fact, the Greek word *catalysis* is highly ambiguous; for while in chemistry it alludes to the presence of an essential inducing substance that in a reaction undergoes no change, in its original sense it meant dissolution and destruction. On the one hand, then, it may be used metaphorically to allude to an intervention whose effects extend beyond its own corporeal boundary; on the other, it implies, by etymological association, the notion of ruination.

When it comes to the apparent impasse encountered by urban design, we should acknowledge that it is not that we lack appropriate models with which to mediate the contradictions that attend modern urbanization but rather that we lack the political will or the legal mandate to apply these models to the generic predicament with which we are faced. A case in point was the unrealized new town of Hook, projected for Hampshire by London County Council in 1960 (symptomatically refused for implementation by the local authority) wherein the projected density would not only have afforded a much greater sense of urbanity than that obtaining a decade later at Milton Keynes but would also have used less land per capita and facilitated an efficient system of public transit as a complement to the automotive access provided throughout its Neo-Radburn layout.

A similarly linear, one might even say ecological, ethic with respect to the consumption of non-renewable resources such as land may also be sensed in the three-strand regional planning model advanced as a generic solution to the demands of urbanization by the British planner J. R. James in 1967. Conceived in the mid-1960s as a generic developmental paradigm with which to connect two medium-sized central Lancashire towns, the so-called three strands were made up of a central high-speed rail spine with autoroutes at some distance to either side. Residential and productive zones were to be woven in and out between these strands, together with interstitial green spaces, while the axial rail system would link up the inter-urban centres. Here we are certainly in the land of lost opportunities, lost largely perhaps for the democratic myth of unbridled individual freedom in the emerging era of escalating consumerism.

While I am surely overly ambitious in attempting to address the predicament of urbanization over a wide front, that is with respect to the 'third' as well as the 'first' world, I feel it is necessary none the less to acknowledge some of the alternative models for land settlement that have been proffered in the past; models which may not only be regarded as lost opportunities but also as still-viable paradigms that remain available for future application. A typical example of this is surely the received model of low-rise, high-density housing which may still be considered as a viable strategy for ex-urban development, as it was when it was first demonstrated as a canonical alternative in Siedlung Halen, realized outside Berne to the designs of

Atelier 5 in 1960. This rendering of residential fabric as if it were a new landscape was even more manifest in Atelier 5's Thalmatt Siedlung of 1974, where the roof of the settlement was covered with grass sod throughout. These *paysagiste,* middle-class collective paradigms corresponded more or less to the general, low-rise, ex-urban thesis advanced by Sergei Chermayeff and Christopher Alexander in *Community and Privacy* (1963) and to similar dense settlement patterns as these were advocated on socio-ecological grounds in Roland Rainer's *Livable Environments* of 1972. Unlike Chermayeff and Alexander, Rainer would be given an opportunity to realize his sustainable, low-rise, high-density typology in his Puchenau Siedlung under development on the banks of the Danube, near Linz (Austria), from 1960 to 1980. One may cite a number of other low-rise, high-density, ex-urban interventions from this epoch, including Alvaro Siza's carpet-housing quarter under assembly just outside the town of Evora (Portugal) between 1960 and 1980 and Vittorio Gregotti's Zen Housing, built outside Palermo (Sicily), over the years 1969–73. Lying in the landscape as though it were some kind of topographic strata, Gregotti's Zen housing introduces the idea of a territorial architecture as this was first theoretically formulated by him in *Il territorio di architettura* of 1966.

Gregotti's operative concept of territorial form was derived from the work of the German geographer Friedrich Ratzel, who coined the term *anthrogeographic* to characterize the totality of a man-made world with the possible exclusion of basic geology, watershed, native flora and fauna and the found contours of the land. This paradigm mode of beholding is as operative in Gregotti's Zen housing as it is present at an altogether different scale in his University of Calabria of 1973, built across the Valle de Crati as a megastructure linking a railhead at one end and a freeway interchange at the other. Here we may differentiate between the *intervention* of the megastructure and the *strategy* of the transit infrastructure, the one being contingent on the other and vice versa. Here, what I would choose to call the *catalytic city* of the university simultaneously serves to articulate both the infrastructure and the landscape. Rather than being a freestanding aesthetic object, the work is a critical intervention determining itself in relation to the surrounding topography. As such, it aspired to the status of civil engineering rather than building. It was a viaduct in fact, to which were attached at regular intervals 'spaces of public appearance'. While neither the Zen housing nor the University of Calabria were able to sustain an urbanity in the big city sense of the term, a manifest civic character was still latent in both of them.

That the concept of the anthrogeographic may extend beyond the built, to such a degree that the landscape itself assumes an importance that transcends the limits of architecture, is borne out by a number of other proposals made by Gregotti Associati, most strikingly perhaps the new residential quarter that they designed for Ceciliano in 1986 or, around the same time, a riverside park that they projected for the length of the Po as it winds its way through the built-up hinterland of Turin. The remarkable aerial perspectives habitually produced by the Gregotti office perhaps say more about the scope of the anthrogeographic mode than any text, for with this vision it is no longer a matter of relating a building to its context in terms of plan, section and elevation, but rather it is a question of layering the work in place through alignment, repetition, axiality and flow. In this procedure, the latent rhythmic potential of the surrounding topography comes to be activated and engaged as we find this compellingly Gregotti project dating from the late 1980s, featuring the refurbishing of an industrial district on the outskirts of Genoa.

Gregotti's formulation of a territorial architecture as a new strategy for the transformation of existing urban conglomerations on a piecemeal basis seems to have had a certain impact on the School of the Ticino, as we find in two canonical competition designs projected by Mario Botta and Luigi Snozzi in 1971 and 1978. I have in mind their new administration centre for Perugia and their equally didactic proposal for the renovation and extension of the Zurich Hauptbahnhof. As it happens, these designs exemplify to a remarkable degree the full scope of my 'catalytic city', for where their Perugia proposal was expressly applied to a megalopolitan context that was already engulfing the outskirts of an Italian town, Zurich was a carefully calibrated insert, deftly placed within a dense metropolitan fabric. Equally crucial in both cases was the strategy of rendering the intervention as a 'city in miniature', as an interstitial nexus embodying a complementary urbanity expressly formulated in the first case to compensate for the no man's land of the megalopolis and in the second, to augment the civic density of the surrounding city. It is critically significant that both these projects were envisaged as being closely integrated with the railway infrastructure, the express purpose being to balance out the perennial propensity for optimizing the automobile. This much is clear from the integration in both instances of multi-level parking facilities with direct connection to efficient systems of rail transit.

While the megastructure as a universal space-frame to which volumes are attached or within which they are accommodated (c.f. the Centre Pompidou, Paris, of 1972) certainly appears in the spine of Gregotti's University of Calabria and in the Botta/Snozzi proposal for Perugia, it is hardly the only vehicle capable of embodying a 'city in miniature', as we may judge from Arthur Erickson's Robson Square Development in the center of Vancouver, dating from 1974, which is more of a *megaform* than a *megastructure.* This much seems to be confirmed by the pocket park that rises in Robson Square in the form of a stepped podium containing government offices to culminate in stacked law courts under an oversailing roof. With its planted terraces and stramps laid out to the designs of the landscape architect Cornelia Oberlander, Robson Square may be seen as a catalyst for activating the redevelopment of downtown Vancouver, comparable in some respects to the role played by the Rockefeller Plaza in Midtown Manhattan. Programmatic content aside, it is the

continuity of the podium rather than the articulation of the structure that allows this megaform to serve as a unifying topographic feature. Something similar as an integrating strategy seems to be embodied in Henri Ciriani's concept of *la pièce urbaine,* as this comes to be reiterated throughout his career in various interventions beginning with his so-called Barreà Marne in Marne-la-Valleé, realized in 1980. Of this he wrote:

(The problem is) how to manage communal space … which can longer rely on the opacity of the private clusters of the historical town, a space that must be qualified in other terms than that of a hollow in a fully occupied area. Thus, we have the problem of an intermediary scale of work, a 'relay' dimension between types of housing and urban morphology, the scale of the urban type, let us call it an 'urban piece'. The limits of the autonomy of this (piece) are in the ability of the brief to define an identifiable urban form. … The scale of the ensemble was modelled in terms of being seen from a distance: The seven blocks are joined by an unobstructed horizontal denoting the vertical dimension, its image at ground level and a base, which acts as a façade for the car parks.

As I have attempted to argue elsewhere, the theme of the megaform as a large-scale bracketing device landmark reoccurs from time to time as a catalytic form throughout the last century, for the first time, perhaps, in Hans Poelzig's House of Friendship Competition of 1917 (Istanbul), while a similar impulse but with a quite different form is detectable in Le Corbusier's Plan Obus of 1930 (Algiers) and again in much of the work of Erich Mendelsohn, such as the Alexanderplatz in Berlin. As should be self-evident in all cases, it is not just a matter of form but also a matter of content.

As with Ciriani's Barreà Marne, the L'Illa block, completed on the Avenida Diagonal in Barcelona in 1997 to the designs of Rafael Moneo and the urbanist Manuel de Sola Morales, was also conceived to be seen from a distance. Like the Botta/Snozzi proposal for Perugia, this may be regarded as an exemplary megaform in a number of ways; first because it is carefully modulated in both height and plan-form, stepping up asymmetrically at the ends to close the composition and setting back towards the middle of the block in plan in order to afford a wider sidewalk; second, because apart from the black revetment used on the ground floor, it is covered in a light stone, making it feel much like the face of a cliff and, finally, because of the way in which it employs the same Loosian, pierced fenestration throughout. This last stems from it being a mixed-use commercial development, the fenestration being treated in such a way as to allow for virtually any usage within the façade depending on the play of the market, irrespective of whether it happens to be a hotel, offices or apartments. In that sense, it may be characterized as a loft structure suspended above a continuous shopping galleria on its lower three floors, an interior volume which also rises and falls in height throughout the length of the development. Beneath this galleria, there are multiple parking levels so that the building makes itself available to two different classes of user at two different moments, so to speak, in the evolution of urban form; that is to say in the first instance to people coming from the *metropolis* of Cerdá's nineteenth-century gridded expansion of medieval Barcelona, and in the second to a population flooding in from the rather chaotic *megalopolis* of the inner suburbs surrounding Cerdá's *ensanche*. This varying consumer catchment finds its parallel in the double topographic reading of the structure, for while, on the one hand, it is in scale with the eight-storey fabric of the nineteenth-century city which it bounds almost as if it were a wall, it may also be read across a much broader landscape dimension, that is to say, its stepped horizontal form is legible at the scale of the suburban megalopolis as though it were a natural geological formation that it so happened marked the ground since time immemorial.

With the L'Illa block, we encounter the concept of the catalytic city in a more active sense, to the extent that it is inseparable from de Sola Morales's strategy of 'urban acupuncture'. Under this rubric, the critical designer brings to the spontaneous aggregation of contemporary urban form the possibility of intervening at a single meridian point in such a way as to release tensions and to engender new energy flows within the situation, not only in terms of the specific site but also with regard to future developments emanating from that site in ways which cannot be foreseen. De Sola Morales has applied this strategy in many different situations over the past decade, including the new town of Almere in the Netherlands on the North Sea, the old port and submarine base in Saint-Nazaire in France, and in a housing project designed for the town of Alcoy in Spain.

Perhaps one of the most dynamic of the hybrid *acupuncture* pieces by de Sola Morales is his 1996 proposal for a restructuring of a multi-modal transport interchange in the centre of Louvain in Belgium. Of this project that is still being realized he has written:

Louvain is not a large city, but every day thousands of students and professionals pass through its station on their way to other parts of the country. A system of circulation that connects commuter trains with all-day parking lots and bus services, and an access for pedestrians that integrates the square in the historic centre with the heavy underground traffic, can perhaps be handled without much being visible from the outside. … Louvain is a city characterized by its medieval and Renaissance institutions (the university, the city hall, the cathedral and the abbeys), where splendid power has faded into a suburban and conservative outlook, something that finds expression in monuments undergoing restoration and in detached houses with gardens. … The station is about half an hour by train from that of Brussels. It is true that the convenience of such proximity loses its advantage owing to the incredible state of neglect into which railroad infrastructure of Europe's capital (Brussels) has been allowed to fall. Today, the adaptation of the network to

handle the TGV and the sheer scale of suburban commuting require new changes to be made, changes for which imagination is just as necessary as application. … I'm interested in proposing a complex project as a synthesis of different intentions in a succinct urban form, and making sure that this brings clarity and a sense of well being to situations that would otherwise only cause inconvenience. The easy flow of traffic – whether that of people or vehicles – and its simple and immediate introduction into the city are intended to be the project's central theme, while forms of the city and its use, not the forms of the buildings themselves – are supposed to be the real protagonists.

With de Sola Morales's work at Louvain, my argument comes full circle, that is to say, it comes back to the general ecological and cultural predicament posed by the megalopolis. This fundamental challenge can perhaps be best formulated in the following terms: given the schematic, not to say fictive character of master planning and the relatively unspecific prescriptions of zoning codes, what can planners and urban designers literally achieve today in terms of effective critical interventions?

One may begin to respond to this challenging question by claiming that there are certain late-modern building types and/or programmes that lend themselves in particularly powerful ways to being cast in the form of catalytic cities; that is to say, they may be rendered as 'cities in miniature' at various scales. Mixed-use commercial development, as in the L'Illa block, is surely a case in point, as are shopping malls in general, of all shapes and sizes, particularly when they are combined with other, more civic, uses such as sports facilities. As we have already seen, universities, government offices and transport interchanges may be readily brought to constitute the substance of a megaform, irrespective of whether it is overtly visible or not, together with the concomitant interstitial civic space that is so essential to the provision of urbanity within the placeless domain of the megalopolis; on the one hand a landmark or landform, or on the other hand a city in miniature.

Beyond this, one is compelled to acknowledge, particularly with regard to the North American continent, that the megalopolis is already built and that, for the foreseeable future, little of its fabric is likely to be reconstructed. We must in fact recognize that not much can be done to retrieve the wasteland of suburban sprawl, save the introduction of public transport where feasible and topographic interventions of various kinds and dimensions. In part, this prescription returns us to the strategic importance of high-speed rail as an efficient ecological means of inter-urban transit, along with the revival of the tram, today known as light rail, for intra-city circulation. At the same time, there also remains the critically creative potential of landscape per se, in all its ramifications as possibly the agent with which we may be able to transform, or at least to mediate, extensive areas of regionally urbanized land. For historical reasons, this topographic/ecological potential is perhaps more seriously cultivated in the Netherlands than it is elsewhere, and in this respect I would like to draw your attention to the recent work of the West 8 design team under the direction of Adrian Geuze, above all, their recent transformation of the 8 km Oosterschelde dam on the North Sea through the use of mussel shells, along with their implantation of Schiphol airport with birch trees wherever there is unpaved space. In this last instance, clover cover is introduced as an organic fertilizer, along with hives of bees to propagate the clover and thus complete the ecosystem. At Oosterschelde, where large stretches of construction waste left behind after building the dam had to be cleaned up, they bulldozed the waste into a series of plateaus, adjacent to a sea-wall autoroute, subsequently covering this instant parterre with waste mussel shells, alternating white and black in large abstract swathes, with the white areas serving as nesting grounds for sea birds.

By now, I have departed from my ostensible theme of the catalytic city to refer instead to the catalytic landscape, although the two, as I have already attempted to indicate, are unavoidably interconnected. At the same time, where the traditional dense city still prevails as a vital urban environment, the fundamental challenge is somewhat different, although here, too, landscape may have a crucial role to play in refurbishing and resemanticizing urban space, particularly in face of its perennial infiltration by the automobile. One thinks, for example, of the recent transformation of a series of open spaces on the Presqu'île in the centre of Lyons (France) by various teams led by Alexander Chemetov, Michel Desvigne, Michel Bourne and Alain Sarfati.

While much of the urban crisis to which I have alluded applies with particular force to the United States, where the phenomenon of the megalopolis was first identified, automotive urbanization has become an environmental predicament to a greater or lesser degree more or less everywhere. In the United Kingdom, social control over the quality of the urban environment has greatly deteriorated over the past forty years. The British government's Urban Task Force Report, published in 1999, reveals a number of disturbing trends as far as urbanization is concerned, including the prediction that car traffic is scheduled to grow by a third in the next twenty years and that the average commuting time today is already 40% higher than it was twenty years ago, not to mention the accompanying statistic that 1.3 million urban buildings currently stand vacant and that unemployment is highest in inner city areas. While the current national policy is to accommodate on previously developed land some 60% of the 3 million new households that will be required in the next twenty years, it is obvious that this target will prove to be unattainable if certain regulatory measures are not passed into law, such as severe restrictions on the release of greenfield sites for future development, combined with a mandatory increase in current developmental densities in order that a full range of social services may be provided in close proximity to dwellings. The Task Force report goes on to stress the need for a fully funded state public transport policy

together with the selective taxation of automotive commuters. On top of this, it calls for the establishment of national priorities and resources with regard to site acquisition, land decontamination and the essential regeneration of existing urban stock. As all such provisions are of a social democratic, not to say socialist, nature and are expressly intended to moderate market forces, there is little likelihood of their equivalent being adopted in the USA in the foreseeable future, despite the fact that Parris Glendening recently ran successfully for the governorship of Maryland on a so-called 'smart growth' ticket and has so far continued to pursue something of a sustainable environmental policy with regard to the future development of the state. To this end he has introduced a series of financial incentives aimed at persuading individuals and companies to return to downtown areas, while at the same time sponsoring brownfield decontamination and the preservation of existing farmland. We may even argue, in the light of the Task Force Report, that, on paper at least, Maryland is somewhat ahead of the UK with regard to its environmental policy. Be this as it may, it is clear that as far as overall sustainable strategies are concerned Continental Europe, particularly Scandinavia, the Netherlands, Germany and France, is still ahead of the Anglo-American world.

Where, we may well ask, does all this leave us, not only with regard to the future of the profession but also with regard to the future of architectural education? Apart from the environmental prognosis embodied in the Urban Task Force Report, I would like to advance the case that landscape in the broadest sense of the term and piecemeal urban design should both be given a high priority in any reformulation of architectural education in relation to contemporary practice. In my view, we need to adopt a self-consciously critical interventionist attitude towards the miasma of the megalopolis, irrespective of any environmental legislation that may or may not be brought to bear on the problem over the long term. While there is a limit to what may be achieved by any one individual designer or design brief, it is equally clear that each intervention ought to be oriented towards some kind of catalytic critique of the status quo. For this reason, having briefly passed over a series of more normative land settlement models, such as those prescribed by Chermayeff and Alexander or by the Austrian architect Roland Rainer, I have devoted a considerable part of this presentation to the catalytic potential of the megaform or urban piece, that is to say, to its double critical capacity, to serve on the one hand as a topographic landmark within the placelessness of the megalopolis and, on the other, to embody within its programmatic matrix an urbanity which is otherwise largely absent from the space-endlessness of the urbanized region. None of this should preclude adopting more specifically nuanced responses to the renewal of existing traditional urban fabric, nor for that matter the application of reparatory interventions that are thought out and executed in exclusively landscape terms. On the contrary, all these different interventionist approaches ought to be seen as part of a continuous environmental spectrum that may rise and fall in face of the megalopolis according to the situation. What we really need in the end is a different level and intensity of focused engagement capable of transforming the immediate reality as found, rather than the endless over-reaching of master-planning the adoption of unduly aestheticized strategies with regard to the future of urban form.

Hospicio Cabañas, Guadalajara, Mexico (C i, ii, iii, iv);

inscribed in 1997

Source: Nomination file

The Hospicio Cabañas was built at the beginning of the 19th century to provide care and shelter for the disadvantaged - orphans, old people, the handicapped and chronic invalids. This remarkable complex, which incorporates several unusual features designed specifically to meet the needs of its occupants, was unique for its time. It is also notable for the harmonious relationship between the open and built spaces, the simplicity of its design, and its size. In the early 20th century, the chapel was decorated with a superb series of murals, now considered some of the masterpieces of Mexican art. They are the work of José Clemente Orozco, one of the greatest Mexican muralists of the period.

The Committee decided to inscribe this property on the basis of criteria (i), (ii), (iii) and (iv), considering that the Hospicio Cabañas is a unique architectural complex, designed to respond to social and economic requirements for housing the sick, the aged, the young, and the needy, which provides an outstanding solution of great subtlety and humanity. It also houses one of the acknowledged masterpieces of mural art. (21st Committee session)

8

The preservation of nineteenth- and twentieth-century heritage

by Fabio Grementieri

The following contribution attempts to address some issues regarding the preservation of 'modern heritage' as seen from the perspective of a country where the most important heritage belongs to the nineteenth and twentieth centuries and from a city whose imagery in music, literature and architecture was shaped between 1880 and 1970.

Heritage at high risk

In 1998 Argentina lost the integrity of a proto-modern international landmark and the authenticity of a world masterpiece of 'Brutalism'. The first victim was the 'Bunge y Born' grain elevator located in Buenos Aires port and built in 1904. Demolished by the city authorities to make way for a housing project, the building was much more than an icon admired by Modern Movement masters such as Gropius and Le Corbusier, or art theorists such as Wölfflin. Its significance also surpassed the technical value of being the lost link of the building-type evolutionary chain linking traditional brick grain elevators to modern reinforced concrete structures. Its great symbolic value for a country that was once called the 'granary of the world' was yet another qualification. Designed and built by a German engineer, the Bunge y Born grain elevator was not an important manifestation of the 'Americanismus' that fascinated the European architectural avant-garde but, instead, a masterpiece of the Deutscher Werkbund overseas, one of the brightest incarnations of modern German design ideals before the First World War.

