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# Designing Parks

Ontvangen

04 JUN 1992

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*J. Lodewijk Baljon* **Park ontwerpen**

Een beschouwing over hedendaagse ontwerpvoorstellen  
in de parkarchitectuur, behandeld aan de hand van  
een vergelijkende ontwerpanalyse van inzendingen  
voor het Concours International Parc de la Villette, Paris, 1982/83

**Proefschrift**

ter verkrijging van de graad van doctor  
in de landbouw- en milieuwetenschappen  
op gezag van de rector magnificus,  
Prof. dr. H. C. van der Plas  
in het openbaar te verdedigen op dinsdag 19 mei 1992  
des namiddags te vier uur  
in de Aula van de Landbouwuniversiteit te Wageningen

*Promotor* Ir. M. J. Vroom, hoogleraar in de landschapsarchitectuur

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*Lodewijk Baljon* **Designing Parks**

*An examination of contemporary approaches  
to design in landscape architecture,  
based on a comparative design analysis of entries  
for the Concours International:*

*Parc de la Villette Paris 1982-3*

*Architectura & Natura Press Amsterdam 1992*

Published with the financial support of

Van Eesteren, Fluck & Van Lohuizen  
Stichting, The Hague

Kring Tuin- en Landschapsvoorziening,  
Zeist

LEB-Fonds, Wageningen

Stichting Fonds voor de Geld- en  
Effectenhandel, Amsterdam

Tuinaanleg Binder BV, Rhooen

Tuin- en plantsoenaanleg Van Ginkel BV,  
Veenendaal

Terreinaanleg en Groenvoorziening  
Graphorn BV, Barendrecht

Heidemij Uitvoering BV, Rotterdam

Hoefakker BV, De Bilt

Mostert en de Winter Groenvoorziening  
BV, Sliedrecht

Nederlandse Organisatie  
Groenvoorziening, Zeist

Aannemingsbedrijf A. Schot,  
Heinenoord

Adviseurs Groenvoorziening en  
terreinrichting Buro Smits-Rinsma,  
Lochem

L. & J. Stoop Groenvoorziening BV,  
Waarland

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and Architectura & Natura Press,  
Amsterdam

Translation Jane Zuyl-Moores  
Text editing Chris Gordon  
Design Alje Olthof

Production Drukkerij Nauta, Zutphen

ISBN 90 71570 10 X NUGI 638/923

Published by Architectura & Natura Press  
Leliegracht 44  
1015 DH Amsterdam  
The Netherlands

Distributed outside the Netherlands by  
Idea Books  
Nieuwe Herengracht 11  
1015 RK Amsterdam  
The Netherlands

BIBLIOTHEEK  
LANDBOUWUNIVERSITEIT  
WAGENINGEN

## Stellingen

- 1 Parken zijn beplante plekken, waarvan begroeiing, grond, water en het gebouwde zodanig zijn gecultiveerd door compositie, dat zij een zin krijgen die de betekenis van de enkele plant te boven gaat.
- 2 De landschapsarchitectuur is een uit ambacht, theorie en kunstzin opgebouwd vak. Door wetenschappelijk onderzoek kunnen deze drie pijlers van het vak worden versterkt.
- 3 We kunnen van de tuinkunsthistorie leren, maar alleen met een kritiek die daar boven staat. Een rationele benadering van de vaktraditie is noodzakelijk, omdat zinvolle creatieve activiteiten zijn gebaseerd op regels en het nieuwe in tweespraak met het bekende wordt ontwikkeld.
- 4 Door in de analyse de tekentaal te benutten kunnen ontwerpspecifieke zaken beter aan de orde worden gesteld en is het resultaat voorstelbaar en overdraagbaar.
- 5 Stileren is niet het kiezen van een stijl voor het ontwerp; het ontwikkelt zich tijdens het ontwerpen en het kristalliseert uit onder invloed van de opgave.
- 6 De nadrukkelijke aandacht in het ontwerpen voor de ecologie heeft geen stijl doen ontstaan, omdat ecologie een van de technisch-functionele aspecten van het ontwerpen is.
- 7 Het gerealiseerde Parc de la Villette is niet het door de prijsvraag

gevraagde park van de eenentwintigste eeuw; het is het park van de eenentwintigste eeuw anno nu.

- 8 Voor de stad is de openheid van een grazige of sprankelende ruimte de voornaamste kwaliteit van het park.
- 9 «'t Is ook niet zo', dat voor zover in architectuur sprake is van een kunstuiting, deze zou kunnen ontstaan door volgens een principe te werken – 't is eerder zo, dat het principe zich formuleert tijdens of na de daad.» Dit omschrijft niet alleen waarom ontwerpanalyse zinvol is; het stelt tevens de beperking ervan.  
(G. Rietveld, januari 1960, in: G. H. Rodijk, *De huizen van Rietveld*, Zwolle, 1991, p. 14.)
- 10 Dat de Moderne Beweging in de parkarchitectuur in vergelijking tot de bouwkunst niets zou hebben voort gebracht, is een misvatting. Van de tuinen en parken ontworpen in die periode is echter weinig overgebleven dat deze stelling kan ondersteunen.
- 11 De restauratie van een historisch park kan, ten gevolge van de voortdurende ontwikkeling van de vormen en de beplantingen en door de vergankelijkheid van het materiaal waaruit het is opgebouwd, geen droge reconstructie van een stijlperiode zijn; het is een actuele ontwerp-opgave.
- 12 Het ontwerp heeft in het proces van plannen en bouwen onvoldoende gezag.
- 13 Bezoekers van muziek- of theateruitvoeringen barsten zo vaak in uitbundig applaus uit, dat het eerder een uiting van opluchting lijkt dat de voorstelling voorbij is, dan dat het een blijk van waardering is.

J. L. Baljon *Park ontwerpen*

Een beschouwing over hedendaagse ontwerp-opvattingen in de park-architectuur, behandeld aan de hand van een vergelijkende ontwerp-analyse van inzendingen voor het Concours International Parc de la Villette, Paris, 1982/83.

*Wageningen, 19 mei 1992*

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**Part one** *Introduction*

The first part of this study describes the phenomenon of the park in the light of our research. The concept of comparative design analysis is then introduced based on the objectives, instruments and characteristics of the method of design analysis to be developed for this study. The submissions for the Concours International: Parc de la Villette in Paris were analysed using this method of comparative design analysis. We also discuss the circumstances of the competition, the existing characteristics of the site, and the nature of the programme required.

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## 1 The analysis of urban parks

### Designing parks

Parks are planted places in which vegetation, earth, water, and constructions are cultivated in such a way through composition that they acquire a meaning beyond the significance of the single plant. Through cultivation a variety of images of nature can be created [ill. 1-4]. The representation of nature was the principal motive in the development of the art of park design. In the Middle Ages the garden was still a place from which hostile nature was excluded. From the Renaissance onwards, however, country estates were created that were oriented towards the surroundings by means of views and sight axes. These systems developed increasingly in size and complexity, culminating during the Enlightenment in an anchoring in the landscape with an elaborate network of scenes and vistas, in which the country house occupied a central position. From the rise of industrialism onwards, the vistas extended beyond the boundaries of the estate and were no longer exclusively oriented towards the house.

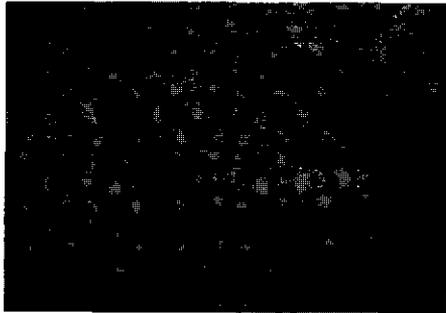
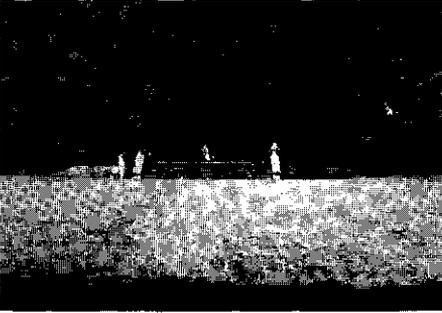
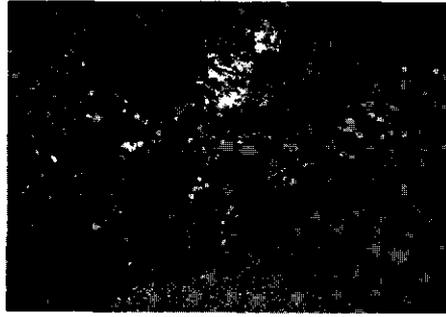
Parks are places of reconciliation between man and nature. The environmental problems of our own time have led to increasing doubts as to the reconcilability of man and nature however. If for medieval man nature was still powerful, ominous and mysterious, this fear diminished with his increasing knowledge of nature. In the Renaissance this led to the notion that, although 'wild' nature is chaotic, its rendering in art form enabled the concealed harmony to be revealed. Special series of numbers, proportional systems and pure geometrical figures were the means by which nature's divinely perfect order was made

manifest. Later, a further development led to a paradox: whereas in everyday reality man penetrates ever more deeply into nature's secrets in order to unlock her mysteries, outside of that reality he seeks an impenetrable and wilful nature: the beauty of the miracle of the Creation. Nature was seen at the same time both as a subject of research and as a place for reflection. In addition to the 'true' nature of the scientists, there was a powerful, wilful nature that found expression in art. In these parks there is a harking back to the pantheistical meaning of nature, as a place where the breath of the gods was perceptible. This idealized image counterbalanced the uncertainties caused by the Industrial Revolution. To compensate for the scientific matter-of-factness and the chaos of factories and mines, there was a readiness to believe in nature as a self-renewing, constantly changing but ultimately permanent force: a force safeguarding the continuance of life on earth. Now, however, the belief in the self-renewal and continuance of nature is increasingly open to question. There is no unequivocal concept of nature. Sometimes, even the reference to nature in park design itself is brought up for discussion.<sup>1</sup>