The second victim was the internationally known Banco de Londres. This exceptional work was designed in 1959 and inaugurated in 1966. Innovative in many aspects, from formal and spatial to constructive and technical, the complex structural design anticipated the use of computers very early in the history of architecture. A bright combination of Brutalism, organics and metabolism, assembling a prefiguration of hi-tech products, the building was perfectly executed and masterfully implanted in the existing urban environment. Largely defined as a masterpiece of Brutalism and as a turning point in the development of bank architecture, it was widely recognized as a landmark of Latin American architecture, but also considered one of the most original buildings of the 1960s and praised among the best architecture of the second half of the twentieth century. Despite all these values and its excellent state of conservation, uncontrolled and aggressive renovation mutilated and disfigured the building, affecting its integrity and authenticity seriously and irreversibly.

Although not listed at local and national levels, both the Bunge & Born grain elevator and the Banco de Londres were the most important Argentine candidates to be registered on the World Heritage List as part of the legacy of the Modern Movement. In terms of appreciation and preservation of modern heritage, these unfortunate cases could be seen as the exception to the rule, but according to recent inventories of modern heritage, the field is filled with more exceptions than rules.

Selectivity: historiography and assessment of values

The Western world

The cases described above show, *in extremis*, the problems of appreciation and preservation that modern heritage faces. There are fundamental questions relating to the identification of the values and significance that those pieces have by themselves or as part of an ensemble, or as clusters of a network portraying the emergence, development and expansion of modernity. This crucial issue of appreciation primarily follows art and architecture historiography and criticism. In the case of the nineteenth and twentieth centuries, the main discourses of these disciplines have focused their work on those trends and examples that had, evidently or apparently, paved the path of progress and innovation.

Despite the reactions of the last quarter of the twentieth century, much of the identification and appreciation of modern heritage worldwide still relies on the 'big chronicles' founded by strong supporters of the Modern Movement such as Nikolaus Pevsner or Sigfried Giedion.[1]

These sagas, that selectively dug into the nineteenth century also, were further developed and enlarged by Bruno Zevi, Leonardo Benevolo, Reyner Banham and Kenneth Frampton[2], strengthening different dimensions such as space, urbanity, technology or regionalism. Some other authors, such as Henry-Russell Hitchcock, insisted on broader readings that better connect the nineteenth to the twentieth century and assess both innovation and tradition, but they are primarily focused on both sides of the North Atlantic.[3] Scholarly attentive interest on modernity exchanges have remained concentrated in those geographical areas as shown by the latest studies and projects such as 'Scenes of the World to Come' directed by Jean-Louis Cohen.[4] The analysis of other exchanges, often described as influences, impositions or adaptations of central models, emerged in the last two decades and cope with the concepts of imperialism or colonialism. Their interest also relies on the continuities they discovered throughout the nineteenth and twentieth centuries, much less selective than those of official modern historiography.

1. Nikolaus Pevsner, *Pioneers of Modern Design, from William Morris to Walter Gropius,* London, Faber and Faber, 1936; Sigfried Giedion, *Space, Time and Architecture: The Growth of a New Tradition,* Cambridge, Mass., Harvard University Press, 1941.
2. Bruno Zevi, *Storia della architettura moderna,* Turin, Einaudi, 1950; Leonardo Benevolo, *Storia della architettura moderna*, Bari, Laterza, 1960; Reyner Banham, *Theory and Design in the First Machine Age;* London/New York, Architectural Press/Praeger, 1960; Kenneth Frampton, *Modern Architecture: A Critical History,* London, Thames & Hudson, 1980.
3. Henry-Russell Hitchcock, *Modern Architecture: Romanticism and Reintegration,* London, Payson and Clarke, 1929.
4. Jean-Louis Cohen, *Scenes of the World to Come,* Paris, Flammarion, 1995.

The prejudicious attitude towards tradition developed by modern historiography started to fade in the second half of the twentieth century, coinciding with a second phase of the Modern Movement. The emergence of post-modernism saw a more inclusive vision of the twentieth century with controversial stylistic classifications by authors such as Charles Jencks,[5] transgressive appreciations of reactionary traditions in the hands of Léon Krier,[6] or integrations such as the project on German architecture of the first half of the twentieth century led by Vittorio Magnago Lampugnani[7] or the vision of Ákos Moravánsky on Central Europe in the same period.[8] Finally, attention to Art Deco heritage started in the 1970s, parallel with the consecration of objects of this style as valuable antiques, with the United States and France as specialized centres.

The assessment of the second half of the twentieth century poses similar problems as those described for the period before the Second World War. The internationalization and massification of modernity between 1950 and 1975 and its many different trends are being thoroughly investigated[9] Many different works have already been consecrated, either as part of Modern Movement continuities or late creations of the masters and their descendants, and instantly acclaimed urban achievements such as Brasilia or Chandigarh. The eruption of post-modernism and contemporary eclecticism is still under analysis, and a definitive appreciation will need some more detachment, although the acceleration of history and the subsequent succession of changes increase the perspective.

The situation in the nineteenth century appears as conflictive and complex as that of the twentieth century but it has been less investigated and is much more contradictory. The century of the *bal masqué* has long been dismissed and deprecated, in part for the lack of consideration by contemporary theorists and critics, incapable of defining its style, but primarily for the sectarian approaches of modern historians such as Pevsner or Giedion. In their vision the only valuable nineteenth-century architecture was that which was capable of engendering works that were recognized as steps towards the definition of the architecture of the Modern Movement. These footprints were revisited, enlarged and complemented with further analysis by their successors, Zevi, Benevolo, Banham, who examined urban developments of the second half of the century or started to explore the role of academicism and the Beaux-Arts system.

The situation started to change after the Second World War with the careful rereadings of Henry-Russell Hitchcock,[10] devoted more to Anglo-American production than to continental Europe and with little appreciation of the Beaux Arts, but with a formidable diffusion in many countries. By that time, Nikolaus Pevsner also revised his earlier posture and faced the artistic inventory of Victorian and Edwardian architecture of the United Kingdom, encouraging younger generations to start the study of British colonial architecture.[11] In the late 1950s an interest in Art Nouveau also arose. First revisited in connection with the controversial emergence of the reactionary 'neo-liberty', seen as another Italian treachery to the modern tradition, studies on the different expressions of this trend flourished through the 1960s and 1970s and the importance of the Belgian and Viennese in relation to the Modern Movement was exalted. As a result most of the Art Nouveau heritage was consecrated in the 1980s.

It now appears evident that the definitive rediscovery of the nineteenth century started after the fall of the École des Beaux Arts in 1968 and would be closely associated with the emergence of post-modernism. The grand exhibition 'The Architecture of the École des Beaux Arts' at the Museum of Modern Art in New York in 1977[12] was certainly a turning point and encouraged scholars to investigate and evaluate many different aspects of academicism, historicism, eclecticism and the role of tradition in the evolution of architectural culture during the nineteenth and twentieth centuries. In North America the challenge was immediately accepted and in Europe many scholars allocated resources to analyse the contradictory century, resulting in an important array of studies that cover many countries and trends, even many peripheries. As a result, clever syntheses, such as those of Robin Middleton and David Watkin[13] or François Loyer,[14] nourished a broader appreciation of the nineteenth century but always concentrated on both sides of the North Atlantic. The Manichean dissociation between avant-garde and tradition or architecture and engineering was finally surpassed and the American attitude of integration permeated European historiographic fundamentalism.

The climax appeared to crystallize in the cultural operation of the Musée d'Orsay. This French project finally presented and communicated the artistic production of an important part of the nineteenth century as an integrated ensemble where 'pompiers' and 'impressionists' supported each other and built the cultural heritage of the period together. The 1980s also saw the rise of cultural studies focusing on different key events or centres in the history of modernity and its contradictory expressions, as presented by studies following the seminal contribution of Karl Schorske.[15]

5. Charles Jencks, *Modern Movements in Architecture,* London, Pelican Books, 1973.
6. Léon Krier, *Albert Speer, Architecture,* Brussels, Archives d'Architecture Moderne, 1985; *idem, Architecture, choix ou fatalité,* Paris, IFA-Norma, 1996.
7. Vittorio Magnago Lampugnani and Romana Schneider, *Moderne Architektur in Deutschland,* Stuttgart, Verlag Gerd Hatje, 1994.
8. Ákos Moravánsky, *Die Erneurung der Baukunst – Wege zur Moderne in Mitteleuropa 1900–1940,* Vienna, Residenz Verlag, 1988.
9. Joan Ockman, *Architecture Culture 1943–1968,* New York, Rizzoli (Columbia Books of Architecture), 1993.
10. Henry-Russell Hitchcock, *Architecture: Nineteenth and Twentieth Centuries,* Harmondsworth, UK, Penguin Books, 1958.
11. Robert Grant Irving, *Indian Summer; Lutyens, Baker and Imperial Delhi,* London, Yale University Press, 1981.
12. Arthur Drexler, Richard Chaffee, David Van Zanten and Neil Levine, *The Architecture of the École des Beaux Arts,* New York, Museum of Modern Art, 1977.
13. Robin Middleton and David Watkin, *Neoclassical and Nineteenth-Century Architecture,* New York, Rizzoli, 1980.
14. François Loyer, *Le Siècle de l'Industrie,* Paris, Skira, 1983.
15. Karl Schorske, *Vienna fin de siècle,* New York, Alfred K. Knopf, 1961.

There was an evident concentration of attention on the key period around 1900, which appeared as a crossroads in many issues aesthetic, social, technological and others. Several continuities in the course of the two centuries were discovered or reconfirmed, and new approaches to the consideration of centre and periphery beyond colonialism or imperialism were investigated. This enlargement of focus and multiplication of visions enriched the appreciation of both nineteenth and twentieth centuries and many major exhibitions helped to diffuse the new approaches.[16] Further developments appeared in the 1990s with original rereadings that tried to capture the identity and continuity of architectural and urbanistic cultures infringing canonic boundaries.[17] Finally, from the 1980s onwards, the assessment of the importance of regionalism assumed by contemporary critique, that also influenced the study of the phenomenon throughout the twentieth century, permeated into the consideration of these kinds of expression in the nineteenth century, as shown in several books and exhibitions.[18]

Latin America

In the consideration and appreciation of the heritage of the nineteenth and twentieth centuries, Latin America in general, and Argentina in particular, followed the path determined by the Western discourses of history and critique. The region had to deal with some important manifestations typical of its own culture, such as that of the 'colonial revival' of the first part of the twentieth century. But it also had to process and assimilate the transferences and transpositions coming from the impact of modernity.

In 1960 Nikolaus Pevsner, after a visit to Argentina, said: 'I cannot help being branded as a nineteenth-century man, and for South America architecture is, of course, one of four things: pre-Columbian, colonial, very recent, or nineteenth century. The nineteenth century is of the four the least explored in Europe also. One can say that it is also the least deserving, but that is neither here nor there ...'.[19]

Pevsner's simplistic categorization of Latin American architectural culture is still useful as an outline. All four periods contain a strong variety of trends and particularities, but the questions of historiography and appreciation quite defined the features for each period. The pre-Columbian period was the first studied and its heritage the first consecrated, although its investigation is far from being complete and research is an ongoing activity. The colonial period only started to attract attention around 1900, in connection with the emergence of neocolonial or colonial revival. The recognition and protection of its heritage was an almost simultaneous campaign. Throughout the twentieth century this period was revised from different points of view, most of them Latin American[20] and some European, Spanish and German mainly, or scholars from the United States.[21] The investigation of the colonial era now appears as the most complete of all four periods, and after its final distinction from European Baroque in the 1970s, the assessment of the values of its art, architecture and urbanism is an accomplished fact. As a consequence, the appreciation of the originality and importance of this heritage was universally recognized, as the inclusion of several monuments and sites in the World Heritage List confirms.

The case of the other two periods is quite different. As in the Western situation, the twentieth century received the first attention and appreciation. This reflected in part the European equation, but there were local factors. Depending on the region, the nineteenth century had not left important traces, appeared very late or permeated into several decades of the twentieth century. For the Americas, the First World War was not the strong break that it was for Europe, although the 1929 crash or the Second World War would certainly be.

In Latin America, modernity was not felt as intensively, as vitally and broadly as in Europe, where the weight of tradition and the socio-political evolution defined much of its strength. Far from the context of Europe, and also from that of the United States, there was not a powerful historiographic elite; modern pioneering did not emerge in the hands of technique and academicism did not challenge the avant-garde, but generally supported them. And in many parts literature, instead of art, was closer to architecture in the definition of the new spirit of the age. The neocolonial movement, a true Ibero-American expressionism, with strong manifestations also in the United States, imposed an important renovation and many of its leading figures would be crusaders of modernity, as in the case of Lucio Costa in Brazil.

The modern architecture of the 1930s in Latin America was seen then, and is still too much considered, as a reflection of that of Europe or the United States and not as creative or compromised as that of the centres of modernity, where the rupture with tradition was seen as truly characteristic. Appreciation of Latin American modernity emerged in the late 1930s at the time of the withdrawal of the avant-garde from Europe, due to the political situation and the economic depression, the reinforcement of academicism and the stylization of modernism. Brazil appeared as the inventive and invigorating reservoir of

16. Jean Clair, *Vienne 1880–1938: L'apocalypse joyeuse,* Paris, Catalogue de l'exposition, Editions du Centre Pompidou, 1986/Catalogues of Pompidou Centre Exhibitions: *Paris-New York,* 1977; *Paris-Berlin,* 1978; *Paris-Moscou,* 1979; *Paris-Paris,* 1980.
17. Hermann Fillitz and Werner Telesko, *Der traum Vom Gluck,* Die Kunst des Historismus in Europa, Exhibition Catalogue, Vienna, Kunstlerhaus Wien/Akademie der Bildenden Künste, 1996; Ákos Moravánsky, *Competing Visions: Aesthetic Invention and Social Imagination in Central European Architecture,* 1867–1918, Cambridge, Mass./London, MIT Press, 1998; Eve Blau and Monika Platzer (eds.), *Shaping the Great City Modern Architecture in Central Europe,* Munich, Prestel Verlag, 1999.
18. Jean-Claude Vigato, *L'architecture régionaliste: France 1890–1950,* Paris, Norma, 1994.
19. Nikolaus Pevsner, 'Argentinian Edwardian in Cordoba', *The Listener,* December 1960.
20. Diego Angulo Iñiguez, Marco Dorta and Mario Buschiazzo, *Historia del Arte Hispanoamericano,* 3 vol., Barcelona, Salvat, 1945–1956.
21. Pal Kelemen, *Baroque and Rococo in Latin America,* New York, Macmillan, 1951.

modernity and remained a primary reference on the international stage for a decade, until the veteran masters relaunched their careers. The Brazilian architecture of the period was celebrated by big names such as Sigfried Giedion and Henry-Russell Hitchcock and consecrated by modern historiography. The coherent and sustainable development of Brazilian modernism for more than three decades permitted it to reach the heights of Brasilia, also consecrated before being built, by just following the tradition of the icons of modernity.

By the mid-twentieth century, other centres in Latin America exhibited important and autonomous developments in their architectural culture, as in Mexico, Venezuela and Argentina. The first two cases were consecrated internationally and assimilated in the international 'chronicles' of different generations of architectural historians.[22] Mexico by means of the assimilation of pre-Columbian essences and the extraordinary phenomenon of muralism; Venezuela for the outstanding case of the Ciudad Universitaria of Caracas. The Argentine case was relegated for being too eclectic and excessively cosmopolitan and lacking the originality expected from peripheries.

The Latin-American twentieth century started to be revisited and revised by local historiography in the early 1980s, coinciding with the emergence of post-modernism, but also encouraged by the diffusion of 'critical regionalism'. This renovated approach coexisted with several new summaries issuing from orthodox historiography that were enrolled in the defence of regional identity, an attitude that followed the path inaugurated by those pioneer Latin-American scholars of the first thirty years of the century and that enhanced both the colonial past and the colonial revival achievements. This lively orthodoxy produced innumerable sagas grouping periods and regions or inserting the twentieth century in comprehensive overviews.[23] It is interesting to note how balanced these presentations are compared with European studies, where Modern Movement reflections, academicism, neocolonial and Art Deco are always associated with expressions of modernity and occupying similar places on the stage. The renovated approach or heterodoxy, influenced by Western trends, re-evaluated the canonic sequences, works and figures through new and diverse lenses. And they started to reconsider the dichotomy between innovation and tradition, both as a universal phenomenon but also within the particularities and complexities arising from cross-readings nourished by the assessment of regionalism and peripheries. The first and most important group appeared in Argentina under the guidance of Jorge Francisco Liernur. Still very active and disseminating the trend in diverse parts of the region, with another important pole in Brazil, it has antecedents in the patient and humble work of a small group in Cordoba led by Marina Waisman. The examination of the second half of the twentieth century followed similar patterns as those of Western approaches, with particular attention to discourses and architectural culture. But very little work of these groups was considered in exploring the connections and continuities between the nineteenth and twentieth centuries or for the reassessment of the 1900 crossroads. There were few attempts to analyse modernity exchanges between both sides of the Atlantic or among the American regions and countries.

Forty years after Pevsner's remarks, the Latin-American nineteenth century is still the most unexplored and certainly least-recognized period. Identified with the efforts of independence and attempts to organize postcolonial societies, this era was heterogeneously distributed and it invaded part of the twentieth century. It was most significant in the case of countries such as Argentina, which shaped a good part of its identity in the last third of the nineteenth century.

For this century the stereotypes as cast in the European way, or the iconoclastic view as shaped by the United States, do not apply to the Latin-American case. The nineteenth century long suffered from prejudices derived from aesthetic or moral questionings. It was dismissed by regional historiography pioneers for having broken the Hispanic cultural continuity. Younger generations of historians reluctantly agreed to study the period for it appeared an even falser masquerade than Pevsner's European *bal masqué*. Latin America copied in that period what Europe copied from its own past: an unsustainable vice. If they became involved in its analysis, as in the case of Argentina,[24] it was because it produced an important amount of work or shaped a good part of the country's cityscape and cultural landscape. The 1970s saw an additional dismissal in the approach to the nineteenth century and part of the twentieth. Tinted by the ideological spirit of the moment, the built culture of the period was seen as the expression of the economic, political or cultural imperialism of Europe, as well as of the United States. Post-modernism helped in reconsidering, but the effect was not to be compared with the phenomenon occurring on both sides of the North Atlantic. Increasing attention was paid to the period, but the studies were basically descriptive and the assessment of values lacks many of the tools that could only be provided by European scholarly works, then in progress. The present situation shows that much of the European background and input is available now, but also that the interest in better assessing the production of the nineteenth century is weaker than just a decade ago. This is evident in many cases and particularly important in Argentina, where the appreciation of the heritage of this period is a pending task.

22. Henry-Russell Hitchcock, *Latin American Architecture since* 1945, New York, Museum of Modern Art, 1955.
23. Ramón Gutiérrez, *Arquitectura y urbanismo en Iberoamérica,* Madrid, Cátedra, 1992.
24. Federico Ortiz, La arquitectura del liberalismo, Buenos Aires, Sudamericana, 1968.

Selection

'The architecture of today, for the first time since Baroque, possesses a style. But a style made of such a broad web that offers each region or country the chance, if it is capable, of speaking their own language ...' Sigfried Giedion in *Space, Time and Architecture ,1949*.

The programme to define international criteria for selection based on the World Heritage Convention, to establish strategies for better assessment and appreciation, and to design guidelines for conservation policies and techniques for the heritage of the nineteenth and twentieth centuries, will have to work on several questions.

Universality

Modernization, one of the phenomena to be appreciated, and its tangible manifestations to be consecrated as part of the world's heritage, implies a universality that contradicts the concept of exceptionality stated in the World Heritage selection criteria. The increased globalization in different fields and disciplines during those two centuries spread industrialization and democratization, uniformizing cultures and their expressions, affecting their so-called 'otherness' in many aspects and to different degrees.

Legitimacy

The consideration of the historiographic readings of both centuries, especially those from the fields of culture, art and architecture, appears as an important but still underdeveloped tool for the project. The dramatic loss of some important pieces of Argentine heritage as described above, and the short and incomplete summary of the state of studies on the architectural culture of both centuries in the Western world and Latin America, both show that part of the remaining modern heritage could still be affected by ignorance or incorrect assessment of values, also because of the existence of quite large 'losses' in the historiography of the period. Dealing with tangible and immovable heritage, there is a serious risk of assessing the appreciation of buildings and sites through the powerful strength of official modern historiography *raccontos* that transformed architecture into an autonomous discipline and its history into a sort of 'Darwinian' scheme of survival of the most original, and a 'biological' diagram of influences and transformations.

Heterogeneity

The discussion will need to define an array of visions for appreciation that take into consideration the multiple readings and networks that linked groups of testimonies in different regions and parts of the world; and from those 'sagas', defined by official historiography, to important trends as the precise and circumscribed Art Nouveau or the multifaceted and ample Art Deco. The discussion will need to include universal selections, such as those suggested by DOCOMOMO for the Modern Movement, or those defined for industrial heritage, which must be started for the diffusion of Beaux-Arts architecture as well. In relation to this last trend, it is well known that aesthetic prejudices still affect the appreciation of monuments, sites and ensembles of the Beaux Arts. Important landmarks representing major events of political history, nationally and internationally, are dismissed for their 'inappropriate' aesthetics, apparently very far from innovation. Among the many cases, there is the monument to Vittorio Emmanuelle II in Rome, celebrating the unification of Italy, which is as important as the Berlin Reichstag is for Germany, or the Opera in Paris for France, or the National Congress Palace in Buenos Aires for Argentina, or the Palacio de Bellas Artes in Mexico City. All these monuments could also be seen as major works of academicism, one of the most important artistic and architectural cultures of the nineteenth century, closely related to those positivist ideas of order and progress that ruled the period and intimately linked to the representation of new or refound national states. Several dismissed groups or pieces of nineteenth and twentieth centuries heritage would certainly receive a different interpretation, appreciation and protection if identified as part of larger groups or systems of international cultural heritage.

While aesthetic prejudices still affect the consideration of an important part of the heritage of the two centuries, on the other hand important pieces having significant and diverse aesthetic values are questioned for their political or cultural 'inappropriateness'. The case of New Delhi, the monumental embodiment of British colonial imperialism, may be a good example. Apart from an important urban experiment, a major piece of classicist revival typical of the early twentieth century and a most interesting attempt at architectural hybridization, the city is also an important precedent for later experiments, such as those of Chandigarh or Dhaka, integrating the restrained group of city capitals designed in the twentieth century. In many parts of Africa, Asia and Latin America, much of the urban and architectural heritage of the nineteenth and twentieth centuries still suffers from this type of 'discrimination', a crucial issue when values are to be assessed and preservation policies designed.

Inclusiveness

Universal value, heterogeneous developments and particular character are some of the concepts that orient selectivity of modern heritage. But inclusiveness is also an issue to be analysed. Trends and 'sagas', systems and networks can help to define the inventories and selections. But other built forms developed, redefined or created during the nineteenth and twentieth centuries are to be considered as well: interior design, landscape and urbanism. This last discipline could help to select in the case of the definition of a series of new cities and put aside not only Brasilia and Chandigarh, or Tel Aviv and Sabaudia, but also New Delhi, Pretoria, Canberra, Asmara and Dhaka. But it also poses difficulties when dealing with new architecture within the existing built environment and building codes, as is the case with the versatile and masterly implanted modernity of Bucharest or Buenos Aires. There is also the problem of assessing successful mixes of tradition and innovation in modern quarters of Casablanca or Damascus. In the case

of industrial design, important dilemmas appear in connection with the intrinsic reproducible and movable properties and the consecration of prototypes and designs as part of the heritage of the period. In the case of civil engineering, the identification, appreciation and protection of infrastructure systems need a particular approach. Building types, a classification broadly enlarged in the course of the two centuries, also offer a possible cataloguing technique.

Representativity

The fact remains that very few countries and cities recognize their roots and identity through tangible testimonies of the nineteenth and twentieth centuries. Beyond or infringing all divisions based on artistic criteria, ideological matters arising around colonialism, imperialism and totalitarianism still affect the consideration and appreciation of much of the built culture in different parts of the world. The question surpasses Africa, Asia or Latin America and is also installed in Europe. Prejudices still affect nazist, Stalinist or fascist built cultures and heritage, even in the case of pieces that would serve as important testimonies of the dialectic and characteristic battle between tradition and innovation. The subject curiously impregnates the appreciation of late-modern architecture in Eastern Europe, as shown by the case of the Alexanderplatz in Berlin. This important architectural and urban experiment and response to the reshaping of West Berlin was to be razed to make way for a post-modern development of the era of globalization. In contrast, the Hansa Viertel, but also the Stalin Allée, was listed.

Integrity and authenticity

Integrity and authenticity, two fundamental principles for modern preservation theory and important tools for selection purposes, pose diverse challenges for nineteenth- and twentieth-century heritage.

At first glance the most complex problems appear to be those affecting most of the production of the orthodoxy of the Modern Movement, whose intrinsic transitional and experimental construction implies poor ageing and accelerated deterioration. In this case integrity and authenticity gave way to an ample and unfinished debate that handles categories of idea, space and form or materials in different ways, detaching it from criteria that are applied to heritage of previous periods. But the recognition of different modern built cultures has shown that the fragility of Dutch modern buildings, or Le Corbusier's villas of the 1920s, or Tel Aviv's urban tissue, is not always the rule. Stone-faced rationalism in Italy or terra-cotta clad Art Deco in the United States or simil-stone stucco modernity in Argentina mean that the criteria of integrity and authenticity can be applied closer to ancient times. These criteria also apply to those testimonies belonging to the enlargement of the concept of twentieth-century heritage that includes traditional trends and styles mastered by academicism. In some cases it is acceptable to direct the preservation of Brutalism materiality.

In assessments of recent years, when Western and Eastern heritage preservation traditions have been compared, integrity and authenticity were to be coherent with the identities and the nature of different cultures, regions or civilizations. In the case of orthodox modernism, recent interventions show that an attempt was made to adapt these criteria to the history and conditions of each particular monument: from archaeological conservation at the Maison de Verre of Pierre Chareau in Paris or historic preservation of the De la Warr Pavilion by Erich Mendelsohn and Serge Chermayeff at Bexhill-on-sea, to differently inspired reconstructions of Mendelsohn's Einsteinturm (tower) in Potsdam or Mies van der Rohe's Pavilion for the Barcelona International Exposition of 1929. Beyond these particularities, reversibility still applies to modern heritage, although replacements and reconstructions are largely performed to save or rescue many pieces. Other matters, such as adaptive reuse of modern heritage, pose difficulties in maintaining contrast or indicate precise differentiation among existing structures and harmonic additional parts. These types of intervention prove to be more difficult than redesign projects for architectural heritage of earlier periods.

The nineteenth century and the 1900 crossroads need specific analysis and discussion. The fragile, experimental and hybrid materiality of Art Nouveau and the Beaux-Arts International Style of the turn of the century need to be studied in all their complexity and contradiction. Academicism, in the role of decoration in the shaping of space and the aesthetic appreciation of the work, and the problem of conservation or restoration of immense ornamented surfaces, in interiors but also on exteriors, are matters for discussion. The period also poses the challenge of preserving the integrity and authenticity of the different technological layers in the construction of many buildings where tradition and innovation overlap, but are not fundamental in the formal expression of the work. To face this problem, the approach that guides the appreciation and conservation of ancient heritage, where structures of different periods overlap, could be useful.

The need to preserve the integrity and authenticity of the environment of monuments and sites is an established dogma for heritage of all periods. But in the case of the larger part of the twentieth century, and a good part of the nineteenth century, many buildings or ensembles need to preserve their physical context as close as possible to the time of construction. The aim should be to keep the contrasts and conflicts with the existing urban or rural surroundings that the building or ensemble originally showed.

From the point of view of interpretation (conceptual, visual or educational), a considerable part of the cultural significance of modernity is easily assimilated in comparison with tradition. And in this sense the preservation of testimonies of ancient or contemporary conservative buildings and sites that could serve as references is to be considered. This should not be the case only for innovative pieces and their

traditional surroundings, such as Loos' Goldman and Salatsch building on Michaeler Platz in Vienna, but also for geographically distant but closely interactive pieces such as the Société des Nations Headquarters in Geneva or the United Nations in New York. These cases show that integrity of both urban contexts and heritage 'sagas' or 'systems' emerge as important tools for public interpretation and appreciation.

The integrity of modern heritage also has to be considered in relation to the preservation of documents and drawings. Compared with the heritage of previous periods, the twentieth century has the largest amount of documents relating to its architectural and urban production. But this quantity, so useful to support preservation actions, also faces great conservation problems derived from the enormous amount of documents to be processed and the fragility of the material used. Plans, drawings, pictures and photographs present serious conservation problems that need specific concern and policies.

Conclusion: nineteenth and twentieth-century heritage issues

The initiative of addressing nineteenth- and twentieth-century heritage as 'packages' to be studied and considered in relation to World Heritage criteria and international selection seems an innovative approach if compared with the treatment of the heritage of previous ages. They were generally investigated, appraised and protected first, at local and national levels, and then included in the World Heritage List. In contrast, the heritage of the nineteenth and twentieth centuries has not yet been fully investigated and is still not correctly appreciated or protected at national or local levels. It is important to send out warnings about those pieces which have not been completely studied or analysed for diverse reasons and which could quickly become very valuable heritage.

The comprehensive approach for modern heritage will have to reach an international consensus and deal with different challenges. Among these challenges are the definition of a clear argument for the whole 'collection' to be as representative and as inclusive as possible; or the individualization of trends, systems or cultures, representative of continuities, antagonisms or simultaneities; but also the definition of the criteria of integrity and authenticity adjustable to the material use and character of the buildings or sites. The full applicability of the Venice, Florence and Washington Charters has to be analysed. Apart from these challenges, there are risks to be avoided. This will appear within the identification of conceptual mainstreams to define the exceptionality of the selected pieces.

The strong predominance of 'canonic' historiography of modern architecture is to be considered but also surmounted, and other surveys and valuation tools incorporated. Built culture, its emergence and development in the local, national, regional or international contexts is to be considered as a testimony of the phenomenon of modernity, but not always fully expressed by innovation. The still reluctant recognition of the interaction and complementarity between the nineteenth and twentieth centuries is also to be surmounted and the heritage of the two centuries assessed as an integral project that can generate strategies and policies in common. Tools for mapping, classification and hierarchization are to be identified and historiographic 'sagas' or 'peerages' combined with trend or typological classifications and cross-checked with regional distribution schemes. Artistic, technical, political, social and cultural values are needed to help define landmarks, reflections and networks and precise preservation standards and categories.

Note that the World Heritage Centre project of shaping universal appraisal criteria and preservation strategies for nineteenth- and twentieth-century heritage should influence regional, national and local policies in the future. For this reason, definitions and recommendations need to be comprehensive for West and East, as well as North and South, and inspired by the spirit of the 'Dialogue of Civilizations' currently being organized under the auspices of UNESCO.

At the beginning of the twenty-first century, the appreciation and preservation of the recent past appears as an interesting alternative to better assess the values of globalization and diversity. The heritage of the nineteenth and twentieth centuries is but the most universal and diffused of the history of humanity and the communication of its values could help to build a better understanding among people of different parts of the world.

Museumsinsel (Museum Island), Berlin, Germany (C ii, iv);

inscribed in 1999

Source: Nomination file

The museum as a social phenomenon owes its origins to the Age of Enlightenment in the 18th century. The five museums on the Museumsinsel in Berlin, built between 1824 and 1930, are the realization of a visionary project and show the evolution of approaches to museum design over the course of the 20th century. Each museum was designed so as to establish an organic connection with the art it houses. The importance of the museum's collections - which trace the development of civilizations throughout the ages - is enhanced by the urban and architectural quality of the buildings.

Criterion (ii): The Berlin Museumsinsel is a unique ensemble of museum buildings which illustrates the evolution of modern museum design over more than a century.
Criterion (iv): The art museum is a social phenomenon that owes its origins to the Age of Enlightenment and its extension to all people to the French Revolution. The Museumsinsel is the most outstanding example of this concept given material form and a symbolic central urban setting.
(23rd Committee session)

9

The heritage of modernism in South Africa

by Derek Japha

This paper addresses the heritage of modernism in southern Africa, concentrating particularly on the case of South Africa. It consists of two sections. The first deals mainly with the questions of whether modern architecture in the region has been distinctively local in character, and therefore how easily or not it can be subsumed under Western categories defining the modern. The second, on urban planning, concentrates particularly on planning for apartheid, this being without question the most significant intervention by planners in South Africa in the twentieth century. There is a brief conclusion, addressing a few important local heritage issues. These have arisen mainly from the following circumstances, which also apply to many parts of sub-Saharan Africa.

Pre-colonial southern Africa was peopled mainly by agrarian societies with impermanent and non-monumental buildings, and with the homestead or the village as the basic units of settlement. With the exception of the southernmost centres of Afro-Arab culture in Mozambique and some sites now only of archaeological significance, such as those associated with the Mashona culture responsible for Great Zimbabwe, the surviving permanent architectural and urban heritage of the region is therefore entirely colonial or post-colonial.

Within this heritage, that which is classifiable as 'modern' is by far the most pervasive. Colonial development in southern Africa prior to the nineteenth century was extremely limited in scope, given that the regional population of colonists around 1800 was hardly more than 50,000 people. The nineteenth and twentieth centuries, therefore, produced almost the entire regional stock of permanent buildings and nearly all the urban settlements.

Naturally, not all of these can be categorized as modern; but most can, if the index of modernity is taken to be some connection to processes of societal modernization. From around the mid-nineteenth century, markers of this – such as the rapid growth of commerce and industry, the development of a transportation infrastructure and the availability of mass-produced building components – began to change the nature of an economy that was previously based almost entirely on agriculture and trade in natural resources. As the century progressed, and particularly after the discovery of gold and diamonds in the 1870s, the visible place of these activities in the landscape of South African settlement increased dramatically, as existing townscapes were reconfigured and extended and new towns developed. Very few surviving buildings in the region precede this period, or were unaffected by changes made during it.

Architecture

In the nineteenth century, the natural source of professional expertise was initially the colonial mother country. In the early part of that century, when the British replaced the Dutch as the colonial power, various technical reasons made it impossible for the new colonists to import and construct their building forms without modification. This resulted in a distinctive hybrid architecture, in which some British features such as joinery were superimposed on forms derived from the Cape Dutch tradition, which had by then been indigenized and no longer directly resembled Dutch or other European models. By the mid-century these technological limitations had ceased to apply. Thus, when the urban cultural landscapes of the country were transformed as the economy developed and diversified, the architects building the new banks, commercial buildings, railway stations, factories and public symbols of colonial power were much less limited than their equivalents of the previous generation had been.

For the most part they were recent immigrants, who brought to Africa the skills and concepts acquired in the course of a British training, sometimes honed elsewhere in the British colonial world. They exercised their profession within a culture of building – both indigenous and earlier colonial – that in the main they did not naturally tend to value or draw from; and they passed on their attitudes as well as their skills to the employees in their offices and also to the students who attended the first southern African courses in architecture, which were established around the beginning of the twentieth century. Thus, while some response to the different context was inevitably required, particularly to its climate and less sophisticated building industry, most of the earliest buildings reflecting emerging southern African modernity were not distinctively South African. They were either the typical artefacts of the British colonial world; or they were more decisively European in character, built in the various styles of late-nineteenth-century eclecticism – neo-Gothic for religious buildings and Classical for almost everything else.

These buildings were the first examples of one of the two competing impulses that have remained at play throughout the development of southern African modern architecture: to identify those forms and concepts from elsewhere thought to represent the sharp end of then current global practice, and to transfer these as literally as possible to the local context. This is not meant to imply a necessary lack of creativity or quality: it is rather that the quality of local work in this genre must be judged mainly by external comparison; and that innovation, where present, was made within the terms of the imported frame of reference, rather than by regional adaptation.

But while very common at every stage of South African architectural history between the mid-nineteenth century and the present day, this approach was not universal. While, without exception, architects in the region have been influenced from outside – first from Europe or the

British colonial world; then also from America; and now from the world generally – some have sought to achieve a distinctive regional expression by superimposing one or more of the possible logics of local contextual opportunity and constraint: cultural cross-pollination; response to the qualities of light, landscape or climate; and response to local material, technical or economic factors.

The earliest attempt to localize imported influences was made by the first architect of international reputation to work in the region, Herbert Baker, who arrived in South Africa towards the end of the nineteenth century. Baker was an eclectic architect, whose southern African work had Classical, Arts and Crafts and Queen Anne roots. His interest in local vernacular cultural expressions led him to experiment with the incorporation of forms and motifs drawn from both indigenous and early (Dutch) colonial architecture; and many of his Arts and Crafts and Classical buildings reflect his desire to engage with local materials and the qualities of the African light and landscape and to make buildings that would resonate with it. The most successful of these buildings are in what was then the Transvaal, which are particularly distinctively embedded in the soil they inhabit.

At about the same time, regionalization also occurred less self-consciously through the perpetuation into the twentieth century of aspects of pre-British and distinctively local colonial building traditions, particularly in housing. Speculator-built working-class terraced housing at the Cape in the late nineteenth and early twentieth centuries was a good example of this. This housing was planned using street arrangements and building-to-building relationships that would have been very familiar in parts of the United Kingdom, but with house types and a three-dimensional form that were entirely different. Some of these house types can best be described as colonial vernacular, similar to that found in other British colonies, particularly Australia. But Cape house forms, such as the flat-roofed, parapeted house that is one of the Cape's most distinctive vernacular creations, continued to be built by speculators well into the twentieth century, modified by the growing availability of both locally made and imported industrial products, such as mass-produced joinery, cast-iron verandah elements and corrugated-iron sheeting. Many of these houses were, therefore, hybrid products, incorporating symbols of modernity as well as traditional elements.

Baker continued to influence many architects practising until the Second World War. But the Baker project to regionalize imported forms and ideas did not have universal appeal, and others continued to import and apply ideas with little attempt to address the local environment, as for example many of the exponents of so-called Union classicism and the authors of the fine Art Deco buildings in the region built between the wars. This was also the case with what was perhaps southern Africa's most distinctive and well-recognized contribution to global modernism, made by the so-called 'Transvaal Group' of architects based in Johannesburg in the 1930s. The members of this group became such articulate polemicists for International Style forms, and deployed these forms so skilfully, that their acknowledged leader, Rex Martiennsen, was elected to membership of the Congrès Internationaux d'Architecture Moderne (CIAM) following a proposal by Le Corbusier. Martiennsen also transformed the local architectural journal, the *South African Architectural Record* into a publication able to command the respect and interest of some of the major figures of European modernism. Although the group built a significant body of work of very high quality, most of these buildings have now been much altered or demolished.

A similar diversity of approaches was evident after the Second World War, when a minority experimented with regionally located forms, while many architects followed then developing European, American or other imported models.

On technical and political grounds, the surviving members of the Transvaal Group abandoned International Style modernism for the so-called new empiricism; others – paradoxically calling themselves regionalists – looked to post-war work in Brazil; and in the late 1960s a number of younger architects trained mainly at the University of Pennsylvania under Kahn initiated a project specifically intended to mirror what the Group had achieved in the 1930s. The references were changed, becoming the post-war work of Le Corbusier and Kahn, but the ideals and approach were similar and the body of work was of equal quality. Many of these buildings still exist in good condition.

But the post-war period also brought a sustained and more systematic interest in the exploration of more regionally situated forms. Baker's themes of engagement with local vernacular expressions, local materials and the qualities of light and landscape were taken up again; and other possibilities for regionally appropriate expression were explored as well, such as climatic response, which was most noticeably considered in those regions where the climate presented formal opportunities, such as the sub-tropical east coast of both South Africa and Mozambique.

Another tack was the exploitation of the economic and technological limitations that inevitably apply to many projects executed by architects in the developing world. Such limitations can obviously lead to a loss of quality – this is always the outcome when the concept is to make a building in a limited-resource context merely a lesser version of something somewhere else. But loss of quality is not inevitable. Some of the most interesting post-Second World War buildings in southern Africa have come about when the design challenge of working in a limited-resource environment has been creatively addressed. Architects have approached this problem in various ways: modern spatial and formal concepts have been realized with pre-modern materials; the forms of buildings have been designed to express the need to limit what must be built by skilled labour; and systems of detail have been

adapted to achieve aesthetic elegance and precision within an environment where the building skills for real technological sophistication are either lacking or are prohibitively expensive. Some of the most interesting work of this kind in the region is perhaps in Mozambique, where both Pancho Gueddes and Ze Forjaz have repeatedly demonstrated the architectural possibilities of taking regional economic limitations seriously.

There were also those for whom regionalization meant coming to terms with local indigenous or colonial cultural expressions. Two approaches can be identified, both involving the modernist methods of transformation rather than replication. Some architects used indigenous patterns of space-making, without direct reference to traditional forms or character. Others reinterpreted the forms, motifs and structural character of the traditions with which they engaged. Two of the best examples of this are perhaps the tactile, sensuous buildings of the Pretoria regionalist, Norman Eaton – who aspired to capture 'the general feel, if not the form of things peculiar to the African continent'; and the imaginative reinterpretations of the character of Cape Dutch colonial building by Eaton's student, Gawie Fagan, whose buildings are almost all in the Cape. It may be interesting to note that while many of the architects who were interested in regional expression were Afrikaners and presumably driven to some extent by a nationalist desire to find a local voice, their work had little impact on the architecture of the Afrikaner nationalist state or large corporations, whose chosen iconography was in the main post-war corporate modernism.

Southern African modern architecture in the nineteenth and twentieth centuries therefore reflects a number of approaches and interests, and there is no single, simple answer to the question as to whether Western categorization – such as that proposed in the pre-meeting documentation – is appropriate or not. Some modern heritage in southern Africa therefore does indeed have a distinctly local character; but there is also modern work of quality that is better situated within some broader international movement, either Western or colonial/post-colonial. Also, while some southern African modern architecture is made distinctively local by unique characteristics derived from a synthesis between imported forms and a regional vernacular, other approaches to contextualization have left marks of 'localness' that are quite subtle and less obviously South African.