Parks traditionally belong to a building or are directly connected to one or more buildings. Such a building is a natural central point or climax. This goes back to the country estates and was continued in the fraternity building or the dairy in nineteenth-century urban parks and, to an extent, in the villa parks of that period. Gradually, parks came to be attached to an increasing number of houses. In this way, the meaning of the park was carried over into the garden suburb.<sup>2</sup> The parks built in the nineteenth century served to compensate for the rapid expansion of the cities. They were a facility aimed at counterbalancing the detrimental effects of the city and were arranged with the cultured walker in mind. Their aims were salubrity and morality. Thus the pleasantly varied promenade parks, in which there were no dramatically charged areas, came into being.

The garden city notion is probably the reason why the park lost its expressive form and why recreation areas and strips of land between residential districts eventually came to be referred to as parks.<sup>3</sup> The park as the city's 'imaginary countryside' has always remained in the minds of urban planners, however, and is a notion just as alive for the general public.<sup>4</sup> An urban park, in this sense, refers firstly to nature—a global, occasionally exotic nature—and to the apparently wilful forces within. These references can be minimal.<sup>5</sup>

The moment<sup>6</sup> the park is reduced to a recreational area, sports



1-4 Various images of nature in garden design

complex or green strip, it loses its expression and meaning and there remains merely a utilitarian form. It is precisely the imagination—a certain mysterious, fantastical or poetical quality—from which the park derives the rationale of its existence. Without imagination a park is a mere dry décor for people who come and go; a meaningless façade. The appeal to the imagination can be achieved both rationally and instinctively. It is not so much a question of an antithesis between culture and nature in the park, but rather of an interplay of forces between man and nature. The expression of this in the form of gardens, parks and landscapes is culture. The essence of landscape architecture is that, through arrangement and design, an illusion of something else can be created: a metaphor.

Parks are cultural systems of oppositions between the rural and the urban. The development of the city park is part of the increasing urbanization. The park complements the city and, as such, the artificial creation of nature and the countryside is guided by the codes and rules of the cultural world of the city. Neither city nor nature, it is the imagined; just as poetry uses everyday language in order to imbue it

with a new meaning. The complementary colours red and green combine to produce white. Similarly, city and nature re-emerge in the park in an idealized relationship. The history of the urban park shows that this relationship—influenced by changing social conceptions—can shift considerably. At present, the relationship tends towards the city as a dynamic whole: animated, rich in contrast, pluralistic and collective, public and sometimes monumental.

Nature reveals itself in the park in various capacities. An image of nature can be linked to each of the park's functions and to every component of the architectural concept. This produces various concrete representations of nature alongside one another, whereas the city manifests itself in the park in a number of abstract qualities, such as accessibility, animation and interchange. The confrontation between nature and the city—the Apollonian and the Dionysian—can impart extra value to the park.

Parks (including gardens) are potentially the most artistic products of landscape architecture. 'Parks are works of Art, rather than of Nature.'<sup>7</sup> This abstract meaning is the essence of the park. It is precisely for this reason that, through analysis and examination, this study seeks to identify the artistic aspects of park design. The functional utility of the plans and the park's actual use are less extensively considered. The current function the park is required to have changes rapidly. A high degree of alertness and a great deal of money are required in order to respond to this directly. But these do not provide a permanent solution. Ultimately, it is a question of the need that underlies the demand. This is determined by two pairs of contrasting needs, namely freedom and new information versus clarity and order, and peace and privacy versus activity, contact and communication.

## Comparative design analysis

### *Objectives, instruments and characteristics of the design analysis*

**OBJECTIVES** Landscape architecture is a profession comprising craftsmanship, theory and artistic sense.<sup>8</sup> Research enables these three mainstays of the profession to be consolidated and their mutual position and interaction clarified.

The main objective of the present study is to contribute to the formation of theories of landscape design. The first aim in relation to

this is to highlight the notion of landscape design. This is done by means of a comparative design analysis; through the intellectual decomposition and examination of park designs. A design is more than simply a specific response to a given programme, a given location. The plan also represents universal design concepts and traditions. We analyse plans because a good plan not only solves the problem, but also sheds light on the issues, says something about the context.<sup>9</sup> In this way, park design can be examined in terms broader than merely the entries for the Parc de la Villette competition analysed here.<sup>10</sup>

'It is while making that we must learn how to make things.'<sup>11</sup> The form of the things we make must, according to Dom van der Laan, aim to have a two-fold effect: functional, with a view to physical use, and expressive, with a view to mental use. 'One cultivates the form specifically for the development of the mind, because (although without direct functional significance) the form will stimulate a further development of the functionality.'<sup>12</sup> While sketching, thus, it is possible to contribute to the development of designing. A design is, therefore, not only an end product; it can also be the start of a new plan. Designers' interest in each others' work is often based on the perspectives they open for one another, on the broadening of their understanding; and, in addition, the technique of design itself and compositional matters play an important role.

This design analysis is a contribution to the compilation and evaluation of basic architectural knowledge and principles concerning the design of parks. Park design is a subject of study eminently suited to this objective, for here the essence of landscape design is present in a concentrated form. Further, because park design was for centuries the main task of landscape architects, it is firmly anchored in the historical development of the profession.<sup>13</sup>

2) The second objective of this study is to contribute to the development of the methodology of design analysis. It is to be seen as an empirical exploration; that is to say, it is not preceded by any hypothesis (concerning the relationship between the various park designs). We 'let the material speak', although the variables to be studied are determined, as are the relationships to be examined.

3) This study is, at the same time, an examination of contemporary park design and its sources. It aims to trace and to demonstrate the qualities of and the possibilities offered by recent developments in park design by investigating various aspects of these developments. In the light of current post-modern tendencies, it is clear that an understand-

ing of the tradition (as the total of forms and ideas handed down) of landscape architecture is of major importance as a source of knowledge and inspiration. For this reason, the framework and concepts employed in the analysis of contemporary design philosophies have been sought in the tradition of the profession.

Designers immerse themselves in the history, not in order to derive laws, but in order to consolidate their position, both as craftsmen and as intellectuals. How does the landscape architect as researcher deal with history? For the design analyst the tradition of the profession provides the context, through which—with the identification of similarities and differences—an understanding is obtained of the sources, structure, effect and innovation within the design. The design analysis provides an overview of the means designers have at their disposal. These have mostly been handed down, but some are of more recent origin: sometimes the result of careful development, sometimes the result of accidental *ad hoc* discovery, and sometimes the result of an original combination of old familiars.

Landscape architecture is a traditional art.<sup>14</sup> The new is developed in a dialogue with tradition.<sup>15</sup> The past never rests, it is constantly being re-created; for the limitations, prejudices and blind spots of the previous generation are always a provocation to the subsequent generation to make changes and to provide new interpretations. The traditional images lend themselves to reinterpretation, to modernization for the purpose of spatial, organizational and contextual effects in contemporary park design. We can learn from the history of garden design, but only with a criticism that is superior to it. For this reason, the concepts employed in our analytical research are, in the main, constructed on the basis of the forms, the spatial and compositional concepts, handed down by park culture.

It is not our intention here to provide definitive statements however: the designer has drawn this idea from that source and that idea is a cliché whose origins date back to that period and so forth. The resources of park culture can be exploited in a far more profitable way. How is the idea incorporated into that design, what generates the creative process? How is a cliché made operational, what kind of interpretation of the park tradition is developed in the design? Design analysis is not an objective in itself; it is a method of elucidating the design process and developing a theory of landscape architecture. There are dogmas and opinions, but there is no systematic determination of the relationship between the form of a park and its value.

This study also aims to reveal the qualities of park forms. In this examination of park design the emphasis is on spatial-aesthetic and artistic aspects. Technical and social scientific research can therefore only formulate some of the questions, and results, in a limited programme,<sup>16</sup> whereas the results of the involvement of laymen are too often determined by the known and thus yield few or no insights capable of contributing to new qualities. For this reason, the detection of latent needs is more a question of creativity and inventiveness, combined with artistic sense.

**INSTRUMENTS** The entries submitted to the Concours International: Parc de la Villette in 1982 provide the material on which our analysis of contemporary design philosophies in landscape architecture is based. A competition provides conditions favourable for design analysis. Qualitatively varied strategies in creating park (landscape) designs can be compared since they are being applied to the same site and use the same programme.

A comparative analysis of design plans must make clear which strategies and themes have played a decisive role in the design and how these have been incorporated into the various designs. The end result of the analysis reveals and evaluates the multiplicity of solutions to a demanding and complex programme and the possibilities for artistic representation in an urban park.

The Parc de la Villette competition produced a great deal of easily comparable material. It also received international interest. Above all, the competition was chosen for this study because the complex brief constituted a particular challenge for the participants. Designers are thus compelled to sharpen their ideas and to broaden their understanding and method of approach. They have to, as it were, enter into a battle with conventional concepts concerning parks, possibly even with their own familiar principles. The objective of creating the park of the future means that a pragmatic approach alone, the approach taken in the daily work of landscape architects, would be inadequate. It implies the need for a theoretical approach too; at least in part, for innovation has a marked *ad hoc* character and is fuelled by spontaneous discovery and adjustment to the characteristics of the site.

The brief for the Parc de la Villette is unique when compared with usual design practice. This has caused a great deal of discussion among designers and planners.<sup>17</sup> It is worthwhile therefore to analyse the plans in detail. In order to prevent the results and conclusions from

having too limited an implication, however, because of their being too dependent on the uniqueness of the La Villette project, a context has been sought. This context has been found both in historical and in the most recent conceptions of landscape architecture.<sup>18</sup> The themes landscape architects derive from the tradition of their profession and the way in which these themes are incorporated into their new designs have been investigated. This has determined the framework and the concepts employed in the analysis.

Innovators are often, despite their innovative qualities, completely within the (previous) tradition.<sup>19</sup> Indeed, the requirement to innovate formulated in the objective has something compulsive about it: new for the sake of new, whereas innovation is possibly only achieved 'accidentally', that is to say, it is 'essentially a by-product'. Meuwissen put it well: 'It is paradoxical and perhaps characteristic of the development of architecture that its forms, types and design principles seem to develop best in a situation in which a new problem is approached using existing means.'<sup>20</sup>

A thorough knowledge and understanding of the brief—both the question and the location—is essential if a design analysis is to be successful. These aspects of the competition are therefore dealt with in Chapter 2. Indeed, it is probably necessary in studying the brief to make a design oneself, for this is an important way of discovering certain—hidden—characteristics and possibilities offered by the site and the programme. The author was a member of the team from Bakker and Bleeker from Amsterdam, which won joint first prize; in retrospect, it was clearly advantageous to have worked exhaustively on one particular design solution. As a result of this involvement, images and meanings conveyed by the site—such as those discovered by the participants—can be identified. This discovery is not only a question of logic and deduction, but one involving an appeal to the imagination.<sup>21</sup> Participation in this competition meant that one found oneself confronting an extensive, complicated and unique problem and that one had to work intensively on a solution. This influences one's perception. Firstly, there is an affinity with one's own design, submitted as the result of all one's exertions. In examining some of the inept or unrealistic solutions, the researcher is perhaps more easily inclined to become irritated. On the other hand, however, he is also more likely to readily acknowledge exceptional, clever, and elegant solutions.<sup>22</sup> These are most often 'minor discoveries': not large, not spectacular, but of a sophisticated quality. Thus in due course and through examining so

many alternative solutions, the necessary distance from one's own work is soon achieved.

For the purpose of the design analysis the researcher must try to gain as thorough an understanding of the plans as possible and, where necessary, emphasize specific features in order to stimulate professional discussion. The term 'analysis' has an intellectual and objective ring to it. It is also, in part, a personal process, however, which lies close to designing itself and is driven by a playful and yet, at the same time, scientific wonder. Empathy with the design is necessary in order to be able to study the object. The interpretation of designs is a cultural activity in which it is impossible to aspire exclusively to objectivity though. The analysis is objective in the sense that the explanatory decomposition is open to reply and criticism. The material studied consists, however, of personal interpretations of the design brief.

Design analysis is the search for the theory of practice. For this reason, the theoretical approach should not only deal with designing, but should also, in part, coincide with it: analysing by designing. This echoes Warnau's description of designing: 'One begins with drawing, and this within the small circle of programme, characteristics of the site, organization and layout (composition), and one thereby gradually involves other design tools and objectives on a higher level of abstraction.'<sup>23</sup> Design analysis is not the repetition or reconstruction of the design process, for the sequence of the development of a design and that of analysis are not the same; neither do the considerations necessarily correspond. The analysis is presented in an orderly manner: step by step and explicitly formulated.

The analysis covers all of the stages of design and touches upon as many of the considerations that have influenced the design as possible, although not necessarily in the same (or the reverse) chronology. The analysis reasons proceeding from the product, via an interpretation of the process, towards the idea.

A designer draws both to clarify his thoughts and to transmit his ideas. But why should a researcher draw? A drawing of a park design—before it represents a park—is essentially a flat surface of lines, surfaces and colours arranged in rather a painterly manner. During the design process, each time the designer looks at the drawing, it is in a different way. Sometimes, purely as a composition on a flat surface, sometimes as a spatial scene, then in terms of the nature of the material or the practical functioning of the design. There is a constant shifting of viewpoint (both literally and figuratively): looking down from above

and immersing oneself in the site in order to observe its various aspects. The initial painterly approach is gradually adjusted because of a multitude of considerations. By omitting, adding, shifting and modifying elements in a plan, the qualities of the design can be examined. In this way, clarification or consolidation of the concept is sought, or a consolidation of the relationship between concept and plan.

Much of the analysis is carried out and recorded in drawings. By making use of the language of drawing, design-specific matters can be more easily considered, and the result is conceivable and transmissible. In this way, design analysis approaches the fundamentals of the creative process. Drawing brings one closer to the activity of designing.

The analytical drawings of the designs must have a comparable degree of abstraction: between the conceptual principles they are intended to illustrate and the complete individuality of the designs from which they are derived. In addition, the information the original plan's characteristic style of drawing gives must not be lost. Through abstraction the design is freed of obscuring inessentials, specific and incidental details, so that the idea is clarified. Because of the concept's greater degree of abstraction, it is more general and, therefore, reproducible. A close interrelatedness between text and drawings is necessary for an effective and clear analysis.

The analysis proceeds in four stages, from directly readable data to interpretation. Here, they are placed neatly behind one another. In research, however, it is sometimes a question of juggling simultaneously with programme, location, design strategies and concepts of form. This is unavoidable in view of the circularity of the design process.

After describing the programme and the location – the terms of the brief (Chapter 2) – we consider what designers do with these (Chapters 3 to 6). The first stage investigates the plan's graphic composition. The second is concerned with the conditions that guide designers: which do they ignore and which do they oppose? The third stage considers which design strategies the designers set against the potentials and meanings offered by the site and the programme. The fourth decomposes the designs: which concepts of form influence the design, either directly or by way of the adaptations (design exercises) observed in the first stages? This is an investigation of form themes and form tools. The analysis looks for the considerations that guide the designing of a plan: the design philosophy (which aspects jostle for precedence in a designer's thoughts at the start of a design?). A design philosophy is seldom based on a solid theory or a treatise on park design. Rather, it is

usually a construct comprising knowledge, tradition, experience and fragments of theories and ideas which, through interaction with the design brief, becomes operational and crystallizes.

To what extent do the aspects discerned in the design analysis correspond to those used in designing? In large measure; for the analysis attempts to penetrate the design and the brief as deeply as possible, by getting as close as possible to the design process and design result. The analysis unravels, and the design, the synthesis, unites. They are, thus, a continuation of one another.<sup>24</sup> The aspects and concepts dealt with in the analysis can likewise be deployed during the process of design in order to guide the styling.

Designing is therefore a process in which ideas lead to forms, and vice versa. The drawing is the medium of experimentation. There is frequently a continuous dialogue: from drawing to talking, and back to drawing.

**CHARACTERISTICS** In a design analysis the plans are approached openly and positively. The design philosophies are sympathetically listened to. The design strategies and the concepts of form are positively formulated. Criticism can also be made with regard to the suitability and the appropriateness of the design approach in the light of the brief, which has been determined by the location and the programme (see Part three). This design analysis aims to provide an understanding through comparison, and not to ascertain an absolute truth. The designs submitted to the competition are examined in relation to each other and in relation to the brief. Any criticism is preceded by a realization of the differences between the plans. This enables the results to provide some insight into the strategies and philosophy that underlie these designs.