South African modern architecture can be grouped as follows:

- that falling entirely within and exemplifying Western concepts and forms;
- that more related to the architecture of the British colonial world or to post-colonial architecture in previously colonized regions;
- that which can best be described as the result of vernacular regionalization. Applicable mainly to housing, this was generally produced by speculators rather than architects, and arose from the perpetuation of traditional forms at a time when industrial products were widely available;
- that which can be considered as part of the project by architects in many parts of the world to contextualize modernism and to produce a distinctive local expression. In southern Africa this was achieved by various means: cultural cross-pollination; engagement with local materials; designing in response to local light and landscape qualities; dealing creatively with the local economic environment; or, as was almost always the case, with some combination of these.

Planning

Few South African towns are the products of modern planning in their entirety. Most grew around the cores of older settlements; others developed rapidly and chaotically in response to a defining event, such as the discovery of gold on the Witwatersrand, which prompted the growth of the city of Johannesburg in the space of a mere few years. In southern Africa, therefore, modern planning has in the main created nothing larger than a suburb or an adjunct to a pre-existing urban centre. Within this relatively limited sphere of operation, planning as a discipline came to exert a visible effect on the form of South African cities in the 1920s. Like architects, planners tended to draw on European and American ideas. In a few early cases some attempt was made usually much watered down to apply the principles of pre-war Corbusian urbanism. However, the earliest modern planned environments exemplified garden suburbs planning concepts, and this together with neighbourhood planning theory have remained the drivers of most modern planning in South Africa.

Southern Africa's most distinctive 'contribution' to modern planning has perhaps been the set of planning paradigms together making what is generally called the 'apartheid city'. Partially segregated environments were already present in the mid-nineteenth century. In the first half of the twentieth century, urban segregation became increasingly systematic, as new, state or municipality-built housing areas for Black people, called 'locations', were placed on the periphery of then current urban development.

With the accession to power of the Nationalists in 1948, institutionalized segregation became absolute, and those who were Black and poor became spatially marginalized in an urban setting of isolated dormitory suburbs and absolute functional separation. Massive state resources were invested to achieve this, including the funding of research to find the most appropriate and economic housing forms. Key South African modern architects contributed to this research, ironically less from a desire to support apartheid than to supply the social dimension which South African modernism had previously been thought to lack. The ideas on which they drew were the Mumfordian regionalism of *The Culture of Cities,* the writ-

ings of Gropius on social housing and, particularly, from neighbourhood planning theory. Both this and the concept of regionalism could be interpreted in ways entirely congruent with the apartheid goal of self-resourcing, spatially segregated, ethnically homogeneous communities.

The projects for Black housing areas executed between the 1950s and 1970s on the basis of this research created the 'apartheid city' and gave almost every South African urban agglomeration an important component of its current form, and the South African post-apartheid present one of its most pressing and intractable development problems. The local identity of South African architecture is often a question of nuance. In urban planning, the reverse is the case: the considerable proportion of the planned built fabric in South African cities that was produced to support apartheid is both distinctively regional and as crude a demonstration of the relationship between space and power as can be found anywhere in the world.

Conclusion

Colonial and modern heritage raises complex value issues anywhere in the post-colonial world. Where this heritage can easily find a place among a number of indigenous traditions, as for example in India, the power of these issues may be lessened. On the other hand, they become much sharper in contexts such as South Africa, where indigenous heritage consists mainly of archaeology, landscapes invested with meaning and living culture, and where there are few other assemblages of building against which the colonial and the modern can be offset. In so far as built heritage is concerned, colonial and modern heritage is basically what there is. Previously colonized regions of this kind in Africa are therefore different to those that did have pre-colonial traditions of urban settlement and permanent building, where interactions between architecture in the categories 'colonial', 'modern' and 'indigenous' naturally could occur more easily and lead to hybridized and therefore recognizably local forms.

Although South African heritage legislation is broad-ranging and provides theoretical protection to all categories of heritage, including the colonial and the modern, it is inevitable that the associations with colonial/apartheid rule and the alien provenance of most modern buildings makes what they represent less than straightforward in the post-colonial and post-apartheid present. This applies to all categories of heritage; but the case of modern urban planning is perhaps even more complex than that of architecture, because of the direct linkages to apartheid philosophy and the need now to transform what are clearly dysfunctional environments.

In this context, historical values are those that will probably be particularly significant in identifying the products of South African modernism most likely to receive the broad community support necessary for effective protection with the participation of the public sector. These products of modernism will include those embodying values deriving from connections with political history and those that function most effectively as documents of the life experiences of ordinary people. The Union Buildings in Pretoria, for example, once a defining colonial symbol, changed meaning when they served as the backdrop for the investiture of Nelson Mandela as the country's first democratically elected president; and, more modestly, a rehabilitated mine hostel in Johannesburg now functions as a museum to record and explain a way of life that has deeply marked the country's history.

Rietveld Schröderhuis, Netherlands (C i, ii, vi);

inscribed in 2000

Source: Nomination file

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The Rietveld Schröder House in Utrecht was commissioned by Ms Truus Schröder-Schräder, designed by the architect Gerrit Thomas Rietveld, and built in 1924. This small family house, with its interior, the flexible spatial arrangement, and the visual and formal qualities, was a manifesto of the ideals of the De Stijl group of artists and architects in the Netherlands in the 1920s, and has since been considered one of the icons of the Modern Movement in architecture.

Criterion (i): The Rietveld Schröder House in Utrecht is an icon of the Modern Movement in architecture, and an outstanding expression of human creative genius in its purity of ideas and concepts as developed by the De Stijl movement.
Criterion (ii): With its radical approach to design and the use of space, the Rietveld Schröderhuis occupies a seminal position in the development of architecture in the modern age.
(24th Committee session)

10

Continuity and change in recent heritage

by Jukka Jokilehto

Building in the twentieth century represents various aspects that have not been present in previous centuries. These are generally classed under 'Modern Movement' or modernity. Taking the notion of 'modernity' to mean what characterizes our recent, built heritage, the purpose of this paper is to explore the various influences that have inspired particular forms of building and how far such influences have integrated ideas or techniques from the past as a form of continuity. The roots of modernity, and of the modern concepts of historicity and the conservation of cultural heritage, are referred to the Age of Reason, an era that established cultural paradigms that are deeply reflected in present-day society. Isaiah Berlin, the foremost historian of ideas, has identified two principal factors that have shaped human history in the twentieth century. One is the development of the natural sciences and technology; the other is in the field of ideologies: dictatorships, nationalisms, racism and religious intolerance (Berlin, 1990, p. 1). The impact of these factors can also be seen in the choices that have characterized design and construction of the built environment, our recent heritage. Our period is also characterized by rapidly increasing urbanization and the growth of ever-larger cities and metropolitan areas, requiring new systems of planning, administration and communication, as well as the development of new processes of construction and standardization of products in this pluralistic, market-oriented society.

In his recent publication, Bruno Zevi (2000) identifies early modernity in the growing use of industrial technology, in the Arts and Crafts Movement, and in the various forms of Art Nouveau exploiting modern technology for innovative forms and spaces. Following the First World War, the international Modern Movement emphasized rationalization of production, aiming at a free elaboration of materials and spaces. Zevi's long list of significant works includes over a hundred entries. He proposes seven features, of which asymmetry and dissonance seem to stand out as the most characteristic (pp. 7–9):

1. Articulation of a *new architectural language* and the abolition of the academic concepts of style, based on proportions, symmetry, repetition, and static volumes.
2. Introduction of *asymmetry* and *dissonance* into architectural design, the different elements reinforcing and contrasting each other (Art Nouveau, Bauhaus).
3. :The design of a construction so as to be perceived from multiple viewpoints that are equally important, as conceived in Cubism (Expressionism).
4. The idea of *dismantling the architectural reality* of a construction perceived in four dimensions, set up by the De Stijl movement, and later reinterpreted in 'Deconstruction'.
5. The qualification of the *engineering structure* as a significant part of the architectural form and space (Paxton, Eiffel, Maillart, Nervi, Fuller).
6. The *dynamic transformation of architectural space* in relation to time, becoming a significant element in the architectural experience, first developed by Wright.
7. Finally, the new *continuum between the building, the town and the landscape,* taking advantage of any available elements (Sabaudia, Tapiola, New Towns).

Early modernity

A particularly important aspect of the early developments is the attention paid to city planning. It required the development of methods and solutions for production in large quantities, needing rationalization and standardization, which became characteristic of the new building industry. The early projects included Robert Owen's New Lanark (1815), Sir Titus Salt's Saltaire village (1853), the plans of G. E. Haussmann for Paris, the new master plan for Barcelona by Ildefonso Cerdá (1858), the Ringstrasse in Vienna, the plans of F. L. Olmsted in the United States, as well as the Garden City Movement (Ebenezer Howard, 1898) proposing to re-establish a connection with nature. The increased pressure on cities motivated the construction of ever-taller buildings, first in traditional masonry, and then using metal and reinforced concrete. The architects of the Chicago School emerged as leaders, though initially using past stylistic forms. A significant early example was the Marshall Field Stores (1885–87) by H. H. Richardson. The Auditorium (1887–89) by Dankmar Adler and Louis Sullivan in Chicago was a masterpiece of innovative technology, solving problems generated by such a large complex. Gradually the development led to the simplification of the architectural design, favouring a classical framework and giving new meaning to decorative elements. Sullivan was influenced by contemporary philosophers (Nietzsche) and natural scientists (Darwin), and thought that nature expressed itself in architecture through its structure and decor; his is the motto: 'form follows function', which was often repeated in the further development of the Modern Movement in architecture.

At the end of the nineteenth century, the search for inspiration started turning towards the Orient, as the heavy Romanesque forms did not satisfy emerging needs. The austere character of the ancient Assyrian structures attracted Sullivan. Frank Lloyd Wright, disciple of Richardson and Sullivan, found inspiration in traditional Japanese buildings; their modular plan and heavy horizontal rooflines are reflected in his Prairie houses. Later, he looked for a new style aiming at a global approach, a *Gesamtkunstwerk*, where all components from the general structure to the minute details reflected the same spirit. Wright remained fully conscious of the value of tradition, and wrote: 'The true basis for any serious study of the art of Architecture still lies in those indigenous, more humble buildings everywhere that are to architecture what folklore is to literature or folk song to music and with which academic architects were seldom concerned' (Moholy-Nagy, 1976, p. v). The Finnish *Jugendstil* (1895–1915), represented by Eliel Saarinen, was strongly

associated with traditional wooden buildings, the music of Jean Sibelius, the paintings of A. Gallen-Kallela, and the epic poem *Kalevala*, gaining particular significance for the Finnish identity in the struggle for independence.

The search for new structural forms while referring to the Gothic found remarkable expressions in the different 'branches' of Style Nouveau, Art Nouveau, *Jugendstil,* Secession, such as the work of Antonio Gaudí, also inspired by Mudéjar architecture, Victor Horta's new form of spatial expression in a free and open plan, and Charles Rennie Mackintosh, inspired by W. R. Lethaby's mystic evocation of ancient Celtic symbols. The period of the Viennese Secession was characterized by a debate on values, the desire to return to nature and an emphasis on national character, as expressed in the works of Otto Wagner, J. M. Olbrich and J. Hoffmann. In France, A. Perret reached an extraordinary clarity, creating masterpieces of early-modern architecture. Henry Van de Velde was deeply influenced by the theories of Alois Riegl and Theodor Lipps, the former speaking of *Kunstwollen* (tending to art) and the latter of *Einfühlung* (empathy), related to the philosophy of Nietzsche and the issue of 'Will to Power'. Van de Velde's earlier emphasis on decoration (he even designed his wife's clothes to harmonize with their home) changed into an anti-decor approach after his visit to Greece and the Middle East. He then aimed at an organic form in its purest expression. In 1904, he became professor at the School of Arts and Crafts in Germany, for which he also designed the building in Weimar (1906–07).

While Adolf Loos maintained that all culture depended on continuity with the past, he also insisted that most architecture should not be seen as 'art', apart from funeral monuments and memorials. He favoured severe and plain forms, and left furniture for the inhabitant to choose (not proposing a *Gesamtkunswerk*). Perhaps in order to compensate, he utilized precious 'decorative' materials in his luxurious interiors in Vienna. Loos knew the freely developing plans of Gothic-revival houses in England, but he remained faithful to his classical conception of simple cubic forms. Influenced by Hermann Muthesius' contacts with the Arts and Crafts in England, Germany developed a strong circle of artists and architects, including Peter Behrens, director of the Kunstgewerbeschule in Düsseldorf (1903). In 1906, Muthesius was in the team establishing the Deutsche Werkbund, an influential association that became crucial in the development of the Modern Movement. The debate touched on issues of national cultural influence and the impact of industrial production. The architects took their references from different styles, such as the severe 'Zarathustrian' (Behrens, AEG factory, 1908–09), early Renaissance, or neoclassicism. Attention was given to the systems of production, and the perfection of the design of prototypes to be used for standardized and efficient production, leading to the neue *Sachlichkeit* (Functionalism). Buildings and objects were thus seen as an outcome of a systematic process, motivated by function and use, but not conceived as works of art that would depend on artistic creativity or individual taste.

The Modern Movement in the 1920s

The trends in early modernism were expressed in different fields, including painting, sculpture and architecture, favouring an increased detachment from traditional models. The distinction between 'fine arts' and 'applied arts' was reduced, and the tendency was to design decorative features in reference to function. Yet, the expressionism of Oskar Kokoschka and Edvard Munch found parallels in architectural works, such as those by Bruno Taut, Hans Scharoun or Erich Mendelsohn. The First World War shocked artists such as Wassili Kandinsky, Paul Klee, Piet Mondrian or Wladimir Tatlin, who searched for new directions in art. The post-war reconstruction and the growing industrial potential indicated new motives, already experimented though more in the sense of a Utopia, such as the garden city idea, and the *Cité industrielle* of Tony Garnier (1904–17), whose scheme anticipated the codification of building typologies and urban zoning. The city became a primary focus; it was seen as an organic machine functionally associated with the needs of the working class, the requirements of hygiene, economy and psychology. It also introduced a new political basis to meet the objectives of social life. In 1917, H. P. Berlage prepared a master plan for the southern part of Amsterdam, consisting of a large application of modern housing. City planning in the Netherlands was further integrated with ideas from De Stijl and the Bauhaus as in the housing areas in Rotterdam; here, the Kiefhoek Quarter was designed by Oud in 1925–30. The Weissenhof Siedlung (Estate) of Stuttgart (1927) was another Bauhaus experiment, designed by a group of leading architects led by Mies van der Rohe.

The New Architecture of the post-war period was based on earlier achievements, but it tended to go beyond local and national issues, aiming at the universal. Henry-Russell Hitchcock and Philip Johnson identified this new approach as the 'International Style', presenting it in an exhibition at the Museum of Modern Art in 1932 (Hitchcock, 1932). The ideas were rapidly introduced all over the world, and it became a truly international movement in the 1920s. This did not necessarily mean uniformity or a new style, generally identified in specific formal language, as Hitchcock had claimed. In fact, Walter Gropius has noted that 'A "Bauhaus Style" would have been a confession of failure and return to that very stagnation and devitalizing inertia which I had called it into being to combat' (Gropius, 1956, p. 92). There are different parallel trends with their own personality; G. C. Argan (1984, p. 325) has identified the following, though the list could be extended taking into account developments elsewhere; for example, Latin America and Japan have made a strong contribution to modernism:

1. Formal rationalism in France, led by Le Corbusier (e.g. Villa Savoye, 1929–31);
2. Didactic-methodical rationalism in the Bauhaus in Germany, led by Gropius and Mies van der Rohe (e.g. Bauhaus building by Gropius, Dessau 1925–26; Villa Tugendhat by Mies van der Rohe, Brno 1927–30);

3. Ideological rationalism of Soviet Constructivism (e.g. *Izvestia* building by G. B. Barkhin, Moscow 1925–27);
4. Formalistic rationalism, referred to the Dutch De Stijl movement (e.g. Rietveld-Schröder House, by Thomas Rietveld, Utrecht 1924);
5. Empirical rationalism of the Scandinavian countries, represented by Alvar Aalto (e.g. Sanatorium, Paimio 1929–33);
6. Organic rationalism in America, led by Frank Lloyd Wright (e.g. Robie House in Chicago, 1909–10; Falling Water House, 1936).

The Bauhaus School

In a short book, first published in 1935, Gropius claims that the new architectural forms were 'the inevitable logical product of the intellectual, social and technical conditions of our age' (Gropius, 1956, p. 20). In his early training with Peter Behrens, from 1908, he had become convinced that modern construction techniques should be allowed an expression in architecture, and that this would demand unprecedented forms (p. 47). In his opinion, the later slogans, 'functionalism' or 'fitness for purpose equals beauty', were misleading and obscured the real motives of this New Architecture. Rationalization, for him, was only the purifying agency, liberating architecture from the 'welter of ornament', placing emphasis on its structural functions, and concentrating on concise and economical solutions. This material side needed to be combined with the 'aesthetic satisfaction of the human soul', both finding 'their counterpart in that unity which is life itself' (p. 24). In his long career as educator, in Germany and later in the USA, Gropius emphasized the need to bring together technicians and artists as teachers, a dual education aiming at a 'reunion of all forms of creative work' so as to become architects of a new civilization (p. 75).

Modern architects were not ignorant about history; it had been an important part of teaching in the Beaux-Arts tradition, which continued even after the Second World War (1968!); it also remained a basic reference for the general public, who had some difficulty in getting used to new forms. Gropius consciously chose the name for the influential school of the Bauhaus (1923) in reference to the medieval concept *Bauhütte,* workshop for the construction and maintenance of cathedrals. The purpose of the name, referring to Ruskin's description of an inspired medieval artisan, was to assimilate the creative process of design and production. Following the principle of the Bauhaus, mass production of objects and buildings needed engineers and artists with 'fresh mentality and exact information about old and new materials' (Moholy-Nagy, 1961, p. 63), anticipating today's 'industrial designer'. The aim was to avoid 'dead' imitation of products, and rather to emulate an inventive process of production. Laszlo Moholy-Nagy, a Bauhaus teacher, referred to the policy of the school to help the students to learn to see and think creatively: 'Since he is not allowed to imitate past solutions, he soon finds the power to face new situations fearlessly, to develop new habits of imagination. This relieves him from the necessity of identifying or even comparing his work with past performances. This policy is a powerful incentive for the teacher too, as it lessens the danger of clinging to traditional fixations or to academic certitudes' (Moholy-Nagy, 1961, p. 65).

Developments in the 1930s

The 1930s were characterized by a changing political climate in the world, and ended with the Second World War that swept over the entire planet. In this pre-war decade, several countries experienced increased nationalism, forming a counterpoint to the Modern Movement, as in Germany, Italy, Russia and Japan. As a result, architects were encouraged to reconsider the earlier principles, and attention was focused on the introduction of a new national spirit into building forms. This was no longer the national-romantic movement of the early years of the century, but a political trend combining modernity with selected traditional features. A new prominence was given to public buildings that assumed the role of 'monuments' in the Latin sense of the word, i.e. to admonish and to give a clear political message. Modern technology assured the framework and structure, while tradition gave the finishing touch associated with the ambitions of each regime. It is thus interesting to find how the principles of modern architecture were manipulated for political purposes.

In Italy, several talented architects participated in the debate between those supporting the Modern Movement and those favouring traditional features. The Casa del Fascio (1932) in Como, by Giuseppe Terragni, was built on an elevated platform with a perfectly square plan and carefully proportioned elevations, characteristic of monuments like those in Ancient Persia. The scheme of EUR (Esposizione Universale di Roma) was built following the directives of Mussolini in order to demonstrate the strength of the fascist state; the symmetrical design of the buildings reflected their monumental scope. In the German Third Reich, modernism was abolished as 'cosmopolitan and degenerated' (Frampton, 1982, p. 254). The principal architects of Hitler, P. L. Troost and Albert Speer, developed a simplified version of the nineteenth-century Schinkel School, emphasizing the classical monumentality of public buildings, such as the Stadium of Zeppelinfeld by Speer, in Nuremberg (1937). The Königsplatz, in Munich, was instead built symbolizing ancient sacrificial and cult places, representing crucial aspects of Hitler's Third Reich (van Pelt, 1993, pp. 328f). Similar approaches were adopted in the Soviet Union, where the Stalinist style of buildings became standard, and was diffused in most countries under the communist regime.

Le Corbusier and urbanism

Travelling in the Mediterranean to study ancient sites, Le Corbusier rediscovered the monastic ensemble near Florence, Certosa di Ema, as a reference for the development of modular housing, the design of the monastery of Sainte-Marie-de-la-Tourette (1957–60) and the pilgrimage chapel of Ronchamp (1950–55). Returning from his trips, in 1911, Le Corbusier wrote, full of enthusiasm, as one whose eyes had seen the shining white marbles of the Acropolis: *Mais pourtant j'écris avec des yeux qui ont vu l'Acropole et je m'en irai joyeux. Oh! Lumière! Marbres! Monochromie! Frontons tous abolis, mais point celui du Parthénon, contemplateur de mer, bloc d'un autre monde. Celui qui prend un homme et le place au-dessus du monde. Acropole qui exauce, qui exhausse* (Le Corbusier, 1966, p. 168). In his *Towards a New Architecture* (first published in 1927), Le Corbusier claimed: 'Architecture today is no longer conscious of its own beginnings. Architects work in "styles" or discuss questions of structure in and out of season; their clients, the public, still think in terms of conventional appearance, and reason on the foundations of an insufficient education' (Le Corbusier, 1976, p. 21). He traced the process of creative thought in architecture, analysing ancient temple sites, cathedrals and Renaissance palaces in their masses, elevations and plans. He referred to the 'lesson of Rome', but also to a ship, an aircraft or an automobile, in order to reach 'the eyes which do not see!'. He examined the proportions of ancient Persian architecture, Notre-Dame of Paris, and the Capitol of Rome, and developed analogous methods to define the proportions of his own buildings. For him, the 'regulating line', the proportions of the building, was 'a means to an end; it is not a recipe. Its choice and the modalities of expression given to it are an integral part of architectural creation' (Le Corbusier, 1976, p. 64). He summarized the findings in: *The Modulor. A Harmonious Measure to the Human Scale Universally applicable to Architecture and Mechanics,* first published in 1949.