The meaning of a design can even extend beyond the designer; the plan analyst can reveal more considerations than the designer consciously put into the design. One of the objectives of the analysis is to discover and to identify more than the designer's own immediate aims. The researcher's judgement can therefore be of equal value for the meaning of the design as the designer's intention.<sup>25</sup> The researcher is, thus, in the same position as the reader of a book in relation to its author,<sup>26</sup> as a consumer in relation to the artist. The reader can do more than simply follow the author.<sup>27</sup>

The adage of the natural sciences: 'through measuring to knowledge', can be rewritten for landscape architecture as 'through examina-

tion to understanding'. That is to say, through careful observation, consideration and reflection one arrives at an intellectual command of the essence of a design.<sup>28</sup> It is in this sense that our study seeks to contribute to theories of landscape architecture.

Design analysis provides the designer with an entirely different sort of information and stimuli than the results of research into society, technology and nature. Much emphasis was placed on the latter during the 1970s. Making the process of design more scientific was supposed to result in better designs.<sup>29</sup> Because of the need to plan with uncertainties and the fact that research results are not always directly translatable into layouts, these methods failed to meet these high expectations. After all, the future cannot be predicted. For this reason, as Koningsveld claims in his discussion of the subject of planning and (un)certainities, the pursuit of certainty in planning is not rational.<sup>30</sup>

Our analysis is a type of exegesis that avoids being moralistic. Interpretation and elucidation are based on a knowledge and understanding of the location, the programme, the design strategies and the concepts of form derived from the competition brief, the entries, literature on current design philosophies, and the history of park design. The comparative design analysis made here does not provide value judgements, such as those required of the competition's jury. The analysis can, of course, serve as a solid basis for such a judgement though. It can be compared with a declaratory judgement, in which only the existence of a law is recognized or verified and no further sentence is made.

In the analysis the concepts that refer to either practical or aesthetic functions are interchangeable; they overlap. The aesthetic experience is an intense and meaningful perception and cognizance developed and used for extremely practical purposes. The fact that the architectural aspect is central in this study does not mean that it is only a question of the form as an aesthetic problem; it is just as much a question of the form as a response to conflicts concealed in the programme and the location.

The evaluation of plans with the aid of a design analysis is an excellent means of breaking free from too limited a view of a design problem. When designing with this information, it is a question of analogy, not copying.<sup>31</sup> It is not intended as an incitement to plagiarism, the conscious, unassimilated and unscrupulous copying of external forms. Our analysis searches precisely for universal principles—the whys and wherefores of the design—and seeks to elucidate them.

The original intention was to categorize all the 471 plans submitted

to the competition. The question soon arose, however, as to whether this was either practicable or desirable. This approach would require such a degree of immersion in the background of each individual design as to present far too great a task. Further, categorization would not be an end in itself; it would be a means of answering more fundamental questions. Furthermore, the classification of design philosophies according to a preconceived framework—even if it is one specially developed and constructed for the purpose—is impossible. None of the philosophies within a design is so dominant that the design is unequivocally determined by it and thus capable, as such, of being classified on the basis of this philosophy. The design considerations should, of course, have a coherence (consonance), that is to say the ability to give shape to a system of spatial relationships and meanings in a totality. A good park design cannot be derived from a single principle.

#### *Methods of design analysis*

The objectives, instruments and characteristics of design analysis were broadly formulated on the basis of a study of the existing literature. They were then specified more closely on the basis of an examination of competition submissions and their results, including, of course, that of the Concours International: Parc de la Villette. It was from this that we drew our initial ideas concerning the method of analysis to be used.

There are no directly usable methods in the literature. The objective is not to categorize the plans—something that takes place notably in jury reports. This leads to the coarsening of the designs' concepts, and is a method suited only to providing a general idea of the tendencies displayed in submissions.<sup>32</sup> The method most closely related to the approach used in our research is that of the decomposition by Meeus of the plans produced during the International Design Seminar 'Land van Hoboken', held in Rotterdam in 1985.<sup>33</sup>

According to Meeus,<sup>34</sup> the design seminar produced a catalogue of 'design philosophies' capable of being elucidated: firstly, by reconstructing the 'design methods' used, by deducing the various ways in which designers can view the programme and the site; secondly, by describing the 'principles of composition'; and, thirdly, by decomposing the 'form, space and design concepts'. A summary of this method of analysis is given in the Appendix.

Using Meeus' ideas as a basis, a further ordering of previous studies was made. In so doing, the classifications and concepts were adapted

and modified. The method ultimately obtained differs considerably from that of Meeus, though Meeus' work<sup>35</sup> has—partly on account of suggestions he made at an early stage in the research—been a catalyst however. Adaptation is a process of repeated testing and subsequent adjustment, reorganization or complete restructuring. Furthermore, the core of Meeus' method—an analysis in stages, from directly readable characteristics towards more comprehensive notions and abstract concepts—was the guiding principle. Both methods of analysis are evaluated in Part two; the similarities and differences are shown, and the generalizability of the analytical method and concepts discussed.

### *Selection of plans to be analysed*

Initially, the comparative analysis was organized and carried out on the basis of six entries. The number was limited for the sake of surveyability and the magnitude of the work. Indeed, the method still had to be developed and tested. After completing the entire analysis, the results were supplemented by decomposing a larger group of plans. In so doing, in addition to broadening our understanding of the entries, the instrument of analysis was tested.

Prior to the selection, all 471 plans were thoroughly examined and described by means of a brief characterization. This provided a general picture of the diversity of the solutions. In order to counterbalance the limitations of one's own understanding and individual judgement, the designs were also examined and commented on several times by a number of other landscape architects.<sup>36</sup> This intersubjective criticism ensured that adequate justice could be done to the designs.

When enough was known about the location, the brief and all the designs submitted, the plans were selected. By first becoming acquainted with all the entries together, the sensitivity of one's perception was increased. The rejected plans also helped to make clear where the brief's problems and impossibilities lay.

Because of their limited qualities, not all of the entries were suitable for analysis. This question of suitability was highlighted early on by van Dijk and de Boer:<sup>37</sup>

An extensive programme, difficult pre-conditions, highly determinative site characteristics, a heavy emphasis on innovation in design and technique, ambitious basic assumptions with regard to the nature and use of the future 'park'—these are the problems with which 471 design teams were faced. The brief contained a variety of discrepancies that, nevertheless, had to be given coherence to. In the

first place, this demanded clarity as regards the basic concept. At the same time, it required close attention to detail. Only a small number of the entries presented an interesting response to these problems.

Of the 471 entries, those designs were chosen first that gave the impression that they commented on the brief: the location, the objectives, or the programme. Indeed, a good form not only solves the problem, it also elucidates it at the same time: says something about the context. Plans were also included that revealed something about landscape architecture in general. The plans were approached with a thorough knowledge of the brief. This does not mean that designs that ignored the programme or interpreted it in a limited way were necessarily excluded from our selection. Such designs were considered if they commented on the problem of designing parks. Indeed, the most interesting designs expressed something about the development of landscape architecture, by reformulating part of the landscape design problem.

In both the selection and the analysis the drawings submitted to the competition played the leading role, and the accompanying texts figured as an explanation. Designers set their intentions down in drawings; in the texts they concentrate for the most part on 'selling'—the explanation and persuasion that their plan is the best. Ideas and intentions contained in the text were only included in our research if they were also present in the designers' sketches.

For our research to be successful, the plans had to be adequately articulated. To continue the imagery, one can argue that they needed to be eloquent—whereas many entries proved to be expressionless. In the first selection round plans were chosen on the basis of the following requirements: the design concepts must be articulated; the solution should show a measure of coherence and a grasp of the brief in its entirety; the proposal must be spatial. As a consequence, around 370 plans had to be excluded because they failed to convey any idea of sufficient depth.

During the following round a further consistency in plan layout and elaboration of the design was demanded of the 100 or so remaining plans. More in-depth analysis revealed that a good plan proves to possess increasing coherence; at least, that more and more connections come to light. Otherwise, without this consistency, the plan will disintegrate to such an extent that it no longer represents anything and no qualities remain; in short, it proves to be inadequate. Almost 60 plans<sup>38</sup>

met this criterion, although the extent to which they did so differed considerably. The question asked in the final stage of selection is: can one successfully use that plan to explain and defend the ideas and philosophies that can be read in the design? Is there a strong case to be made for it?

Most of these designs are discussed at different points in the analysis and are illustrated in Part four. They are used to highlight the structure of the argument and to illustrate components. This limited number—always at least 50 however—have been intensively studied in order to discover the design philosophies that inspired them, and they have contributed to the development of the concepts used in our analysis.

From this group the six plans on which the analysis was initially based have been analysed in detail. Their decompositions are reproduced in full in Part two. These are not necessarily the best plans, but they are suited to this purpose because of the fact that the designs clearly differ.