For Le Corbusier, none the less, life was in constant transformation; any preservation could thus only take place through change, proceeding in an active learning process. In Paris, therefore, he considered that while some individual masterpieces could be preserved, a new Paris should be built over the existing city (Le Corbusier, 1964, p. 139). At the same time, he claimed that the serenity and harmony of the traditional rural environment risked being replaced by an agonizing new culture. His scope was to establish order in the built environment, and especially to solve the problems of traffic (e.g. Algiers, Rio de Janeiro, São Paulo). He was tempted by the vision from the air in an effort to grasp the global environment, ideally grouping various functions according to their character; the ground should be liberated by erecting tall skyscrapers in glass. His *La Ville Radieuse,* the 'glorious city', followed an anthropomorphic order; the business centre was represented by the head, surrounded by satellites for government and education; the railway station and airport were in the shoulders, and the habitations in the lungs; the manufacturers, general depots and heavy industry were placed 'down' towards the legs. The habitat was conceived as clusters of 'biological elements: cells' *(l'élément biologique: la cellule*), which could be multiplied ad infinitum in either the vertical or the horizontal direction. It was conceived as a disciplined machine and a 'living organism', designed to bring freedom and serenity to humanity (Le Corbusier, 1964, p. 143). Some formal aspects of the scheme became a reference in many countries, being reflected in the avenues lined with multistorey buildings in Moscow or in Beijing, but the initial spirit was hardly generated there.

CIAM

Owing to a disagreement about the jury's verdict in the competition for the Palace of the Nations in Geneva, a group of architects organized a meeting to discuss modern architecture and town planning in La Sarraz Vaud, Switzerland, in June 1928. From this meeting was born the organization for the series of conferences of CIAM (Congrès Internationaux d'Architecture Moderne, operational until 1956), a forum for the discussion and development of ideas with the participation of some of the foremost architects of the time. The first meeting produced a document where the participants declared that 'construction' was one of the basic activities of mankind, closely related to evolution of life. Conscious of the fact that the task of architecture was to express the spirit of an epoch, the participants noted that the current period was transitory, and it was necessary to try to harmonize architecture with the new social and economic conditions in society. The essence of city planning was to provide a functional framework for the society in reference to accommodation, work and recreation, taking care of land-use, traffic, and the legal framework (Le Corbusier, 1957, p. 119f).

The best known of the CIAM conferences was the fourth, organized on board the ship *Patris II,* sailing from Athens to Marseille in July–August 1933. The conference was chaired by C. Van Eesteren; Sigfried Giedion acted as secretary-general. The participants came from sixteen countries. Its fame is due to the declaration that was published in November 1933 after several revisions (which should be distinguished from the 1931 'Athens Charter' by the International Museums Office). In the early 1940s, Le Corbusier added his own comments to the declaration, and published it as *La Charte d'Athènes* (1941–42). The main focus of the declaration was on modern architecture and planning, but some consideration was given to historic monuments and areas. Such quarters were often run down and facing many difficult problems. Nevertheless, when historic areas represented genuine values to the community, and when their preservation did not cause problems to the inhabitants, the CIAM conference recommended that action should be taken to safeguard them. They also insisted that no imitation of earlier styles in new constructions should be tolerated in any form (Le

Corbusier, 1957, p. 91; La Tourette, 1976, p. 96). It is also worth noting Giedion's determination that history is part of life; understanding continuity in time is a fundamental condition in planning, and the future of architecture is inseparably bound up with planning (1982, p. 25).

Further developments

At the conclusion of the Second World War, many major cities around the world were in ruins. There followed a long period of reconstruction. Basically, modern architecture was accepted as the useful standard for mass production of houses and urban planning. There were, however, different approaches ranging from a more or less exact rebuilding of the earlier forms, as in the case of Warsaw or Danzig (Gdansk) in Poland, to designing a new town plan, as in the case of London or Rotterdam. The two Germanys (FRG and GDR), reflecting two different policies, 'capitalist' and 'socialist', presented a wide range of choices and policies. In both countries there were parallel situations; for example, the towns of Lübeck (FRG) and Stralsund (GDR), both recognized for their historic values, were restored and partly rebuilt respecting the historic layout and fabric. In the two parts of Berlin, substantial rebuilding was carried out in new forms, though parts of the old fabric were saved and rehabilitated. In East Berlin, the new construction was obviously loaded with strong political symbolism. Nevertheless, the new designs, whether east or west, followed the concepts of the Modern Movement. Also in Dresden (GDR), new design was based on the models of the CIAM and Scandinavia, recognized as acceptable for a socialist society. In the 1950s and 1960s, Finland became a 'mecca' for many modern architects. Here, the garden city idea found new applications, such as Tapiola and the neighbouring university campus of Otaniemi, just outside Helsinki, involving some of the best-known architects of the country.

Several former masters of the Modern Movement had transferred to the USA: Gropius continued teaching, and Mies van der Rohe designed office buildings of a monumental character (e.g. Seagram Building in New York). The Modern Movement found new forms reflecting evolving needs and emerging values. In Latin America, Brazil's new capital, Brasilia, designed jointly by Lucio Costa and Oscar Niemeyer in the 1950s, became a large-scale realization of the *Ville Radieuse* idea. The city was located in the centre of the country and, with its merits and its defects, formed a strong political statement. At the same time, but on a smaller scale, the university campus by Carlos Raúl Villanueva in Caracas became an outstanding integration of art, buildings and urbanism. The new capital city Chandigarh in India, designed by Le Corbusier, E. Maxwell Fry and J. B. Drew (1950–52), was founded in a plain between two rivers, the Capitol with its government buildings forming the 'head' against the spectacular mountain background. Nehru proposed this city as a new model for independent India, giving the scheme powerful political meaning. The realization was in the hands of the Indian architects and engineers trained by Le Corbusier's team; the builders introduced a flavour of locality, even though the design itself had no reference to this, except perhaps for the Capitol being inspired by the *genius loci* of the site. From an initial feeling of strangeness, the place seems to be gradually obtaining an identity, recognized by the residents, who were mainly immigrants at the outset.

Having opened to the Western world in the nineteenth century, Japan entered a period of active modernization, noting the emerging New Architecture. Wright designed the Imperial Hotel in Tokyo (1916–20), which survived the 1923 earthquake but was later demolished. In 1920, a group of students at Tokyo Imperial University founded the Japanese Secession, and various publications diffused the ideas of Mendelsohn, Gropius, Le Corbusier and De Stijl. Several projects followed, such as Mamoru Yamada's Central Telegraph Office in Tokyo (1926), Sutemi Horiguchi's Meteorological Station in Ishima (1928), and Tetsuro Yoshida's Central Post Office in Tokyo (1931). Junzo Sakakura's Japanese Pavilion at the Paris Exposition of 1937 echoed the lightness of Japanese traditional architecture without compromising the modernity of its conception. In the 1930s, debates arose involving nationalistic arguments in favour of more traditional design, reflecting the political situation of the period, as seen in the National Museum of Tokyo (1938) with its traditional temple-like roof. Kenzo Tange established his status as a modern master by winning the competition for the Peace Centre in Hiroshima (1949–55), later working in the spirit of Le Corbusier.

Assessment and significance of recent heritage

Gropius has noted that new architectural forms were the logical product of the intellectual, social and technical conditions of our age, and Mies van der Rohe has said: 'The new materials are not necessarily the best. Each material is only what we make it.' The materials thus do not define modernity; it is the meaning that we give them. While aiming at a new and creative approach, Gropius also claimed that New Architecture was in no way in opposition to 'tradition', intended as 'the preservation of essentials in the process of striving to get at what lies at the back of all materials and every technique, by giving semblance to the one with the intelligent aid of the other' (Gropius, 1956, p. 112). Christopher Alexander has called this 'a timeless way of building' (1979, p. 7). In a joint publication with Gropius on the Katsura Palace of Kyoto (Gropius et al., 1960), Tange noted that it was built at a time when the masses of people first rose against the aristocracy. The book thus shows a struggle between tradition and creation, and illustrates the creative process. In the same book, Gropius emphasized the importance of contacts between Western and Oriental people in order to better understand tradition and modernity. The West would do well to learn a lesson in spiritual intensification from the Oriental mind, seeking new horizons in the inner world. In

the transformation from a traditional to a modern form of society, the Japanese instead should go in the spirit of their *own* culture; enriched by the new technical achievements, but without imitating Western attitudes.

We can thus conclude that our modernity depends on our values and culture, as well as being based on our inheritance from the past, just as architecture in other periods has been the product of the choices of other generations. In the same sense, Aldo Rossi has stated: 'The study of the Greek Order and of modern architecture can very well coexist provided they are not taken as sacred texts. For they may contain a truth and a norm, but they may well equally contain formulae and dogmatism' (1982, p. 21). The question is thus one of quality judgement. A masterpiece is defined as a production of art or skill surpassing in excellence all others by the same hand. In a wider sense, it is a production of masterly skill. We also have to take into account the speed of change, and that the same architects may have produced works that correspond to different criteria. In order to evaluate the quality of a product, we must know and understand the criteria and values on which it is based. Architectural criticism should also be developed outside the closed circle of architects to which the Modern Movement itself has generally limited it.

Traditionally, architecture was designed and built on the basis of experience, and manufacturing methods facilitated its maintenance, repair and even partial replacement or change without necessarily compromising its existence. Whereas tradition has continued to play a role in modernity as a source of inspiration and as a demonstration of the human creative process, the emphasis on innovation has often shifted attention away from sustainability. In fact, the New Architecture has involved various conflicting trends. One of these is in the standardization and mechanization of production; another is the tendency to be innovative and differentiate from the context. The dream of the fathers of modernity, as expressed in the writings of Le Corbusier, was to elaborate the products and make them ever more perfect in response to the needs of society. This was the spirit of Mies van der Rohe's design, one of the most outstanding in this regard. In the recent development of computer technology, design process has increasingly become the work of specialists with the collaboration of a wide range of different professionals. Owing to the rate of change and pressed for time, however, the results have not always reached the required quality. Psychologically, people also tend to change expectations rapidly, stressing 'newness value'. It is increasingly difficult to find specialized people and equipment for the repair and maintenance of previously acquired products, an obstacle that can facilitate obsolescence. In its market-oriented, pragmatic approach, modern society has consciously aimed at the elimination of maintenance, proposing to satisfy needs only in the short term on the hypothesis that future generations should fulfil their needs. Even modern masters, such as Aalto, used to ignore the possibility of protecting their own work for longer than its functionality permitted. In many cases, a documentary record of a building's design would thus seem important to preserve at least a memory of a fabric that has decayed beyond repair.

It is worth noting that the Modern Movement in architecture and city planning has seen a parallel development in the Modern Movement in conservation of the built and natural heritage. While the innovative spirit of modernity apparently seems to be in striking contrast with the conservative attitude of preservationists, there are many issues in common: the two trends are the product of the same culture, and both have had a worldwide impact. In the first part of the twentieth century, the inheritance of Ruskin and Viollet-le-Duc on the one hand, and the modern masters on the other, seemed to have very different objectives, one tending to keep or at the most rebuild, the other aiming at innovation and change. Since the 1970s, with the growing concern for the environment and the fragmentation of society, the gap between the two trends seems to have narrowed. There are several issues in common, such as the gradually increasing emphasis on cultural aspects and quality of life to counterbalance the earlier priority on economic and market values, as well as an increasing awareness of the importance of environmentally and culturally sustainable development.

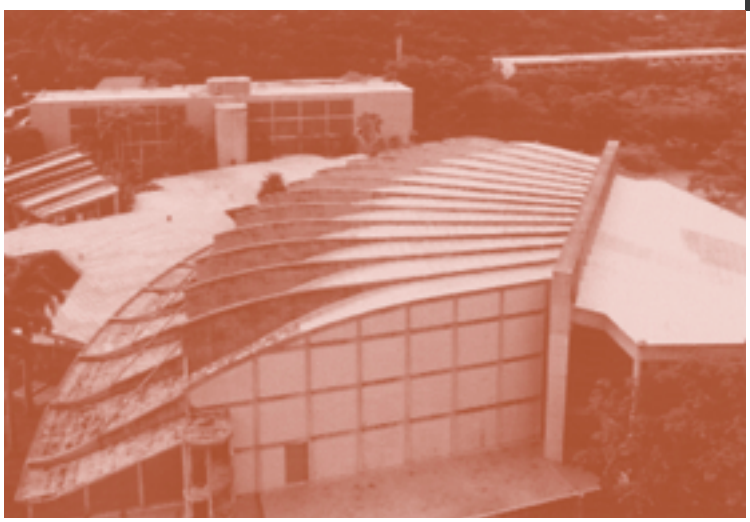
We can see conservation and modernity as the dialectics of our contemporary culture; both have become essential factors in today's society. The approach to the built heritage has evolved from the earlier trend of stylistic reconstruction or conservation at any cost, towards policies and management strategies based on a balanced judgement of the diverse values and aspects of the resources. More recently, this has highlighted the need to take into account gradual change as part of the continuity of living communities, and the recognition of the intangible dimension of places as an essential aspect of heritage. Restoration is based on our modern values; our choices in treatment therefore reflect modernity, tending to become a creative contribution to the stratigraphy of our inheritance. Modernity itself has gone through a certain evolution, and some of the earlier, futuristic ideas have either proved their validity or failed. The production of disposable items has not been sustainable in the long term. As a result, in terms of planning, the 1960s tendency to systematically replace older building stock has given way to urban conservation strategies, currently considered in the context of entire cultural landscapes and built territories. The question of restoring the modern is one of the issues currently being debated. What is the scope of such restoration, and what is the approach to industrial products in general? In fact, this debate goes beyond public buildings and residential areas, also touching the industrial heritage, of which some examples have already been recognized by the World Heritage List.

Assessing the significance of something usually takes time. In the case of modern heritage, the distance is still short and judgment is difficult. Even though our surroundings largely result from the work of the Modern Movement, we have difficulty in assessing them, considering that we are

really judging ourselves. It is easier to assess a modern work that has conventional associations, such as Wright's buildings, than an equally significant work by Mies van der Rohe or by Rietveld, whose design criteria have more consistent novelty. In each case the results may well be creative masterpieces with a distinct sense of personality and innovation. Modernity is not a style. It is rather a cultural approach that has penetrated all regions of the world and is expressed in a variety of ways. It is this plurality of expression that represents our contemporary cultures and forms our recent heritage. In all periods, architecture has been built as a creative response to particular needs. In our time, such needs have become more distinctly different from their precedents than was the case in the past. Thus, architects have had the task of meeting the challenge and of providing innovative solutions that give results different from those we were used to seeing previously. Such efforts may not always have been successful, but there are certainly many masterpieces in our time, as there have been in the past. It is for us to learn to identify them and appreciate their quality.

Ciudad Universitaria de Caracas, Venezuela (C i, iv);

inscribed in 2000



Source: Nomination file

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The Ciudad Universitaria de Caracas, built to the design of the architect Carlos Raúl Villanueva from the 1940s to the 1960s, is an outstanding example of the Modern Movement in architecture. The university campus integrates the large number of buildings and functions into a clearly articulated ensemble, including masterpieces of modern architecture and visual arts, such as the Aula Magna with the 'Clouds' of Alexander Calder, the Olympic Stadium, and the Covered Plaza.

Criterion (i): The Ciudad Universitaria de Caracas is a masterpiece of modern city planning, architecture and art, created by the Venezuelan architect Carlos Raúl Villanueva and a group of distinguished avant-garde artists.
Criterion (iv): The Ciudad Universitaria de Caracas is an outstanding example of the coherent realization of the urban, architectural, and artistic ideals of the early 20th century. It constitutes an ingenious interpretation of the concepts and spaces of colonial traditions and an example of an open and ventilated solution, appropriate for its tropical environment.
(24th Committee session)

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How to evaluate, conserve, and revitalize modern architecture in Asia

by Shin Muramatsu and Yasushi Zenno

In 1905, Banister Fletcher presented an evolutionist view in *A History of World Architecture.* In his tree of evolution, clearly influenced by Herbert Spencer, certain types of Western architecture occupied the highest position while the architectures of Indian, Chinese and Islamic civilizations were shown to be arrested in their evolution at the lower positions. This symbolically represents the difficulties that we face today in Asia in re-evaluating the nineteenth- and twentieth-century architectural legacies, because those in the non-Western part of the world, who should be critical of such Eurocentric world views, are still very much living by them. Another reason is because so many buildings created in non-Western countries during the nineteenth and twentieth centuries were in fact built, politically, economically and culturally speaking, in order to support the Western construction of colonies, and thus it is difficult for the once-colonized nations to evaluate such buildings today without an ideological understanding of their often bitter past.

This paper discusses some of the new thinking towards a more informed and nuanced understanding of modern Asian architectural heritage, which is emerging among the new generation of architectural historians, researchers and preservationists in the region.

Architectural civilizations of the eighteenth-century world

In order to discuss modern architecture in Asia, we should first focus attention on world architecture of the preceding period, which we call 'early-modern'. (Both Chinese and Japanese have a specific term referring to this particular period, which roughly covers the time from the late sixteenth to the mid-nineteenth centuries. To visualize this period geographically, we tentatively present the following five major 'spheres' of architectural civilization that coexisted in the eighteenth century. This will also help to situate Asian architecture in the world while relativizing the so-far dominant position held by Western architecture in modern discourse both inside and outside of Asia.

- Chinese architectural sphere;
- Indian architectural sphere;
- Persian architectural sphere;
- Ottoman (East Mediterranean) architectural sphere;
- European architectural sphere.

What we refer to as an 'architectural sphere' here is a geographical unit, with a core and peripheral areas, that shares a common system of architectural values, knowledge and technology. Note that, while each sphere existed independently with its own long architectural history, they were never totally isolated from each other. The 'early-modern' world came into existence after the break-up of the Mongolian world empire. Since then, and even before the Age of Exploration, there had been active flows of people and materials as well as non-material elements including architectural and urban planning technology among the four non-Western spheres. Such flows were greatly encouraged by the vigorous activities of Chinese, Indian and Muslim traders who moved freely over the sea and created cosmopolitan settlements everywhere they went. The network of commerce thus established once literally covered the whole of what we know as Asia, with Japan on the eastern edge and Turkey on the western. Early voyagers from Spain, Holland and Britain simply joined this great arena of peaceful, and sometimes not so peaceful, exchanges.

We should also note that, in addition to the five major architectural spheres, there developed subordinate spheres such as South-East Asian, Central Asian and Japanese. Early-modern South-East Asian architecture, for example, mainly developed under the influence of Chinese, Indian and European architectural civilizations, while Central Asian developed under Persian, Indian and Chinese influence, and Japanese mostly under Chinese. Architecture of the New World could be also regarded as constituting a sub-sphere, closely linked to the European architectural sphere according to this classification. Like the five major spheres, these sub-spheres consisted of historical amalgamations of various native and foreign elements: developed as hybrids, yet resulting in distinctive geocultural units.

What we today call 'traditional' architecture in Asia and elsewhere is, in most cases, based on the early-modern architectural heritage sketched above. Furthermore, this early-modern world map allows us to see how the architectural developments of the following centuries emerged from the process in which each of these spheres and subspheres accepted and appropriated outside influences from each other. This clearly shows, in other words, that the world's modern architecture, especially that of the non-West, did not develop in a vacuum with the Western colonial presence as its only stimulus.

Reorganization of early-modern world architecture and its shift towards the 'modern'

The period from the late eighteenth to the early nineteenth century saw great changes in world architecture. This was caused by the military, but certainly not architectural, advantage possessed by the European powers. This shift towards European dominance can be said to have first manifested itself when the Ottoman Empire was forced to agree to a peace treaty in 1689 after its defeat in Vienna six years earlier. Facing actual and imagined threats, the Ottoman, Persian and Chinese empires tried to upgrade their forces by introducing Western (especially British and French) military technologies. Western architecture was also introduced to those 'Oriental' empires at this time because it symbolized the economical prosperity and technological advantage of the West, of which the so-called 'Tulip Period' in the Ottoman court is an early example.

The shift in military power between the Ottoman Empire and the West led to the worldwide reorganization of the 'early-modern' architectural spheres that had been coexisting side by side since the sixteenth century. This shift also caused a great change in the Western architectural sphere by allowing Europeans to reclaim Greece, which had been under Ottoman rule, as the source of their architectural roots. Thus, the neoclassical architecture that subsequently developed in Europe should be considered as one of the products of this worldwide shift in military (and consequent architectural) power balance. It is important to note that modern Western architecture did not evolve solely out of its own early-modern legacies, but in fact was born as a result of the significant architectural responses to this great historical reorganization of the early-modern world.