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## 2 Concours International: Parc de la Villette, Paris, 1982-3

### Introduction

In 1974 the French government decided to close the abattoir and cattle market of La Villette. This left a complex of more than 50 hectares vacant in the centre of an area housing millions of inhabitants and close to international roads and airports. Situated on two metro lines and next to the Paris ring-road, it offered unique urban development prospects for the capital and the adjoining suburbs.

In 1979 the Etablissement Public du Parc de la Villette (EPPV) was appointed to oversee the development of the site at La Villette. Several major projects were proposed: the Museum of Science, Technology and Industry, the park, the Grande Halle, and the Music Centre. The French government chose this form of organization because La Villette was to be a unique cultural project – both in terms of its size, and the objective of integrating all the facilities in a park. As a press release at the time stated: ‘To realize on the same site the largest Museum of Science, Technology and Industry, a Music Centre and the largest park in Paris requires competition between the greatest creators and the best of talents. In France La Villette is now a unique place of creation and invention.’

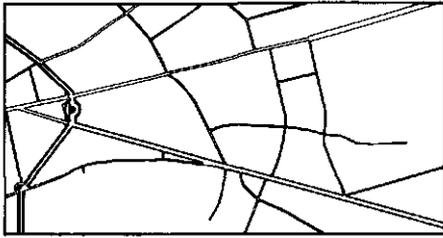
In 1982 the French Minister of Culture, Jack Lang, announced that an international competition would be held for the Parc de la Villette. His cultural policy, whose keywords included ‘pluralism’ and ‘innovation’, coupled with his aim of making Paris once more the art centre of the world, has clearly guided the project’s programme. The winner of

the competition was to be appointed chief architect of the park (maîtrise d'œuvre générale du parc).

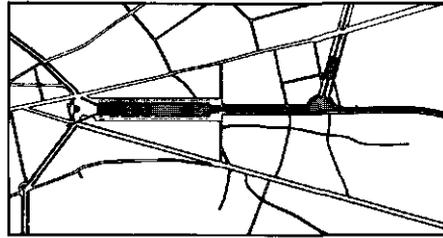
Many designers regarded the size and the nature of the ambitious objective—the designing of an urban park for the twenty-first century in the form of a new type of urban space and functioning as a present-day cultural facility—as an interesting challenge; indeed, 471 entries from 41 countries were received. The international jury, comprising 21 members under the chairmanship of Roberto Burle Marx and including landscape architects such as Pierre Dauvergne, Paul Friedberg, Jacques Simon and Hans Friedrich Werkmeister, failed to reach a decision, however, and 9 plans were jointly awarded the first prize. A second round was therefore held in which these prize winners had to provide more detailed information concerning their plans. Bernard Tschumi was finally awarded the commission and allocated a budget of 350 million francs for the initial phase of the park's construction (1984-7).

Since La Villette is of major importance for the urban development of Paris' north-eastern quarter, a great many plans were put forward in a series of competitions held after the closure of the abattoir. The *Concours International: Parc de la Villette* was preceded by a competition (*Concours pour l'aménagement du secteur de la Villette*) in 1976 to organize the site and buildings into a district offering miscellaneous facilities (housing, offices, shops, cultural activities and a park). This was followed in 1980 by the *Consultation pour la Musée de la Villette des sciences, des techniques et des industries*, a closed competition to redevelop the *Grand Salle des Ventes*, formerly an abattoir, into a museum (it was also intended that the site would become the museum's garden). The President of France, Giscard d'Estaing, chose Adrien Fainsilber from among 27 French architects. According to 1984 estimates, the cost of the museum will amount to 4.5 billion francs. Later, in 1984, closed competitions were held for the *Music Centre* (*Consultation de 15 équipes d'architectes français désigner le maître d'œuvre de la première phase de la Cité de la Musique*) (as a result of which Christian de Portzampac was appointed) and for housing on the north side of the site (*Consultation de 9 architectes pour les logements au Nord du site*).

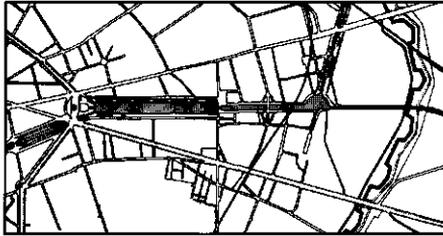
The results of the *Parc de la Villette* competition received a great deal of attention in the professional journals. In their articles critics—often (landscape) architects themselves—were frequently led by their own vision of and ideas concerning the form of the urban park. Recent



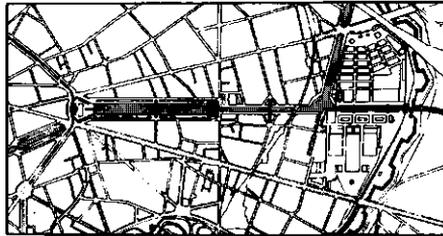
1791



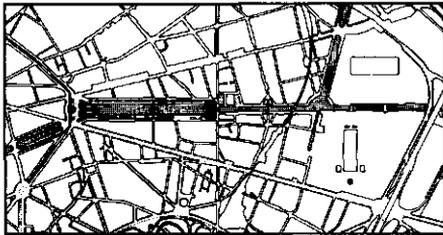
1823



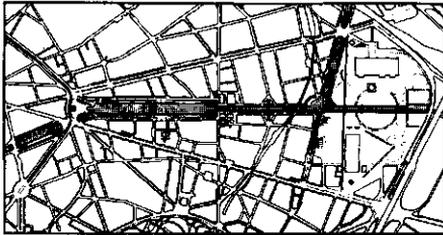
1855



1910



1970



1990

## 5 Historical development of La Villette

references in lectures, articles and designs also reveal the competition's continued influence—and especially that of the widely published plans by Tschumi and Koolhaas (OMA).

### The brief

#### *The occupational history of La Villette*

La Villette is situated in a slight depression between the Butte de Montmartre, approximately 80 metres higher, and the Buttes-Chaumont. The plain between the hills is a favourable location for communications with the regions to the north and to the south of Paris.

From one of the toll-houses (Ronde de Ledoux) in the walls of the

eighteenth-century city (l'Enceinte de Fermiers Généraux, 1785) two historic arterial roads began: the Rue de Flandres and the Rue d'Allemagne. A suburb, La Villette, gradually developed along these roads. The area outside the city walls and the toll-gate was extremely popular with Parisians, and many cafés, inns and country cottages were constructed there [ill. 5].

In the nineteenth century extensive programmes of public works were carried out under the emperors Napoleon I (1802-15) and Napoleon III (1852-71). In order to provide the whole of Paris with good and free drinking water, in 1812 a 25-kilometre-long supply canal from the Ourcq (Canal de l'Ourcq) and a large rectangular reservoir (the Bassin de la Villette, which measured 700 x 70 m.) were dug in the La Villette depression. From here the water was fed to numerous fountains. The water is still of a high quality today and, after coarse filtering, is used for industry and public gardens. The Bassin and canal form the bisector of the arterial roads mentioned above. An unrestricted view across the water in the direction of the city centre was possible for a distance of up to two kilometres. The exceptional buildings on both sides of the Bassin—the Rotonde de Ledoux and the twin buildings of the Magasins Généraux—gave rise to a monumental effect. The quays, once planted with double lines of trees, were popular walks.

Shortly after 1812 the canal system was improved to allow navigation and extended to the south (Canal St-Martin) and the north (Canal St-Denis). This created a 'short circuit' in the loop of the Seine along the centre of the city. In order to surmount the large difference in height, a number of locks had to be constructed.

Bordering the site of La Villette is the turning basin for the connection to the Canal St-Denis (Rond-point des canaux). Shipping on the canals was brisk. In 1923 the St-Denis and de l'Ourcq canals were deepened and the locks lengthened. Nowadays, only a few ships a day pass through here.

In about 1859 La Villette was annexed as a result of the construction of a new line of defence (the ramparts of Thiers) near the present-day ring-road (Boulevard Périphérique). Outside, a new suburb developed in a chaotic and disorganized way. Entrepôts, shipping companies and workshops were set up along the canals; many of these buildings have now fallen into disuse.

There were no large-scale developments at La Villette until the construction in 1867 of a central, combined cattle market and abattoir. This costly project for the improvement of conditions<sup>39</sup> in the metro-



6 La Villette seen from the east, 1975

polis was regarded by Haussmann as 'Une des oeuvres les plus considérables accomplies par mon administration, parallèlement aux grandes opérations de voiries'. The 40-hectare abattoir complex was linked to the rail network via a branch of the Petite Ceinture. This branch line ran through a deepened valley to the Parc des Buttes-Chaumont, another example of a public work constructed under Haussmann's direction; the line is no longer in use and lies overgrown with acacia shrubs. The Grand Halle of the cattle market is the largest (250 x 85 m.) of the distinctive cast-iron market halls erected in 1867.

The structure of the urban fabric remains grafted on to the two arterial roads and the canals. After having being used only once, in the Franco-Prussian war of 1870-1, the ramparts were dismantled in 1919, somewhat later than in other large European cities. They were not replaced by green space, as was the case elsewhere in order to alleviate pressure on the densely developed city, but by a ring-road, the Boulevard Périphérique, which in due course developed into an ever wider and ever busier thoroughfare. It is also the city's municipal boundary.

The area along here was put to a miscellany of uses, providing space for cemeteries, hospitals, schools, entrepôts, sports fields, depots, water reservoirs and parks. The partially elevated ring-road intersects with the historic arterial roads at Porte de Pantin and Porte de la Villette directly to the south and to the north of La Villette [ill. 6].

La Villette thus lies wedged between a convergent infrastructure of roads, canals, railway and metro lines. Accessibility at city and regional—and even international—level is, consequently, exceptionally good. For the surrounding districts, however, these busy transport routes constitute barriers to direct access to the site.

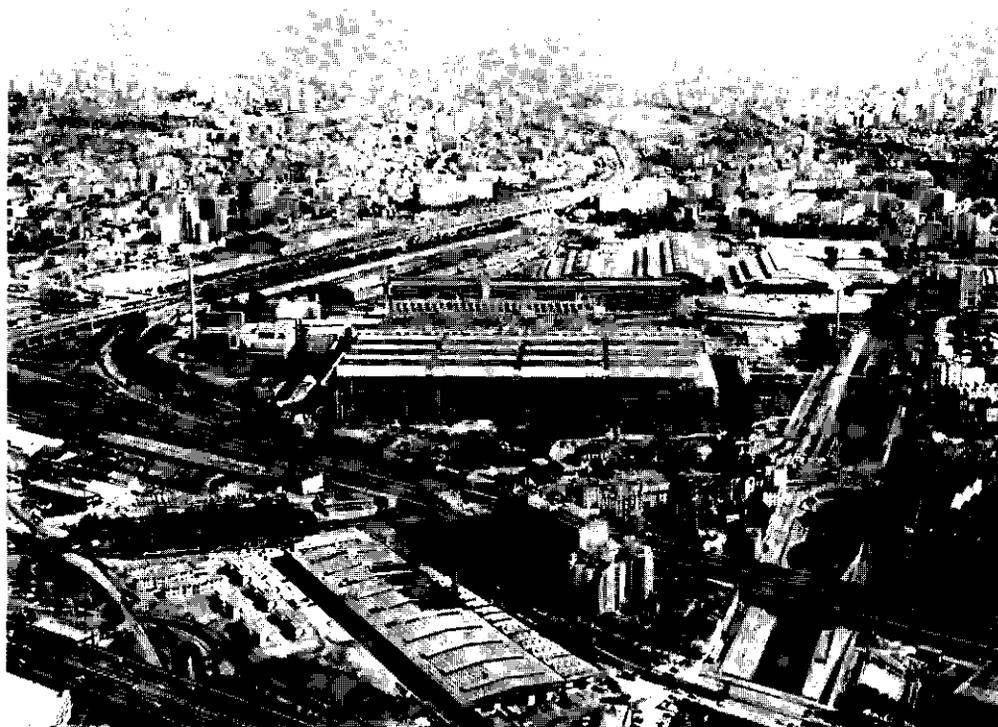
La Villette is situated in a transitional zone between the old city districts, with their dense and ordered fabric, and the neighbouring suburban municipalities, whose development has been more open and less ordered. The boundary between the city and the suburbs is reinforced by the embankment of the ring-road. In conjunction with the four- to six-metre-high retaining wall of the Boulevard MacDonald/Sérurier along the site, the area on the city boundary appears to be embraced.

In the 1960s large-scale new housing was erected on the abattoir site, though it could not be fully utilized until the closure of the abattoir complex in 1973 [ill. 7]. This period also saw, among other things, the construction of the colossal Grande Salle (270 x 110 x 40 m., now converted into the Museum of Science, Technology and Industry) and the near disappearance from view of the Canal de l'Ourcq beneath the bridges and with the erection of tall and elongated buildings.

In 1973 a variety of temporary activities were begun on the deserted but, in part, easily accessible industrial site. Accessibility was increased by restoring the forecourt of the Grande Halle and the fountain at the intersection with the Avenue Jean Jaurès. A local park was constructed at the intersection of the canals. The large hall proved to be well-suited to pop concerts, jumble sales and various other events. A theatre was also set up in one of the pavilions.

The site, with the exception of the canals and their towpaths, was acquired by the state in the 1970s. In 1979 the Etablissement Public du Parc de la Villette was established in order to develop the area. In addition to all the cultural activities in the centre of Paris, facilities were to be provided on the outskirts for the benefit of the suburbs.

In response to the changes taking place in society and in technology, a new type of function for the urban park was sought. In addition, the decision to convert the colossal concrete Grande Salle into a spectacu-



7 La Villette seen from the north, 1975

lar Museum of Science, Technology and Industry was implemented. The programme for the area was expanded into an ambitious cultural project, in particular as the result of the inclusion of an extensive Music Centre and facilities for creative activities. The site was to become a centre stimulating urban renewal.

Despite the presence of ordered lines, which appear on the map as a rigid geometrical arrangement, the buildings are so heterogeneous that the townscape here is really rather fragmented. 'Dans ce paysage urbain peu cohérent, les canaux sont appelés à jouer le rôle d'axes structurants et ils constituent l'un des atouts majeurs pour l'évolution du quartier.'<sup>40</sup> The reorganization of the Bassin de la Villette and the construction of a link to the Parc des Buttes-Chaumont<sup>41</sup> via the old railway line will contribute to this. Many former industrial premises in the immediate vicinity have already been replaced by housing; initially by free-standing, multi-storey blocks, later by linked high-rise flats and, recently, by closed blocks in accordance with traditional building lines and building heights.

### *A description of the site of La Villette*

The site of La Villette has been completely built on or paved over the years. After the demolition of various buildings, a surface layer of asphalt, concrete, sand, rubble and fragments of foundations remained. The surface consisted of a number of elevations with a mixture of clay and marl obtained from the surrounding area and from the deposits of a number of construction projects on the site: roads, canals, ramparts, abattoirs and suchlike. In many instances it is necessary when planting to replace the uppermost layer of soil with a thick layer of humus.

Beneath the elevations there are layers of deposits, chiefly marl, between the hills of Montmartre and Buttes-Chaumont. The uppermost layer consists of clay deposits and is seven metres thick. This layer is scarcely porous. The site can, as a rule, be dug to a depth of 10 metres without encountering ground water. Beneath the clay there is a solid marl-limestone layer which provides a good foundation for piles.

The present situation has developed over the centuries, influenced by the geomorphological and topographical location and the occupations conditioned by this. The competition appears to have signalled the end of this development, or rather that this development would now take an entirely different course. The link with the industrial past was being broken; a cultural park was requested whose animation was to replace the industriousness of past times.

What, however, can a designer, presented with the brief, experience on the site? How do the present, past and perhaps future reveal themselves to the designers; which conditions, potentials and meanings are contained in the existing? These are the questions designers have endeavoured to answer in their plans, and in their designs they have revealed certain conditions, potentials and meanings.

In order to see what the area looked like at the time of the competition, we shall describe an imaginary walk over the site. The site is viewed with the design brief in mind. It is not, therefore, a detached spatial description. We are more concerned with considering which elements can be made use of for the orientation. How are the dimensions and characteristics of the buildings to be assessed? Which possibilities are to be found in order to suggest openness and vastness. In short, what is the strength of what already exists?

Because the majority of buildings to be removed have already been demolished, the size and the character of the two large buildings (the

Grande Salle and the Grande Halle) in relation to the level and empty site, as well as their relation to each other, are easily perceived. Because of the openness of the site, the borders can be surveyed: height, composition, length and direction. The considerable spatial diversity of the borders and the faceless rear façades and discontinuities in the buildings mean that these borders offer few points of departure.

The area's industrial past is discernible both in the remaining buildings, and in the heavy bridges (yet to be demolished) over the canal and the extensive hard surfaces. The site, with here and there bits of rubbish and rubble, is bare and deserted. The real Paris, the animated city, seems a long way off. The festive park to be constructed here is not the first association the place calls to mind.

On the Place Corentin Cariou (part of the Rue de Flandres) to the north, a fragment of the original abattoir complex of 1867 can still be seen. It is a small building with a cruciform ground-plan and a dome in the middle of the roof: the *Rotonde des Vétérinaires*. The other buildings, which formed the curved entrance section, have been demolished. Behind this is the Grande Salle—the future Museum of Science, Technology and Industry—now, on account of the reconstruction, deprived of its façades and surrounding buildings. Only a bare structure of roof, columns and floors remain. It is partially transparent, yet, because of its enormous proportions, makes a sombre impression, as if like a carcass.