Such responses, whose significance continued to be felt well into the twentieth century, also resulted in the following changes in the architecture of the Asia-Pacific region:

- the Indian architectural sphere came under the influence of the British;
- the Ottoman architectural sphere inclined towards the French;
- the Japanese left the Chinese architectural sphere and adopted the British as a model;
- most of South-East Asia adopted the British model, although Dutch and Spanish influences were also visible;
- the Pacific region adopted the British model;
- the Chinese architectural sphere adopted the British, Japanese and American models in sequence.

However, even after colonial dominance by European powers was established, their architecture did not simply replace the architectural civilizations of the non-West. In India, for example, the British-style buildings were not the same as those in the United Kingdom. The cultural, if not military and political, powers of the local ruling class were still intact, and their buildings clearly reflected India's early-modern architectural tradition as its aesthetic and technological legacies were in place to support the modern appropriation of British architecture.

In short, architectural 'modernization' is not equal to architectural 'Westernization'. While it is certainly true that the modern architectural map of Asia we visualize today is the result of the large-scale colonial domination by European, American and Japanese powers in the nineteenth and twentieth centuries, the process of architectural modernization essentially consists of this ongoing appropriation of outside influence by local architectural (material, technological, aesthetic) traditions that had been firmly rooted in early-modern development. This is true both in the non-Western and Western spheres.

Finally, we should note that there is variation among countries and regions as to when the 'modern' period is supposed to end and the engulfing force of 'globalization' starts asserting its influence, with even more rapid exchange of people, capital and information, which, even as we speak, is further reorganizing the architectural cultures of the world at an alarming speed.

In terms of Asia, we may say that the architectural 'modern' period ends when a nation has entered a period of rapid economic growth through participation in the global marketplace. Thus, the Japanese modern period can be said to have ended by the 1960s, while its Korean counterpart did so in the 1980s and the Vietnamese in the 1990s.

Various types of modern architectural responses in East and South-East Asia

We have defined the architectural 'modern' period as the worldwide reorganization process of the early-modern architectural spheres. This means that it no longer helps our understanding of Asian architectural development of the nineteenth and twentieth centuries to simply apply, as often done in the past, the Western notion of architectural evolution, which is popularly understood in terms of the chronological procession of architectural styles (neoclassical, neo-Gothic, Victorian, Art Nouveau, etc.) towards its ultimate destination in the early twentieth century modernist architecture of the Bauhaus and Le Corbusier. In the following ten paragraphs we describe different types of modern architectural responses that are characteristic of East and South-East Asia.

1. 'Colonial' type
This type of architecture sprouted across Asia in the colonial cities and treaty ports settled by European nationals since the late eighteenth century. It includes the new building types such as offices and warehouses built for trading companies, and residential and recreational facilities for prosperous expatriates. Many of these buildings have already been lost due to their non-monumental nature and often simplified construction. The so-called 'Verandah Colonial' buildings are typical, and were often built by surveyors and engineers (rather than architects) from Europe and the United States, who travelled widely and moved freely among the colonial cities in South-East Asia and treaty ports of China and Japan. Adapting to the local climate by the extensive use of verandah structures, these buildings exemplify the ability of European architecture to appropriate non-Western architectural elements.

2. 'Pseudo-Western' type
This type of architecture exemplifies local builders' ability to appropriate Western architecture with which they came into contact initially at colonial cities and treaty ports. It is true that such appropriation often remained at the level of superficial 'copying' of the visual elements, instead of a systematic adoption of the construction method and spatial arrangement, as their builders were still firmly rooted in local architectural traditions. Japan's 'Giyoohuu' style of the 1860s to 1870s exemplifies this type, although such adaptation was commonly observed throughout Asian countries.

3. 'Hybrid' type
As Western populations expanded in colonial cities and treaty ports (side by side with overseas Chinese in South-East Asia), they started to change the ways in which the local people in and around such urban areas lived and worked. Thus, there arose new types of hybrid architecture in response to such new local conditions. Reflecting the developing 'cosmopolitan' nature of colonial culture, such architecture was no longer a curious copying of surface Western architectural elements, but one that had already started to incorporate Western construction techniques. Singapore, for example, saw the development of shop-house architecture among the Chinese settlers, while in Thailand the traditional raised-floor houses were adapted to a more modern lifestyle. Malaysian 'Nyonyababa' houses and Japanese 'Kindai Wahuu' (modern Japanese styles) of the early twentieth century are among other examples of such architectural responses.

4.'Modern adaptation' type
As people's lifestyles kept changing with the introduction of modern technology and fluctuations in social composition (more urban concentration, rise of urban middle class, etc.), the architectural traditions of Asian countries showed various degrees of spontaneous adaptive responses without direct foreign (i.e. Western) input. Among such cases are hotels in early-twentieth-century Beijing that adopted the southern Chinese courtyard-style residential architecture.

5.'Emerging nation-state' type
As typically exemplified by the case of Japan, when it was establishing a new Western-style nation-state, some Asian governments invited architects from Europe and the United States to design authentic Western buildings (mostly in neoclassical and neo-Baroque styles) as a symbol of their modernity and willingness to change. Such buildings included palaces, governmental and other institutional edifices, and residences for the elite class. While Japan hired an English architect, Josiah Condor, to design new buildings as well as to train the country's first generation of official architects at the new imperial university, Thailand invited Italian and German architects, and Russians came to Korea as foreign advisors. In the case of China, from the late Qing to the early Republican periods, many European, American and Japanese architects were involved in designing public and commercial buildings in its treaty port cities.

6. 'Imperialist' type
The Western, led by the British, and Japanese colonial powers dominated most parts of Asia from the 1870s to the late 1940s. Those colonial rulers often created monumental buildings and sometimes whole new cities to show their power and authority as well as to improve living conditions, primarily for themselves. Such constructions also included port facilities, railway and other transportation infrastructure. Although neoclassical and neo-Baroque were the predominant design modes, Art Nouveau was sometimes adopted as a sign of 'modernity' in places such as Harbin and Tsingtao, and Art Deco in Bandung. As these buildings are most directly the result of past colonial rule, many Asian countries are not particularly enthusiastic about preserving them. The decision in 1996 of the Government of the Republic of Korea to demolish a grand neo-Renaissance-style edifice originally built by the Japanese as the Colonial General Headquarters is a typical manifestation of such sentiment still prevalent in ex-colonies of Asia.

7. 'Orientalist' type
These are the 'native tradition' inspired buildings built by colonial rulers in Asia. Inspired not only by exoticism, such architecture was also a sign of the colonizers' desire to indicate to the local population that they were the legitimate rulers and inheritors of the local civilizations. Thus, the British created those 'Hindu-Saracenic' buildings in India and Malaya, while the French in Indochina, the Dutch in Indonesia and the Japanese in Manchuria also created their own versions. Note also that such 'Orientalist' architectural styles were imported back to the 'master' countries where their implications of 'otherness' were presented for the enjoyment of fair-goers and urban consumers.

8. 'Educated' type
Starting with Japan in the 1870s, some Asian countries such as China (by the early twentieth century) and Thailand (by the 1930s) had come to have their own ranks of local architects trained in the Western architectural tradition. In the colonies, schools to educate mid-level engineers were established, from which some of their local architects emerged. Thus, the West had become the norm for architectural training in both officially and unofficially colonized countries of Asia, including Japan. Those 'educated' Asian architects also pursued the newest trends and thought in Europe by reading Western architectural journals and studying abroad. Their works might not seem 'progressive' compared with those by their European contemporaries, but their historical significance is indisputable in each local context.

9. 'National' type
As new Asian nation-states came into being with their own ranks of native 'educated' architects, they started to compile their own national architectural history, which then led to the creation of 'national style' architecture. As in contemporary Central and Eastern Europe and Scandinavian countries, such romantic art/architectural movements arose in late-nineteenth- and early-twentieth-century Asia, where the new national styles were created by referring to the Western historicist and even 'Orientalist' and 'hybrid' styles of the colonies. While such architectural movements prospered in Japan in the early twentieth century and again in the early 1940s, and in China and Thailand of the 1920s, other Asian countries experienced it mainly after their post-Second World War independence. After the war, it was modernist architecture, instead of the past historicist architecture, that served as the basis for such national expression. Nehru's invitation to Le Corbusier to build Chandigarh could be seen as part

of such efforts towards the creation of a new architecture for the modern Indian nation-state.

10. 'Cold War' type
After the Second World War, most Asian countries belonged to either the American or Soviet sphere, and invited or accepted either American or Russian architects and planners. 'Cold War' architectural models were thus imported through embassy and 'international' hotel architecture, as well as via the students who were sent abroad to study. Chinese architecture of the 1950s (so-called Mao style) was typically influenced by Soviet architecture, while the American planning model was adopted for cities in the Philippines.

Towards the evaluation, conservation and revitalization of modern architecture in Asia

The modern architectural legacies in Asia, as described above, are indeed varied in their historical evaluation and current status vis-à-vis the domestic politics and economy of each locality. In some countries these legacies have been actively studied and preserved, while in other parts of Asia the nineteenth- and twentieth-century built environment has not been recognized as part of the cultural heritage.

The active study of modern architecture had already started in Japan in the 1950s, and finally led to the compilation in the 1980s of a list of more than 15,000 buildings. National registration of some of the best examples followed and today an established system to document, evaluate, conserve and revitalize its modern architectural legacies is firmly in place in Japan. In other countries in Asia, however, the climate has been rather inhospitable towards such efforts, because of people's negative feelings about the architectural heritage from their colonial past, indifference on the part of researchers and a lack of government support. In China, for example, when the country's first official architectural history was compiled in 1959, the modern period was also covered. However, it failed to recognize the architecture of its treaty ports and foreign concessions as part of the nation's cultural heritage that needed to be preserved. Later, the Cultural Revolution made the situation for preserving such buildings much more difficult. In the Republic of Korea and Taiwan, on the other hand, the need to study and preserve modern buildings has, since the 1980s, come to be understood, with Japan as a model. Buildings from the pre-1945 period have now been well documented and studied through the collaboration between Korean or Taiwanese scholars and their Japanese counterparts. Later, such intra-regional collaboration was extended to involve Chinese researchers, which resulted in the extensive study of seventeen cities in China. After a three-year effort from 1988 to 1991, an inventory covering modern architecture in these Chinese cities, and in Hong Kong, Japan, Korea, Macao and Taiwan, was completed and published as *A Comprehensive Study of East Asian Architecture and Urban Planning: 1840–1945*.[1] In these East Asian countries and regions, differences still exist in terms of popularity and academic awareness towards modern architecture. However, the situation has been improving overall in all these places and a new generation of scholars is actively involved in the basic research still needed to document which buildings remain and which are now endangered.

In South-East Asia, Singapore started its efforts to document and evaluate its modern architecture in the 1970s. In the 1990s, a non-profit organization, the Asia & West Pacific Network for Urban Conservation (AWPNUC) was established to preserve the old towns in Malaysia and other parts of the region, although the focus is primarily on preservation issues rather than historical studies. Overall, there is still no common method of documentation and evaluation shared by scholars in South-East Asia. As a result, the whole picture of what constitutes the South-East Asian modern architectural heritage remains largely unclear. A team of researchers from Tokyo University (led by Professors Terunobu Fujimori and Shin Muramatsu) has been working with its local counterparts in Hanoi and Bangkok since the 1990s, as part of an ongoing effort to expand the East Asian inventory to cover other parts of Asia through intra-regional collaboration. This finally led to the creation of our organization mAAN (Modern Asian Architecture Network) in July 2000, with historians, preservationists and officials representing fifteen countries and regions (China, Hong Kong, India, Indonesia, Japan, Macao, Malaysia, Mongolia, Philippines, Republic of Korea, Singapore, Sri Lanka, Taiwan, Thailand, Turkey).

Our organization is designated as a 'network' in recognition of the fact that what is most urgent for historians, researchers and preservationists in Asia is for them to start communicating with each other. Given the shared history (early-modern, modern/colonial, post-colonial) of the region, it makes most sense for us in Asia to work closely together sharing our methods and views concerning the preservation of modern architectural legacies. Researchers from the former colonial 'masters' are now going back to their old turf: the studies of 'colonial' type buildings in Viet Nam is being led by French scholars, those in Indonesia by the Dutch and those in what used to be called Manchuria (simply 'Northeast' in today's China) by the Japanese. However, these outsiders, with or without a nostalgic mentality towards their colonial legacies remaining in Asia, tend to simply ignore the other significant types of modern architecture of Asia as explained in the previous section. There is a danger that the historical and geographical perspective is lacking in which such a colonial built environment needs to be understood and appreciated. Such a perspective could be obtained primarily through local expertise and, more importantly, by working with researchers from other parts of the region who could illuminate various issues beyond each nation's political and intellectual constraints.

1. Terunobu Fujimori and Wan Tan (eds.), *A Comprehensive Study of East Asian Architecture and Urban Planning:* 1840–1945, Tokyo, Taisei Kensetsu, 1996.

Major Town Houses of the architect Victor Horta (Brussels), Belgium (C i, ii, iv);

inscribed in 2000

*Source: Nomination file**

The four major town houses - Hôtel Tassel, Hôtel Solvay, Hôtel van Eetvelde, and Maison & Atelier Horta - located in Brussels and designed by the architect Victor Horta, one of the earliest initiators of Art Nouveau, are some of the most remarkable pioneering works of architecture of the end of the 19th century. The stylistic revolution represented by these works is characterised by their open plan, the diffusion of light, and the brilliant joining of the curved lines of decoration with the structure of the building.

Criterion (i): The Town Houses of Victor Horta in Brussels are works of human creative genius, representing the highest expression of the influential Art Nouveau style in art and architecture.
Criterion (ii): The appearance of Art Nouveau in the closing years of the 19th century marked a decisive stage in the evolution of architecture, making possible subsequent developments, and the Town Houses of Victor Horta in Brussels bear exceptional witness to its radical new approach.
Criterion (iv): The Town Houses of Victor Horta are outstanding examples of Art Nouveau architecture brilliantly illustrating the transition from the 19th to the 20th century in art, thought, and society.
(24th Committee session)

**All Oswald Pauwels photographs of the Solvay Hotel were taken from the publication Horta: L'Hotel Solvay by Y.Oostens-Wittamer, published by Diane de Selliers (Paris), 1996 © VAL 33.*

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Changing views on colonial heritage

by Pauline van Roosmalen

Within the context of a rational study and in order to arrive at a balanced appreciation of nineteenth- and twentieth-century heritage worldwide, architecture and town planning realized under colonial rule requires special attention. This paper describes the strengths as well as the need for a revised vision of this particular heritage and the issues and criteria that should be taken into account for evaluation of the objects. The Dutch East Indies are used as a stepping stone.

Considerations

Identification, listing, preservation and restoration of heritage of the modern era and the implementation of a policy require an open mind to the reasons why a nation does or does not appreciate its heritage and why it does or does not take responsibility for it. In the case of colonial heritage, the notion must also be revised that 'colonial' is something of minor importance and something to be embarrassed, ashamed or angry about. Not because these notions are invalid, but because they affect our evaluation and hinder a fair comparison with works conceived and realized outside the colonies.[1]

Unlike built heritage of earlier periods, until recently the appreciation and valuation of nineteenth- and twentieth-century architecture and town planning in former colonies was almost completely neglected and ignored. For cultural and historical reasons, the continuation of this attitude is no longer acceptable: the time has come to recover the imbalance and pay attention to (sometimes) unique works that for so long were neglected. The willingness to acknowledge, study and appreciate heritage from colonial times will differ from county to country but is indispensable for a successful project.

An inquiry into the relevance of colonial heritage as a designated group within the framework of World Heritage suggests common denominators that perhaps do not exist. Referring to architecture and town planning created under colonial rule as 'colonial heritage' first of all refers to a particular administrative system and a location outside the Western territory. It overlooks periodical, regional and administrative differences and passes over formal and technical characteristics. The denomination creates a situation where the significance of the heritage seems to be derived from political rather than from other, far more subject-oriented factors (formal, technical, circumstantial). Awareness and recognition of the various factors that over extensive periods of time, considerable distances and within various cultures influenced the architecture and town planning in various colonies underlines the necessity to formulate criteria to assess this particular kind of heritage in its own right and in comparison with non-colonial heritage.

Valuation of heritage requires as objective an approach as possible. Western guidelines and criteria regularly prove to be inadequate to evaluate artefacts created and realized outside the Western Hemisphere. Whereas primary and secondary sources and the objects themselves provide ample proof of the assumption that built heritage from colonial times has a quality and value of its own, when measured by Western criteria this heritage is often considered inferior to developments outside the colony. The merits of these works simply never come to the fore because specific (local) circumstances and demands are not taken into account.[2] Thus, taking up the challenge of assessing the qualities of nineteenth- and twentieth-century heritage forces us to recognize the inadequacy of a predominantly Eurocentric approach and coinciding Western criteria with regard to achievements realized outside the Western Hemisphere. Determining the intrinsic meaning, importance and value of colonial heritage within the framework of the modern era therefore requires the formulation of a (new) set of (uniform) criteria that is applicable to heritage around the globe.

Memory of the past

Conceived and realized at a time when European nations established empires around the globe by ruling colonies that were often far more extensive than the territory of the motherland, heritage from those days and regions bears witness to a former world order and its transitory character. It belongs to the realm of tangible evidence of a past that, assuming colonialism as we knew it will not re-occur, has faded away forever. It is this particular condition that gives rise to the need to determine whether it is 'because of' or 'in spite of' its colonial context that this heritage is of special interest and importance.

As the nomenclature suggests, colonial heritage is inextricable linked to specific political and economic circumstances. Circumstances peculiar to colonial society (political, economic, social, cultural) played an important role with regard to the possibilities and limitations that society offered. When evaluating position and meaning, quality and merits of colonial heritage within the realm of architecture and town planning of the modern era, these circumstances will have to be incorporated.

1. Heritage that originates from a colonial past is by definition a bilateral affair: both colony and motherland are the rightful heirs of this heritage and should commit themselves accordingly. Therefore, and in order to avoid the negative connotation of the adjective 'colonial', I would prefer to use the more positive and accurate 'mutual'. In Indonesia this term was successfully used during a seminar on 'Change and Heritage in Indonesian Cities' (Jakarta, 1988) and has been used ever since.
2. Despite various attempts, Western awareness and recognition of different values outside the Western Hemisphere only gradually seem to sink in. Although a small number of studies tries to prove the contrary, many art and architectural historians today still argue that contemporary art and architecture are merely provincial derivatives of Western developments. For a discussion on contemporary Indonesian art see Astri Wright, *Soul, Spirit and Mountain. Preoccupation of Contemporary Indonesian Painters,* Oxford, Oxford University Press, 1993.

In her book on the politics of design in French colonial urbanism, Gwendolyn Wright describes how the French Government used the colonies as a kind of experimental garden to try out new architectural and planning concepts and ideas.[3] Wright's study leads to questions such as the commonality of this practice, the different aims by which different administrations ruled their colony, and differences in the practice of architecture and town planning between colonies and motherland. They also lead to questions concerning how to define colonial heritage, what distinguishes colonial heritage from other heritage, is the term colonial heritage accurate and/or justifiable, does colonial heritage around the world have common denominators that make it stand out as a group, and so on.

The outlook, importance and value of colonial heritage are closely intertwined with and determined by conditions in the colony (climatic, economic, social). The fact that these conditions differ from those in the motherland contributes to and distinguishes colonial heritage as something different from (Western) non-colonial architecture. In order to arrive at an objective an assessment as possible, a study of the circumstances in the colony, including characteristics of indigenous architecture and town planning, has inevitably to be incorporated.

State of the art

In a multicultural society such as a colony (cultural) cross-fertilization is inevitable. However, artefacts that are the result of this blend often no longer fit in with Western criteria. When applying them we none the less risk considering non-Western artefacts merely as regional derivatives and locally derived manifestations of a world (i.e. Western) culture. In doing so we then completely deny the intrinsic quality and importance of this heritage. In order to assess the merits of architecture and town planning in the colonies, a (new) non-Eurocentric analysis and valuation method must therefore be applied.

To arrive at a better evaluation and understanding of the position, meaning, quality and merits of architecture and town planning in the colonies, Western standards such as innovations in the use of new materials, technology, concepts of production, transport, communication and labour, or organization of space, can be applied as long as one keeps an open mind to context and circumstances. When, for example, the Western criterion 'innovations in the use of new materials and technology' is applied in a colonial context, the result will be ambiguous if it is not made clear what is actually being compared. Specifications concerning adaptations of local materials and technologies, innovations realized by Western architects in the colony or other colonies, or applied by local people, all need to be taken up in assessments and valuations.

A new approach should include questions and criteria about:

- ***circumstances:*** political, economic, social, cultural;
- ***assignments and objectives:*** nature (social, political), volume and scale of the assignments;
- ***working space:*** education, professionalization, opportunities, limitations;
- ***point of departure:*** availability of material, institutions, legislation;
- ***local conditions:*** climate, building and construction methods, styles and decorations;
- ***external dimensions:*** application of Western materials, building and construction methods, styles and decorations;
- ***adjustments and adaptations:*** mutual integration of vernacular/Western constructions, material, styles, decorations;
- ***contemporary references and examples:*** other colonies, Europe, United States;
- ***characteristics of emerged (colonial) architecture and town planning:*** distinguish and determine distinct and shared characteristics according to motherland, region and period.

Answers to these questions will eventually allow conclusions to be drawn about the degree to which architecture and town planning in the colonies were innovative; produced a distinguished style particular to a region and period, with its merits and demerits; generated a cross-cultural fertilization, etc. Based on a description of these characteristics, a statement can be made about the intrinsic significance and quality of this heritage.

The Dutch East Indies: late-colonial society (1870–1942)

Towards the end of the nineteenth century, characterless buildings and the greater demands of clients regarding the appearance of their buildings forced architects to create an architecture that would not only suit the climate technically but would be aesthetically pleasing and an impetus to the booming business sector.[4] The demand for appropriate architecture coincides with administrative and socio-economic changes marked by the introduction of the Agrarian Act in 1870.[5]

3. G. Wright, *Politics of Design in French Colonial Urbanism,* Chicago, University of Chicago Press, 1999.
4. Throughout the nineteenth century, the problem that preoccupied architects in Europe was the need to create an appropriate contemporary architectural style that would reflect the spirit of the time: new machines, new professions, new building materials, new building types, etc. A real debate on the need for a proper architecture in the Dutch East Indies did not start until around 1880.
5. The Agrarian Act replaced the much more repressive Culture System that was put into effect in 1831.

Whether the move towards a more liberal administration originated in self-interest (economic profit) or altruism (a conscious effort to build up a colony that would eventually be self-sustaining), the overall result was a gradual shift from an initially completely centralized control by the national government to an increasingly decentralized administrative system. This was taken a step further during the early twentieth century with the introduction of the Ethical Policy. This new policy opened the way for more political and socio-economic changes, marked by the passing of the Decentralisation Act (1903), the Local Councils Ordinance (1904) and the Government Reform Act (1922). These developments also mark the start of and run parallel to a debate on the need for an appropriate *Indische* architecture and town planning.

The Japanese occupation (1942–45) abruptly ended these ongoing developments. Following Japan's surrender, the Netherlands ignored Indonesia's unilateral declaration of independence and reclaimed power over the archipelago. The unbending Dutch attitude plunged the country into guerrilla warfare with Indonesia that only ended because of heavy international pressure on the Netherlands and Indonesia's agreement to establish a federal administration over the archipelago.[6] Following the official transfer of sovereignty (1948), business continued more or less as usual until well into the 1950s. The final blow for the Dutch came in 1955 when they could not reach an agreement with Indonesia on the status of Papoea and as a result the Dutch became *persona non grata* in the Republic until the 1970s. Despite some political hiccups the relationship from then on has been more or less stable.

The implementation of the Agrarian Act and the Ethical Policy brought about considerable changes in many areas. One of the most noticeable physically – and the most relevant regarding architecture – was the increase in the number of citizens. An influx of Europeans who, unlike in the past, often had no intention of returning to the Netherlands, and of Indonesians from rural areas, led to overcrowded cities and a housing shortage. The architects' task was to address these issues. While working on extension and improvement plans and housing schemes, they faced a specific problem, that of the multiracial and segregated character of colonial society. Whereas the various ethnicities initially lived desegregated, the arrival of increasing numbers of Western immigrants after 1870 gradually created a segregated society. In the field of architecture and town planning, this implied the emergence of European, Indonesian, Chinese and Arab quarters each with their own specific economic, social and formal characteristics.

Professionalization of the business

During the nineteenth century, engineers in the Netherlands united and initiated professional architectural organizations. The Royal Academy for Artillery and Military in Delft was established for educational purposes in 1815. A department of civil engineering was added in 1842. Only six years later, in 1848, architects established the Maatschappij tot Bevordering der Bouwkunst [Society for the Enhancement of Architecture] in Amsterdam. Alongside these developments a range of specialized professional journals, such as *Bouwkundige Bijdragen* [Architectural Contributions] and *De Ingenieur* [The Engineer] came into being.

These initiatives by and large also covered the situation in the colony. During the nineteenth century the need for fully fledged institutes and journals was increasingly felt and complied with. In 1898 the Vereeniging van Bouwkundigen in Nederlandsch-Indië and its journal *Indisch Bouwkundig Tijdschrift* [Dutch East India Architectural Magazine] were established as well as other *Indische* journals. Institutes and journals served as an outlet and platform for architects and engineers to exchange ideas and publish developments. Although the journals in the Dutch East Indies were mainly dedicated to local colonial affairs, they did pay attention to developments overseas, whether in the Netherlands, Germany, the United States or India.

At the beginning of the twentieth century, the Nederlands-Indische Architecten Kring (NIAK, Dutch-East Indian Architects Circle; 1923), the counterpart of the by then renamed Maatschappij tot Bevordering der Bouwkunst/Bond van Nederlandse Architecten, was established. In 1920 the engineer R. L. A. Schoemaker was the first professor to be inaugurated at the faculty of civil engineering at the recently opened Polytechnic in Bandung.

Emergence and characteristics of Indische architecture and town planning

Climatologic and geographical conditions in the colony prompted constructive adaptations from the outset. During the eighteenth century, elevated buildings were increasingly erected with steep roofs with ridges that ran parallel to the street in order to create an overhang that would protect the building from sun and rain. Much later, during the first half of the twentieth century, flat roofs and so-called 'double-front' walls were applied as well.[7]

Around the turn of the nineteenth century, country estates a considerable distance from the initial settlement started to emerge for those who could afford to leave the densely built-up and rather unsanitary city centres. The houses occupied large parcels, were usually low-rise, frequently built on stilts, surrounded with galleries on the outside to

6. The question of whether the assumption of power by the Indonesian republicans generated a rupture in architecture and town planning practice is interesting and might be included in research activities.
7. A double-front wall is an extensively pierced façade intended to create natural ventilation and shade.

create natural ventilation, large overhangs, a more or less standard ground plan, and had the kitchen and sleeping quarters of the attendants separated from the main house at the back of the estate. The materials used for buildings usually consisted of wood for the construction, river stones, brick and plaster for the walls, and tiles or *atap* for the roofs. Gradually new residential areas developed around these estates, spaciously laid out with wide unimproved streets, extensive green areas and spacious parcels with wide drives and lush gardens. Their only difference to the initial estates was the (largely) reduced size of the parcels and the consequently more condensed building capacity.

While the need for climatic adaptations was recognized, the engineers responsible for the design of buildings were unable to create a really suitable architecture because their architectural education was very shallow: academies usually instructed students on the application of classical European architectural styles without paying much attention to the function of the building.[8] After nearly two centuries this had resulted in an architecture that lacked style and character. Engineers, who were increasingly annoyed by the low architectural quality, criticized the building 'ethics' in the colony and, stimulated by a growing awareness and increasing demand for quality in architecture and town planning, generated a debate on the significance and need for a contemporary *Indische* architecture that would be physically suitable to the region and aesthetically pleasing to the eye.[9] The debate on the importance and possibilities of architecture focused on various aspects such as the use of materials, construction methods, style, decoration, and last – but certainly not least – the applicability of indigenous motifs.

The architectural debate was at its peak in the early 1920s when two distinctive 'schools' emerged. There were those who felt that the only objective was to create good architecture: architecture that would meet the needs of users and physical conditions and would be aesthetically pleasing. To these architects, the application of Western or Eastern constructions, materials and motifs was irrelevant as long as they were applied with a full understanding of their meaning or function. On the opposite side were those who felt that indigenous architecture was to lead the way towards an appropriate architecture. They were of the opinion that buildings throughout the archipelago offered beautiful examples of suitable architecture and could easily be used as sources of inspiration to create a contemporary architecture for the Dutch colony.

One of the hallmarks of the *Indische* architecture that emerged – apart from adaptations to meet the climatic requirements as described above – was an experimental, loose and eclectic application of a wide variety of construction methods and architectural styles varying from Art Deco to Expressionist, and from modern to vernacular. Within the restricted choice in building and finishing materials, architects managed to create a variety of buildings and spaces with unpretentious but refined detailing and decoration. The overall result was an experimental, vibrant, daring and hybrid architecture that resembled world architecture but added a little twist. Presumably because the building and housing inspection department mainly focused on technical matters, and building regulations were not very strict, buildings seem more daring and elaborate.

In order to meet the demand for large numbers of various kinds of new building (schools, hospitals, post offices, prisons, etc.) that were needed after 1900, the government Department of Public Works often relied on and applied so-called *normaalontwerpen* [normative designs]. Though interesting from a production point of view, these designs often lack a specific kind of architectural quality. Representative, unique government buildings (offices for governors, city councils, departments) on the other hand were (naturally) given more attention and were usually of outstanding quality. The same may be said of the dwellings of middle-income civil servants. Though from an architectural point of view not very noteworthy, their production methods lend government housing an interesting aspect because these buildings were produced *en masse* and were part of larger planning schemes such as city extension plans or improvements of existing areas.

More outspoken and daring architecture is found among buildings commissioned by private entrepreneurs. With an eye for business and increasing awareness of how an appropriate location and building (i.e. architecture) could contribute to and reflect commercial success, private entrepreneurs frequently went to great lengths to realize their dreams in architecture. Houses built for the high echelons of administration and business sometimes displayed a similar sense of distinction, character and remarkable architectural features, with the eclectic application of various styles and decorations to their situations.

Many architects that arrived in the Dutch East Indies were students from the Polytechnic in Delft, but they were not town planners by training. As the practice of town planning in the colony was virtually non-existent around 1900, these newly arrived architects faced the complex and sizeable task of addressing technical and design aspects (uncontrolled town extensions, the need for urban improvement, housing shortage, insufficient infrastructure and sewerage) as well as aspects of legislation, regulation and organization. The town-planning method they developed was characterized by the establishment of various municipal services, systematic execution procedures and simultaneous implementation of legislative matters.

8. Two frequently applied styles were neoclassical and Empire: Jeanine R. M. Deckers, Architectuur in Batavia tussen 1800 en 1900 [Architecture in Batavia between 1800 and 1900], M.A. paper, Vrije Universiteit, Amsterdam, 1992; Dieuwke Wynia, De Indische Overheidsarchitectuur tussen 1908 en 1928 [East-Indian Government Architecture between 1908 and 1928], M.A. paper, Universiteit van Amsterdam, Amsterdam, 1993.
9. This echoes simultaneous developments in Europe and the United States.

A typical element of the *Indische* town was the application of functional and ethnic zoning with buildings that were appropriate according to their location, function and status. As a result of the increasing process of Europeanization, this physical segregation, although already in existence, became more pronounced after the turn of the twentieth century.[10] The majority of the extension plans were designed for European inhabitants at a considerable but bridgeable distance between the new and the existing built-up area. They covered vast areas, had a wide, open and green layout with detached or semi-detached houses, and limited employment opportunities for the Europeans. Chinese areas were usually in the old quarters of the city, dazzling with commercial activities, densely built up with people living above their shops or businesses. The Indonesian areas were usually built in between and around these areas, as the majority of the Indonesian labour force worked as employees of European companies or as housekeepers. The Indonesian areas *(kampungs)* mainly consisted of a jumble of low-rise, semi-permanent houses, with little or only communal sanitary facilities, unpaved roads and poor connections to the main infrastructural network.

Although a detailed description of the various town plans is outside the scope of this paper, the extensions for Semarang (New Candi, 1909) and Batavia (Menteng, New Gondangdia, 1918) should be mentioned because they were the first extension plans in the Dutch East Indies and, with regard to aesthetics as well as methodology, more or less set a standard for developments throughout the archipelago. On account of the remarkable growth and unity of design, the town plan for Bandung should also be mentioned. Bandung, an almost non-existent provincial village by the late nineteenth century, developed over less than twenty years into a full-grown city with almost European allure that provided accommodation for various governmental departments and leading educational institutes.[11] The short development period of the city resulted in a coherent development plan with specific functions, inhabitants and building for each of the eleven districts.

Thanks to the work of a relatively small group of architects, civil servants and legislators, within a period of twenty years a large number of municipal extension and improvement plans were designed and executed, and several local ordinances and a draft town-planning ordinance were drawn up and implemented.[12] The reason for this pace could be the fact that colonial society was very hierarchic, only a limited number of people were involved in the process and communication lines were short. Consequently, decision-making was swift.

Indonesia today: chances and risks

Until some twenty years ago, a general inertia of both Indonesia and the Netherlands prevailed towards their mutual heritage of the late-colonial period an era that had witnessed great political, economic, social and architectural changes. But in 1985 the indifferent attitude changed for the better when a historic landmark building in Jakarta was demolished due to increased traffic and the need to widen a main connection. De Harmonie (1810–14, architect J. C. Schultze) was a corporate building that had been built to persuade Europeans to move from the old city centre to the more southerly located new area of Weltevreden. The building, in Empire style, was generally considered to be one of the most vital of early-nineteenth-century buildings in Jakarta. The fact that it originated from colonial times seemed not at all relevant when architects and the general public expressed their disbelief, anger and frustration over the loss. Its importance as a landmark was (and is!) signified by the fact that this particular area in the city is referred to as 'Harmoni'.

Ever since the destruction of De Harmonie, various people and organizations have documented, studied, discussed, published and created awareness of Indonesia's colonial heritage. In Indonesia governmental and non-governmental organizations are active, such as the Indonesian Institute of Architects, the National Heritage Trust and local heritage societies.[13] Their core business is creating awareness among inhabitants and policy-makers concerning the value of built heritage and the irreversibility of its destruction. Occasionally restoration projects are initiated.[14] Similar organizations in the Netherlands are increasingly interested and involved in various small- and large-scale projects and in exchanging knowledge and expertise.

10. The initially segregated but economically and socially communal mixed way of life gradually gave way to a much-increased (physical) segregation, thus sharpening social, economic and ethnical differences. J. J. P. de Jong, *De waaier van het Fortuin. Van handelscompagnie tot koloniaal imperium. De Nederlanders in Azië en de Indonesische archipel 1595–1950* [The Fan of Fortune. From Trading Company to Colonial Empire. The Dutch in Asia and the Indonesian Archipelago 1595–1950], The Hague, Sdu Uitgevers, 1998, pp. 387, 391, 483.
11. The rapid development of Bandung was caused by the decision of Governor-General Earl J. P. van Limburg Stirum in 1916 to move the administrative departments from Batavia to Bandung. Owing to its appearance and outstanding facilities, Bandung around 1930 was already referred to as the 'Paris of Java'.
12. Not long after the town-planning issue came to the forefront, architect Thomas Karsten wrote an important article on town planning entitled 'Indiese stedebouw'. Until 1942 Karsten published on issues relating to architecture and planning, ranging from social to legal and from technical to aesthetic. Thomas Karsten, 'Indiese stedebouw', *Mededeeling 40 bijlage bij Locale Belangen 19/20 (1920),* pp. 145–250.
13. Local heritage societies operate in Bandung, Jakarta, Medan, Padang, Semarang, Solo, Surabaya and Yogyakarta.
14. Projects that attracted a great deal of attention are the restoration of the Reinier de Klerk mansion at Jl. Gadjah Mada in Jakarta (1995) and the house of and by C. P. Wolff Schoemakers at Jl. Sawunggaling in Bandung (1999). The latter was awarded the UNESCO Asia-Pacific Heritage Award 2000. Currently the Sumatra Heritage Society in Medan is working on the restoration of the historic town hall (design Ch. M. Boon, 1908) while Semarang and Jakarta are working on revitalization schemes for their old (Dutch) city centres. The Jakarta Post in 1999 and 2000 published a series of fifty-four articles on heritage buildings (Arab, Chinese, Dutch, Indonesian, Portuguese) in Jakarta.

The Dutch National Department for Conservation advises on historical projects, the Bond van Nederlandse Architecten, the Netherlands Architecture Institute and the Institute for Housing and Urban Development Studies organize programmes that introduce foreigners to the Dutch practice of architecture, town planning, restoration and policy-making. Non-governmental organizations Stichting Oud Jakarta (Foundation Old Jakarta), Stichting National Cadeau (Foundation National Present), and the Association of Dutch Friends of the Sumatra Heritage Trust, to name but a few, usually focus on a particular project such as the restoration of the Reinier de Klerk mansion in Jakarta or the town hall in Medan. Several students from Indonesia and the Netherlands have conducted research or are working on papers and dissertations.

These initiatives, although sympathetic, should not obliterate the political, economic, scientific and pragmatic implications and problems of the task lying ahead when dealing with conservation of built heritage. An important obstacle to consider in the Indonesian context is the political and economic status quo. Although the political and economic instability that has dominated the country since 1997 has proved to be a 'blessing in disguise' – because of the temporary halt it has caused to the devastating effect of the booming economy through the rapid demolition of monuments in the older parts of cities – it is not hard to imagine this trend will once again continue when politics and economics are back on their feet again. For architecture and town planning this would mean a return to a situation where despite the Act on Monuments and additional regulations, historic buildings and whole city areas fall victim to real estate and infrastructure developments that primarily serve the middle- and upper-class income groups.

This situation automatically leads to another problem, that of Indonesia's general attitude towards heritage, which is at the same time indifferent and of a smothering nature. The indifference is clear from the fact that despite the existence of a national act on the conservation of monuments, the implementation and enforcement of this measure is almost constantly violated by real-estate developers, building- and landowners.[15] Because demolition of a building is considered easier and cheaper, hence more economic, this in general is preferred to renovation or restoration. Historical resentment is hardly ever an argument.

When, on the other hand, people do pay attention to a historic object this does not necessarily create a positive situation either. The general tendency to overemphasize the cultural and historical value of the object, combined with the limited range of design and functional changes that are allowed when handling a registered monument, limits the possibilities for adaptive reuse and radical conversions.[16] The result is that restored heritage buildings are often put on a metaphorical pedestal and turned into a gem only to be admired from an appropriate distance, thus losing connection and interaction with their physical and social surroundings.[17] The same goes for town planning: protective measures usually freeze the existing situation and do not allow any visual or functional alterations, thus creating lifeless and economically depressed areas.[18]

A last but no less essential problem is the lack of sufficient knowledge and effective policy in both the Netherlands and Indonesia on preservation, conservation and restoration of nineteenth- and twentieth-century colonial heritage. For a considerable period, the Netherlands has practically ignored its overseas heritage on both a scientific and political level. Universities in general greatly overlooked this particular part of the Netherlands' architectural heritage. Politics, if any attention was paid at all, usually focused on earlier periods: sixteenth-century fortresses on the Moluccas, an eighteenth-century mansion in Jakarta, the palace of a local king, and a Buddhist temple in Central Java. Nineteenth- and twentieth-century architecture and town planning never seemed able to attract the same amount of enthusiasm; not to mention money. As a result their restoration has only been carried out haphazardly.

The situation is not much different in Indonesia. Despite increased interest in colonial cultural heritage, the national policy of priority to economic growth and development has created a situation where there is almost no need or desire for architects to specialize in the field of preservation, restoration and conservation. Simultaneously, it is obvious that training methods are inadequate and insufficiently up to date to address design issues in a contemporary, innovating and challenging way.

To end on an optimistic note, it is important to mention that there are plenty of architects and Indonesians genuinely interested in the cultural heritage of the country. For them, the coming about of an *Indische* architecture and town planning is, though not without faults, particular to the spirit of the time and region of the late-colonial period. It is also a source of inspiration in their quest for a suitable contemporary Indonesian architecture and a guiding principle in their daily confrontation with current design issues.

15. The first Act on Monuments was drawn up and passed by the Dutch Government in 1931 and revised in 1934. The Indonesian Government revised, updated and passed a new act in 1992: Staatsblad van Nederlandsch-Indië 238 (1931); Staatsblad van Nederlandsch-Indië 515 (1934); Undang-undang Republik Indonesia 5 (1992). Real-estate developers, building- and landowners repeatedly seem to consider themselves above this law.
16. Because of the restrictive laws on restoration, restoration projects usually propose turning monuments into cultural centres, exclusive restaurants, etc. The inflexibility of the regulations leads to inconsistent situations: while dozens of spacious and deserted buildings from the 1930s are scattered throughout pre-war neighbourhoods of Jakarta, some years ago a new building that imitates the atmosphere of the jazz era was built in an southern area of the city and fitted out for entertainment. Another fine example is the entire removal of a nineteenth-century villa from one area of Jakarta to the same southern area, just so that it could be exploited as a Italian restaurant.
17. This observation applies to many conservation projects executed in Indonesia. Pauline van Roosmalen, 'Lagi-lagi museum', *Kompas,* 14 January 2001.
18. As stipulated by law, Indonesian cities draw up new town plans every ten years. Studies on the revitalization of old city centres and/or buildings have been carried out for Bandung, Den Pasar, Jakarta, Medan, Padang, Semarang, Solo, Surabaya and Jogyakarta. To what extent these revitalization studies will be included in or influence future town planning remains to be seen.

Recommendations

Appreciation and assessment of cultural artefacts are determined by qualification criteria. Notwithstanding the significance of Western research and valuation methods for Western architecture and town planning, their ambiguity, inadequacy and deficiency outside the Western hemisphere, i.e. in a colonial setting, hinders an objective and equal evaluation of the intrinsic quality and importance of the objects. Therefore an inevitable stipulation when studying and evaluating nineteenth-and twentieth-century heritage in former colonies is an adaptation of the Western, predominantly Eurocentric methodology, criteria and standards (innovations in the use of new materials, technology, concepts of production, transport, communication and labour, organization of space).