The building cuts the Place Corentin Cariou off from the rest of the site. A 'square' seems for the time being too grand a term for this emptiness at the foot of a preponderant, gloomy façade. The domination of the future Museum seems insuperable, the dimensions inconceivable. The north-east side of the square is bounded by elevated railway lines. On the other side of the Rue de Flandres—the busy road leading from the city centre to the suburbs—a familiar Parisian building block stands somewhat forlorn.

The plans for the reconstruction of the Grande Salle show that although the entrance has been positioned in the dark north façade, the most open façade on the south side is oriented towards the park. Here the architect, Fainsilber, has inserted large, festive sun-rooms in the façade and has projected a glittering spherical cinema (Geode, diameter 36 m.) with a variety of water gardens. The competition organizers, the EPPV, are emphatic, however, in their desire to have a large entrance to both the park and the Museum and that this entrance be directly linked to the city on the northern side. There is to be an open

north-south passage through the building. Only to the west of the complex is there a view of the site behind. Over the Canal St-Denis there is a view of the Rond-point des canaux and, beyond that, even of the buildings along the Avenue Jean Jaurès, which borders the park on its south side. By continuing in this direction along the Canal St-Denis, the view broadens and the southern part of the site with the Grande Halle gradually becomes more visible.

In the foreground lies the 40-metre-wide and 10-metre-deep canal, wedged between the high, dark walls of the quay. The lock situated halfway along surmounts this difference in height in a single step. Its long, narrow and deep form lends it a mysterious atmosphere. Looking back from the island of the lock, we see, rather surprisingly, green wooded hills in the continuation of the canal. This is the *Fôret de Montmorency*, almost 20 kilometres away beyond the suburbs.

Small rustic houses and a vegetable garden, secluded on the island, evoke a rural atmosphere. The lock, with a small bridge over the lock gates, forms an odd link with the urban housing on the other side of the canal. The turning basin at the intersection of the St-Denis and de l'Ourcq canals is large. As the water lies directly beneath the quay, it acts as a spacious mirror for buildings and skies.

To one side, precisely in the continuation of the Canal St-Denis, is a former dock: the *Petite Darse*. The overhanging plantings, the overgrown quay-walls and the old swing bridge give the narrow strip of water a sleepy appearance. The line, Canal St-Denis–*Petite Darse*, is virtually at a right angle to the Avenue Jean Jaurès. A number of grimy industrial buildings obstruct a direct view of the façades along this street however.

The termination of the Canal de l'Ourcq to the west by the *Rotonde de Ledoux* is difficult to distinguish from the buildings in the background since the former toll-house is situated at a considerable distance (1500 m.).

From the most westerly of the two old bridges over the Canal de l'Ourcq (headroom 4.5 m.) the panorama is complete. As is the case at a number of spots on the site, a position of several metres above ground level gives an almost unimpeded view over the site and its boundaries. And, to the south, over the boundaries, the hills of *Buttes-Chaumont* can be seen; here, in a stone setting, the green gem of the park of the same name lies embedded.

There is sufficient difference between the view in the westerly and easterly direction to be able to discern on which side the city centre lies.

The outer limit of the area is the Boulevard MacDonald/Sérurier, which is situated five to six metres above the park. A retaining wall with parapets and road plantings provides a well-defined delimitation for the vast level site. Beyond, the Boulevard Périphérique runs over an embankment, which is a further five metres high. The course of this boundary is not at right angles to the canal. With a sharp bend, the wall leads to the Avenue Jean Jaurès and gives rather a closed demarcation to the site. The more or less horizontal lines of roads, retaining walls, and incline form a strong connecting strip, a plinth, beyond which are the disorderly high-rise buildings of the suburbs. The position of the large elevator buildings on the other side of the Boulevard Périphérique in the axis of the de l'Ourcq canal shows that the canal bends there. That marks the city boundary of Paris.

At the foot of the bridge in front of the Grande Halle are two small pavilions. The rustic architectural style and the entourage of pollarded trees seem to be in keeping with the origins of the traders and cattle-farmers who used to come here. Beyond is the nineteenth-century cast-iron Grande Halle. The former covered cattle market is, indeed, extremely large, with a surface area of two hectares; but the long, continuous, slightly sloping roof gives a plunging form and relatable dimensions. The roof, supported on numerous slender legs, forms a covered square. The elegant building, for which the participants of the competition have to find a new use, offers more potential than the other spatially dominant building: the impersonal carcass that is to be the Museum.

On the area's western boundary, linking up to the Avenue Jean Jaurès, are the untidy backs of several sheds, alternating with a number of older houses. The housing erected over past decades on the sites of former companies protrudes above this, with, here and there, the occasional multi-storey block. In the zoning plan the height of buildings is now limited to 25 metres, which should result in a more regular street landscape in the future.

The Avenue Jean Jaurès, which borders the park site to the south, is a typically Parisian street, with shops and numerous cafés and restaurants dating back to the time when La Villette attracted countless traders and farmers to its cattle market and abattoir; a time too when the area enjoyed considerable gastronomic renown. Viewed from the street, the façade of the Grande Halle forms a striking unit together with the neo-classical pavilions on either side. It is, as it were, an almost 200-metre-wide façade in a paved square, hemmed in by two

tapering avenues of plane trees and with a large fountain in the centre. This unified whole is a worthy entrance to the park; it is in keeping with the busy street and, thus, belongs to the rest of Paris. In the zone along the Avenue Jean Jaurès the various components of the Music Centre (Cité de la Musique) are to take shape.

Looking from the Grande Halle in a northerly direction, the façade of the future Museum immediately comes into view. Even from this distance it is—with its great width and height—an imposing wall and blocks the view beyond almost completely. From the Boulevard Sérurier—the eastern boundary situated six metres above the bare site—the Grande Halle appears as a long roof on a thousand legs. As a consequence of the terracing, the perspective is deep; but this impression would be even more pronounced were the emptiness to be framed between high, continuous walls, as in a French classical garden.

The central scene is dominated by the tranquil lines of the level site and the horizontal lines of the Grande Halle and the Museum façade. Here, the city's stacked profile rises above. The further, the higher. It looks like a clearance in the dense urban forest, an undefined void in the centre of the city, dominated by two enormous buildings with contrastive characters. The atmosphere of demolition also contributes to the sense of alienation. The noise from the ring-road is constant and penetrating ( $> 65$  dB (A)).

The panorama is complete. To the south the slopes of Buttes-Chaumont are visible beneath the buildings. They are accentuated by the contrast between the traditional blocks on the Avenue Jean Jaurès and the high-rise flats on top of the hill beyond. The buildings on the west and north sides of the planning area are situated on level ground. Here and there, tower blocks protrude more than 100 metres. In between is Montmartre, with the Sacré-Cœur visible, though less prominent than it once was.

The continuation of the Boulevard Sérurier, the Boulevard MacDonald, curves around the Museum. This encircling gesture will be reinforced by a three-metre-high soundproof screen. A tall chimney, standing forlorn between the Museum and the canal and deprived of its function and accompanying buildings, has been retained as a signal to the traffic rushing past on the Boulevard Périphérique.

To summarize, our analysis and interpretation of the site suggests the following potentials and limitations. Firstly, the area's image eludes a ready-made and unequivocal concept because of discrepancies and

alienation. Secondly, the experience is constantly ambivalent, so that the challenge sometimes seems impossible and the openness merely a forlorn void. Thirdly, the *genius loci* appears to be chiefly determined by an accumulation of problems: not being able to estimate dimensions; the perception of emptiness; the abundance of possibilities, almost everything has yet to be made, so everything is possible; the great contrasts in atmosphere and effect, with characteristic and idyllic places next to impersonal and macabre ones; linking the park to the city, which is chaotic, unclear, noisy and distant; the largely problematical contours of the site; the large buildings; the bridging of the canal; the more or less subtle relics.

The site's strengths are the programme's intentions, to be discussed in the following sections.

### *The views of the EPPV concerning parks*

The programme drawn up by the EPPV was, in part, fuelled by the competition organizers' criticism of the functioning of existing parks. Today parks are no more than repositories for children and the elderly, whereas they were once centres of activity, filled with a wide range of attractions for everyone. This was, in short, the conclusion of a report surveying the history of Parisian parks. The following extracts from this report, *Données sur l'existant*, provide a good impression of the views of the EPPV.

In the seventeenth and eighteenth centuries the Parisian parks (Palais-Royal, Luxembourg, Tuileries) played a part in the social life of the city: as an urban place of encounter and interchange, they were constantly visited by a miscellaneous public, the majority of which was adult. The park really was a place to exchange ideas, to hear items of news, or to look for an amorous adventure. The garden was, from the moment of its creation, never a mere succession of lanes and parterres: there were more 'attractions' to be found there, added or adapted over the years. Bit by bit, facilities make their appearance, which lent support to the public character of the area.