To understand and appreciate the specific character, meaning and relevance of built heritage in former colonies, the study and analysis of colonial society is inevitable because the architecture and town planning is intrinsically linked to the needs, demands and possibilities of that society. When political and economic circumstances play a decisive role in determining heritage from colonial times as a particular kind of heritage (something its nomenclature seems to suggest) it is essential to not only review and study formal and technical characteristics but to include these circumstances when assessing the value of this particular heritage.

With regard to the Dutch East Indies, the proposed combined study and analysis of nineteenth- and twentieth-century architecture and town planning is interesting, because it covers a period of political, economic, social and architectural transition that runs more or less parallel to and is closely linked with social and architectural developments in the motherland. It is the combination of these aspects, together with the climatic, geographic and specific colonial circumstances, that generated a moderate but flourishing architecture and town-planning practice during the late-colonial period. The specific colonial as well as the formal and technical characteristics make it worthwhile evaluating and studying this particular heritage – in Indonesia as well as in other former colonies around the world.

Tugendhat Villa in Brno, Czech Republic (C ii, iv);

inscribed in 2001

Source: Nomination file

The Tugendhat Villa in Brno, designed by the architect Mies van der Rohe, is an outstanding example of the international style in the modern movement in architecture as it developed in Europe in the 1920s. Its particular value lies in the application of innovative spatial and aesthetic concepts that aim to satisfy new lifestyle needs by taking advantage of the opportunities afforded by modern industrial production.

Criterion (ii): The German architect Mies van der Rohe applied the radical new concepts of the Modern Movement triumphantly to the Tugendhat Villa to the design of residential buildings.
Criterion (iv): Architecture was revolutionized by the Modern Movement in the 1920s and the work of Mies van der Rohe, epitomized by the Tugendhat Villa, played a major role in its worldwide diffusion and acceptance.
(25th Committee session)

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Open spaces and landscapes: Some thoughts on their definition and preservation

by Marc Treib

Terms

The category assigned to this paper, 'Open spaces and landscapes', is ambiguous, and thus warrants some discussion of terms. Historically, in English, landscape architecture is a relatively new term, coming to currency with Frederick Law Olmsted in the later nineteenth century. Until then, gardener or landscape gardener was more common, as it has been in many countries. Garden artist still appears in Danish, for example. In almost every Western language, there have been variations in classification between *gardeners* – those who work more with the vegetation and the specifics of care – and the *garden* (or *landscape*) *architects,* who are supposedly more concerned with spaces and planning as a whole, on a larger scale (and not necessarily their construction of maintenance). Some landscape critics and historians have been troubled by the sense of building (and thus, urbanity) in the term landscape architecture, possibly implying a lesser status than architecture itself. Recently, some writers have preferred the term *designed landscape,* indicating a distinction from the *cultural landscape* without appropriating the word architecture. Of course, cultural landscapes are themselves 'designed', that is, planned with some objective in mind. But in some instances, the objectives behind the making of cultural landscapes are not necessarily shared by professional trained landscape designers, who also engage in the production of polite culture.

Definitions

To consider issues relating to the preservation of designed landscapes, we would best consider a minimum of three arenas: the *social*, the *formal* and the *ecological*. The first set of issues acknowledges that a designed environment, architectural or natural, is created for some human purpose, to be perceived by humans singly and/or in groups. Formal issues, that is, those that embrace issues of space, form, construction and aesthetic invention and sophistication, refer to environmental design as cultural practice. Architecture and landscape architecture (and major works of public art, for that matter) share these two areas – social and formal. It is the third arena, that of *natural and ecological process*, that truly distinguishes landscape design from architecture and other forms of environmental design.

If the ambiguous idea of 'open space' is added to the term designed landscape the problems are compounded. Are open spaces those that remain unbuilt after realizing architecture? Or does the term imply unroofed areas that are designed for some intended purpose? Does a plaza, free of vegetation and paved exclusively with hard surfaces, qualify as a designed *landscape*, or should it be considered part of urbanism or architecture? Defining these areas by the profession responsible for their design is even more problematic. Landscapes are made by gardeners, urban designers, architects, botanists – and even the lay public as well as by the landscape architect. Is agriculture a cultural expression worth regarding as a designed landscape?

To my mind, landscape architecture (or designed landscape, the emerging term) differs from a cultural landscape in that there is an overt cultural aspiration beyond the quotidian. That is, it is landscape practice that positions itself in regard to its time and its history; it strives for values beyond immediacy, efficiency or economic gain. (I realize that this definition remains problematic. If it were applied to architecture, it could exclude the factory, for example, from consideration as architecture – which is hardly the case).

This is not to denigrate in any way the importance of cultural landscapes or the need for their preservation. I wish only to focus on a second, more specific set of issues.

Ephemerality

Change is the most evident characteristic of designed landscapes, especially when they rely on plant materials as their primary means of expression. (For the moment, we direct our focus away from the hardscape plaza void of vegetation). Change is mapped over two axes, *cyclical*, based on the four seasons, and *linear*, which traces the passage of time. Landscapes as a whole require more care than architecture and urban infrastructure, we may even judge the state of a culture by examining its attitude toward gardens and landscapes (or at a human level, as the way we care for the elderly and infants). In many ways the landscape is closer to us than built form as it directly addresses the climate and flora native to the place – or conceives a garden or landscape as an escape from the mundane world of our normal existence.

Unlike a concrete wall, which maintains a degree of permanence for a number of years, a garden may fall and disappear within a few seasons. This makes the issue of landscape preservation all the more crucial. Many of our preservation laws assume that a site requires seventy-five to one hundred years in order to achieve significance (unless, perhaps, it was the site of an important event). Yet few designed landscapes can survive for seventy-five years without some form of protection. Obviously, preservation laws for architecture must be adjusted in considering their application to designed landscapes.

All sites change in use as well as in form over time. As demography and context shift, the character of the space shifts correspondingly. We require adaptive reuse for parks and gardens as well as for buildings and districts. The critical issue is: How much of the original needs to be retained in order to preserve the integrity of the landscape as originally realized?

Landscapes in the twentieth century

The twentieth century, in my opinion, was a period of far greater invention than the century that preceded it. Certainly, the degree of innovation and change (and also consequent destruction) surpassed all that came before it (two world wars did much to instigate this change). An interest in new ideas of space, new ideas in science and technology, the adjustment of social classes, the accumulation of wealth, the availability of exotic plant species, and the continued expansion of cities, propelled innovative thinking in landscape architecture. In some cases, such as the French modernist gardens of the 1920s, invention was embodied in highly mineral constructions, reverting in some ways to the idea of the garden as a visual object. In other ways, the renewed investigation of flowers, shrubs and trees employed species and horticultural methods that led to new designs. In other cases, there was a renewed humanism in which the landscape was considered first in terms of its habitation and use, summed up neatly in the title of Thomas Church's book *Gardens are for People*.

Arenas of consideration

The garden

Like the villa in architecture, many of the most original thinking in landscape in the twentieth century took place in the garden. To some degree this was fostered by new materials and new metaphors; in other ways it was the social process of middle-class suburban life that gave new access to gardens for former city-dwellers. It is easier to convince a single client than a civic body – another reason for the importance of the garden. In many ways the ideas invested in garden design are more pure; the reduced scale allowing a concern at the most detailed level. Key works (among, it should be noted, many others) would include those of Thomas Church, Garrett Eckbo and Dan Kiley in the United States; Christopher Tunnard, Sylvia Crowe, Geoffrey Jellicoe and Peter Shepheard in the United Kingdom; Mien Ruys in the Netherlands; Pietro Porcinai in Italy; Herman Mattern in Germany; Sven Hermelin in Sweden; Roberto Burle Marx and Robert Coelho in Brazil; and Sutemi Horiguchi (if any remain), Kinsaku Nakane and Mirei Shigemori in Japan.

The park

The space embodied in the park represents another dimension of landscape thinking. Here the issues are collective, with society taken as a group rather than as a collection of individuals. As an antidote to urbanization and industrialization, the park continued to serve as an access to nature, however limited and reformed. But, especially in the reconstruction years following the Second World War, the park was treated as a major urban site. Although, in many ways, the nineteenth century was more critical for the formation of public urban parks, at the close of the twentieth century the park re-emerged as a site for landscape discourse. Key names are Erik Glemme, Ulla Bodorf, Holger Blom and Sven-Ingvar Andersson in Sweden; Gilles Clément, Bernard Tsumi, Jacques Sgard and Jacques Gréber in France; C. Th. Sørensen in Denmark; Gustav Ammann in Switzerland; Richard Haag, Zion & Breen, Robert Royston and George Hargreaves in the United States; and Wim Boer and Hans Warnau in the Netherlands (of course, many of the landscape designers mentioned under gardens would also apply here. Roberto Burle Marx's Parque del Este in Caracas and Flamengo Park in Rio immediately come to mind).

[A sub-genre would be the *Art park* or the *Sculpture park,* in which the creation or siting of art works is the basis for design. These may or may not be attached to a museum of art. Notable among these are Louisiana in Denmark, the sculpture garden of the Museum of Modern Art and Storm King in New York, Insel Holmbroich near Düsseldorf, and Celle in Tuscany (there are certain to be others).]

The campus, collegiate or corporate

Should this be treated as a *private park* rather than as a garden? Certainly in scale, and in many instances in form, the campus often recalls the landscape garden of eighteenth-century England. But the genre is unique, with a very particular balance between building and vegetation/open space. I am less familiar with campuses abroad, but I would include Simon Frazier University in Canada, Foothills College in California (Sasaki Walker), Connecticut General Life Insurance outside Hartford (Skidmore, Owings, Merrill with Isamu Noguchi), the Air Force Academy in Colorado Springs (Skidmore, Owings, Merrill), General Motors Technical Center outside Detroit (Eero Saarinen), University of Århus (Kaj Fisker et al., C. Th. Sørensen); Illinois Institute of Technology (Mies van der Rohe, Alfred Caldwell), and IBM Solana (Ricardo Legoretta, Peter Walker). The Ciudad Universitaria (university campus) at Caracas, Venezuela, it might be noted, has already been inscribed as World Heritage.

The plaza

The public open space serves as the urban arena, where society comes to meet, or at least to look. Louis Kahn talked about 'going away from' spaces and 'going to' spaces. A park, for example, is more of a going away from place, at least to many urban citizens. One goes to the park to 'leave' the city. One goes to the plaza for the social interaction, whether visual, verbal or commercial. (There are, to be sure, hybrid spaces than combine aspects of each). Plaza design has gone in and out of fashion in the twentieth century, but there are still a number of important works that display thinking and formal ideas drawn from parallel fields. These would include the work of the team of designers in Barcelona of the 1980s; projects by Isamu Noguchi in the United States, Israel, Japan and France; Lawrence Halprin and Dan Kiley (and Rockefeller Center) in the United States; Arata Isozaki and Fumihiko Maki in Japan; West 8 in the Netherlands; and Jeppe Anderssen in Denmark.

[A related or sub-genre here might be the *shopping centre* or *mall,* depending on the degree to which the project has been realized using landscape rather than architectural means.]

Land art

Although these works are essentially landscapes, they are conceived as artworks and are already covered by attitudes towards their preservation. Or should be. Perhaps, however, these should be included in our listings of designed landscapes as well as, or rather than, works of art. Having visited a number of sites in recent years, I can testify that the general state of repair even for recent projects is rather poor. Michael Heizer's *Double Negative* in Nevada has collapsed; Robert *Smithson's Broken Circle* is under water; his adjacent *Spiral Hill* is covered with shrubs and hardly identifiable; Richard Serra's *Shift*, outside Toronto, is subsumed by weeds.

Closing

Obviously, the considerations and listings are hardly exhaustive, and the quality and merit of the suggested works or designers varies considerably. The issues raised and the list of citations will, it is hoped, form a basis for discussion, which is after all the only intention behind this paper.

Annex A

Modern heritage properties on the World Heritage List

(as at July 2002)

Modern heritage properties (nineteenth and twentieth centuries)

1. Parque Güell, Palacio Güell and Casa Mila in Barcelona, Spain (C i, ii, iv); 1984

2. Brasilia, Brazil (C i, iv); 1987

3. Palaces and Parks of Potsdam and Berlin, Germany (C i, ii, iv); 1990, 1992, 1999

4. Skogskyrkogården, Sweden (C ii, iv); 1994

5. Bauhaus and its Sites in Weimar and Dessau, Germany (C ii, iv, vi); 1996

6. Palau de la Música Catalana and Hospital de Sant Pau in Barcelona, Spain (C i,ii,iv); 1997

7. Hospicio Cabañas, Guadalajara, Mexico (C i, ii, iii, iv); 1997

8. Museumsinsel (Museum Island) Berlin, Germany (C ii, iv); 1999

9. Rietveld Schröderhuis (Rietveld Schröder House), Netherlands (C i, ii); 2000

10. Ciudad Universitaria de Caracas, Venezuela (C i, iv); 2000

11. Major Town Houses of the Architect Victor Horta (Brussels), Belgium (C i, ii, iv); 2000

12. Tugendhat Villa in Brno, Czech Republic (C ii, iv); 2001

Industrial heritage properties

13. Völklingen Ironworks, Germany (C ii, iv); 1994

14. Crespi d'Adda, Italy (C iv, v); 1995

15. Verla Groundwood and Board Mill, Finland (C iv); 1996

16. Semmering Railway, Austria (C ii, iv); 1998

17. The Four Lifts on the Canal du Centre and their Environs, La Louvière and Le Roeulx (Hainault), Belgium (C iii, iv); 1998

18. Ir. D.F. Woudagemaal (D.F. Wouda Steam Pumping Station), Netherlands (C i, ii, iv); 1998

19. Darjeeling Himalayan Railway, India (C ii, iv); 1999

20. Blaenavon Industrial Landscape, United Kingdom (C iii, iv); 2000

21. Zollverein Coal Mine Industrial Complex in Essen, Germany (C ii, iii); 2001

22. Derwent Valley Mills, United Kingdom (C ii, iv); 2001

23. New Lanark, United Kingdom (C ii, iv, vi); 2001

24. Saltaire, United Kingdom (C ii, iv); 2001

Annex B

Research and documentation programme

The Programme on Modern Heritage consists of two phases: the first comprising mainly research and documentation, to build up databases, define critical issues in protection and conservation and raise public awareness. Phase I will be closed with an international conference in Dessau (Germany) to be determined, with World Heritage Centre advice to Committee and States Parties for the implementation of conservation measures and further actions.

Phase II consists of the identification of potential World Heritage, the establishment of regionally harmonized Tentative Lists and, eventually, the drafting of nomination dossiers, using the concepts of twinning or intercontinental connections for a reasonable geographical balance. All this is done at the initiative of the respective States Parties.

Phase I

The expressions in built culture and respective categories of heritage of the nineteenth and twentieth centuries that need to be researched and for which databases will have to be established are:

- Modern Movement
- Industrial heritage
- Expressionism
- Art Nouveau/Jugendstil
- Art Deco
- Eclecticism (with Beaux Arts as sub-category)
- Muralism
- Rationalism
- Constructivism
- Others

Given the limited resources and time available, a selection of priorities for research and documentation activities is necessary. At this moment it can be established that certain categories have been subject to in-depth study already. For example:

The Modern Movement is well-researched and documented, including the Proceedings of five international conferences (Eindhoven 1990, Dessau 1992, Barcelona 1994, Bratislava 1996, Stockholm 1998, with Brasilia 2000 currently under preparation), a separate study on evaluation criteria and possibilities for World Heritage listing (*The Modern Movement and the World Heritage List,* Advisory Report to ICOMOS composed by the DOCOMOMO International Specialist Committee on Registers, Final Version November 1997) and the recently published *The Modern Movement in Architecture: Selections from the DOCOMOMO Registers* (edited by D. Sharp and C. Cooke, 010 Publishers, Rotterdam, 2000).

Industrial heritage is well researched and documented, with separate studies on canals (S. Hugues, *International Canal Monument List,* 1996), bridges (E. DeLony, *Context for World Heritage Bridges,* 1997) and railways (Coulls et al., *Railways as World Heritage Sites,* 1999). Perhaps other sub-categories or certain geocultural regions might need more attention and, if necessary, the International Committee for the Conservation of the Industrial Heritage (TICCIH) could follow up on this.

Art Nouveau/Jugendstil has been the subject of a research and documentation effort under a co-operation project of thirty-five UNESCO Member States, which was published by the German Commission for UNESCO (*Architectural Heritage of Art Nouveau/Jugendstil,* Deutsche UNESCO Kommission, Bonn 1991). This publication perhaps could function as a reference for other studies.

Similar studies on Expressionism, Rationalism, Constructivism, Art Deco and Eclecticism/Beaux Arts need to be undertaken to supplement the body of knowledge and to provide for the proper references. In these studies the definition of (regional) characteristics of each category of built heritage is of importance, as well as the establishment of relevant criteria for selection and assessment through either deductive analysis or inductive exercises.

The set-up of these studies could follow a similar pattern as in the Art Nouveau/Jugendstil study, with the necessary flexibility to allow for a description and explanation of certain particularities relating to the cultural expression under study.

The following guidelines are suggested:

1. Description and explanation of the cultural period and its expression:
- the most important tendencies and directions within the category itself
- the general characteristics relating to the built environment
- the artistic achievements

2. Overview of previous and/or current architectural research and documentation and their main outcomes with regard to methodology, studies, archives, publications and meetings

3. Protection, conservation and restoration issues – policies and practices, problems and solutions

4. Research and history, describing:
- national movements
- international connections
- range of influence (also geographical) and relations with other fields of art
- new forms (structural, decorative) and materials
- most prominent buildings and sites

5. The heritage: case studies for World Heritage nomination and priorities with regard to threats

Apart from these studies, it is essential to assemble an **anthology of critical and significant texts on modernity**, as a reference document, as well as an **extended bibliography on all relevant works relating to nineteenth- and twentieth-century built heritage** with associated issues and personalities.

During and after the UNESCO Expert Meeting on Modern Heritage, various commitments were made to conduct studies and prepare documents. These included:

- ICOMOS has sent out a notice to all National Commissions and international scientific committees informing them of this meeting and its outcome. They will be encouraged **to conduct regional or national studies on modern heritage,** to put up inventories, to select properties and sites to be used during workshop sessions and to establish criteria for selection and assessment. At the same time they will be asked to provide the World Heritage Centre with **information on the studies, publications and meetings** on the subject that have already taken place;

- Mr Fabio Grementieri will conduct a **study on nineteenth-century heritage,** in particular the category of **Eclecticism/Beaux Arts** and the global dissemination and significance of this heritage;

- Under the supervision of DOCOMOMO International, the Université du Québec in Montreal (Prof. France Vanlaethem) and the University of Rome (Prof. Maristella Casciato) will prepare an **anthology of texts on modern heritage;**

- Prof. Kiran Joshi (Chandigarh College of Architecture) will conduct a **study on modern heritage in India,** as well as a **study on Chandigarh** in particular;

- Professors Shin Muramatsu (Tokyo University) and Yasushi Zenno (Columbia University, New York City), representatives of the modern Asian Architecture Network (mAAN), offered the assistance of their network in **the organization of the India meeting on modern heritage,** scheduled for early 2003.

Objectives

The project should attain the following objectives:

- Provide for a vision and concise overview on the heritage of the modern era located in the different geocultural regions of the world and bring this together within one framework;
- Achieve the identification, conservation and legal protection of the structures, buildings, ensembles, sites and landscapes of this type of heritage;
- Enhance the nomination of this type of heritage specifically in underrepresented regions of the world through co-operation (scientific, technical, managerial, financial and administrational) with well-represented regions and thus actively work on the imbalance on the World Heritage List;
- Increase public awareness at the national, regional and the local level.

As a wider spin-off:

- Study into the various spatial and immaterial aspects relating to heritage of the modern era, and important for identification, conservation and evaluation, will bring about a better understanding and possible re-evaluation of other earlier building periods and categories of heritage to re-balance the existing emphasis on the material aspects;
- Advice on the regional co-ordination of conservation and development projects resulting from the research and documentation programme;
- Production of information material, useful in the preparation of budgeted project proposals to mobilize international, multi- and bilateral donors to ensure sufficient resources for sustainable conservation projects.

Expected output

1. **A thorough documentation, description and analysis of the different categories and expressions of planned and built heritage of the nineteenth and twentieth centuries,** resulting from processes of democratization and industrialization, with new concepts of production, transport, communication, labour and the subsequent organization of space, occurring from the nineteenth century onwards in Europe.
2. **An overview of the different regional nuances,** resulting from a spread of the processes of democratization and industrialization over the globe, existing in all relevant areas outside Europe, with related specific characteristics.
3. **Relevant criteria** for the valuation, identification and conservation of the heritage of the modern era, **specifically designed for each geocultural region** in the world in possession of this heritage.

The output mentioned above will facilitate the follow-up phase of the programme, involving regional inventories with measures and actions for protection and conservation; identification of potential World Heritage in each category, with the establishment of regionally harmonized Tentative Lists, and finally the drafting of nomination dossiers.
All these actions are to be executed by the respective State Parties; the World Heritage Centre can facilitate these actions in the usual way of providing technical expertise and preparatory assistance. According to the progress made during the programme and the final results, a follow-up will be planned and developed by the World Heritage Centre to address these technical and preparatory needs.

Annex C

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Annex D

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