During the Second Empire (1852-71) Haussmann realized a hierarchical system of squares, parks and woods, supplemented by an extensive system of avenues of trees. In this period, at the start of the Industrial Revolution, the city expanded and became more dense. The green space had to fulfil new functions: in addition to providing embellishment, it served as an antidote to the pollution and discomforts of the city. The green provided Parisians, and particularly children and families, with clean space in which to stroll and relax. Completely adapted to this function and to the period, in which crinolines and propriety imposed a restful and

dignified pace on the stroll, the parks only allowed one to walk round and to enjoy the landscape, pleasantly varied by the undulations of the terrain, the ponds and the wide variety of trees and shrubs.

The past thirty years have seen a shifting of the notion of the park or the garden to the 'green' [*espace vert*]; a development characterized by an impoverishment of the social function and of the creative considerations themselves. Simplified to an extent—and, therefore, debatable—it can be argued that the 'green' in the city has been transformed into a mere accompaniment to the buildings: a planted décor, often without imaginative power, which evokes not the slightest emotion nor stimulates any activities, in short, provides not the slightest pleasure.

The EPPV concluded that 'parks are not adapted to our time', and that 'users desire flexibility and diversification'.

In the meantime, we have been witnessing over a period of several years a development that probably points the way to a renewal of garden design, linked to a reflection on the social function of public space. This development is effected by means of a two-fold approach: reflection on functions, which determine the atmosphere and activities of urban parks; and reflection on the forms and the meanings of the ideas that are now becoming manifest in the world of landscape architecture. The Parc de la Villette offers, for both perspectives, a unique opportunity.

#### *A description of the EPPV's objectives and requirements*

To illustrate the tone of what the EPPV intended, a summary of the *Rapport d'objectifs* and the *Programme* have been included here.

<sup>1970-1971</sup>  
THE OBJECTIVES The proposed functions of La Villette can be gauged from the following extracts.

Historically, the art of gardening is part of our culture; the shaping of nature according to an ideal model [*naturaliser une idée*]. Gardens reflect a vision of the world and of capability. This symbolic dimension should not be forgotten, for, in addition to the use of the park, the symbolic function has become impoverished in recent decades. Symbols of the present ought to be incorporated into the contemporary park.

Present-day Parisian parks have become green areas, providing space only for the non-working population. Life and the city are elsewhere. The organization of work, the rhythm of the seasons, and the changing weather make the park a temporary and discontinuous place. This way, the Parisian park is dying and, since Haussmann, nothing new has been created.

The character of the location of La Villette is first and foremost determined by the urban context and its history. The district must be reanimated. The park is not so much a lung, as a heart. The entrances to the city ('les Portes') evoke a powerful symbolism of entry and passage. They need to acquire a new significance as a centre, especially for the eastern suburbs. It is also necessary to know something about the present inhabitants (workers, the young, North Africans) around the park before being able to provide for their needs.

La Villette is a large project that has to combine urban planning and cultural innovation. That is the magnitude of the ambition. By creating a complex of large-scale facilities, a change really can be accomplished. It is an innovative cultural project. The park serves as a new cultural instrument. It is part of an urban planning policy that completes the city and, at the same time, opens it up to the suburbs.

The EPPV required the architects to address the issue of pluralism and unity.

In order to make a large urban park, the following questions must be answered. Which symbols and functions should be given to the park? Which aesthetic requirements should the park satisfy? And which policy should be pursued?

First and foremost, the cultural and symbolic reference is pluralism.<sup>42</sup> The park is a meeting point of cultures, which have the right to express themselves individually: it is a park of reconciliation. This status will be achieved by applying three unifying concepts:

*Urbanism:* man and the city. It is man's nature to be social; man's culture is the city. La Villette will reveal the riches of urbanism and be a forerunner of a true urban ecology. Traces of the past present on the site make identification with the park possible. Because of the presence of daily activities, the park becomes a meaningful part of the lives of the inhabitants. No one may feel excluded. It is a large residence in the open air, with a choice of facilities, in addition to open space for free imaginings.

*Pleasure:* body and mind. The park is arranged for relaxation and well-being; the body is not exercised physically without also developing the mind. Sometimes Descartes must be forgotten in order to discover Rabelais. La Villette is a city of water and festivities. Of the everyday and the exceptional. Two French cultural manifestations—the garden and the kitchen—are both a homage to nature.

*Experimentation:* knowledge and action. The park is a garden of cultural superabundance. A living, active culture is sought in which theory and practice are not separated. By means of exhibitions and workshops, familiarity with technology will be achieved. The cultural extremes, music and technology, are united by means of the park's facilities. In this rapidly changing world, experimentation demands an extremely flexible plan that can evolve without affecting the underlying idea.

We aim for a park in the true sense of the word, but, at the same time, one that is a 'bridge' between the Museum and the Music Centre. A poetic answer that has neither the dictatorship of a too obvious structure nor a chaotic mosaic of unstructured eclecticism is therefore anticipated.

Diversity will be the consequence of two spatial extremes, which give expression to the two sides of the relationship between the city and nature. On the one hand there is the garden city [*la ville-jardin*], to be concentrated around the Grande Halle as a centre of activities, performances and experiments. The organization, design and atmosphere should evoke the image of a civilized nature and of a city replete with urbanity. On the other hand there is the garden in the city [*le jardin dans la ville*]: a centre of relaxation and well-being for both body and mind. These are the thematic gardens, a world of discovery and play in a nature whose manifestations are various.

Unity, synthesis and coherence are also necessary to achieve a meaningful whole. It must definitely not be a post-modern garden, eclectic and nostalgic, a jumble and collage of countless incoherent elements from a dislocated world. Unity has various aspects. Firstly, the unity of the landscape. Of the elements, water plays a prominent role, as it does in the architecture of the Museum too. The rhythm of the growth of the plant world must be in harmony with the use of the park. Good lighting and concentrated activities will contribute to the continuity, atmosphere and safety of the site. Secondly, the architectonic unity. La Villette will play an important role in the renaissance of the art of urban development and garden design as a result of the architectonic quality and unity of the architectural facilities and the plantings. True unity is created in the detailing.

The *Rapport d'objectifs* also drew attention to the future management of the park.

The complex and innovative character of the park necessitates special management. The area must be arranged in such a way that it is safe without having to make a show of strength. Consider Stendhal: 'La beauté est une promesse de bonheur'. The park is a cultural facility in the open air. For this reason, a special staff under the supervision of the Ministry of Culture is necessary, in addition to the customary horticultural management.

**THE PROGRAMME** The competition involved the creation of a concept for the design of the park; the defining of the park's relationship to the Museum of Science, Technology and Industry and to the Music Centre; the detailed designing of specific elements contained in the programme (entrances, thematic gardens); the presentation of the proposed design on three panels (90 x 135 cm.), including the plan (1:1000) and an illustration of how the design fitted in with the urban development plan for the area (1:5000), and an explanatory text (10 pages of A3).

The following provides a summary of the competition programme. The *Programme* begins with an overview of the objectives (the same as those in the *Rapport d'objectifs*) in order to reach the conclusion that the park must be active, i.e. used by many diverse groups; permanent, i.e. organized in such a way as to put an end to the customary slack periods of use: weekdays, night-time and winter; and it must be experimental, i.e. linked to the pace and way of life of the city by means of a constant renewal of activities. In relating the park to the Museum and the Music Centre, the designer had to take account of the following.

The park must welcome the visitors to the Museum; it must inform, lead, and accompany them. Moreover, the park must have an image that is in harmony with, or at least consistent with, the Museum. The park lends support to certain of the Museum's activities: permanent and temporary exhibitions, workshops, greenhouses and thematic gardens, logistics.

The Music Centre will be established in the southern section of the site. It comprises the following components: auditorium with large and small halls, conservatoire, music research and experimentation centre, music museum, and underground car park.

The *Programme* was also clear about the links between the park and the city and the inclusion in the park of existing or proposed buildings, and the need to make the park accessible for the disabled.

The park will be created in a complex area that bears traces of its history and of more recent urban planning developments. It is not only a question of creating a park, but of carrying out a programme of urban development that is exceptionally complicated and new. The links with the surrounding urban area are chiefly focused on the entrances to the park, the relationship with the suburbs, and the use of the former railway line to the Parc des Buttes-Chaumont as a footpath. In the treatment of the northern zone, buildings can be added if desired. The inclusion of existing buildings chiefly concerns the Grande Halle, which can provide accommodation for a variety of temporary activities, five characteristic nineteenth-century pavilions, and a large fountain.

Particular attention should be paid to providing access and freedom of movement for people with disabilities.

The *Programme* contains an outline of the analytical programme of activities. This is the actual programme of requirements, the list of the proposed facilities, and the conditions to be met, etc. The activities are grouped into five units: main activities (*activités majeures*); reception, services, shops; administration, management; internal circulation; and logistics.

The main activities will lend the park its unique character. They are classified around the following themes: spectacle and entertainment; discovery, initiation; expositions; training and care of the body; and restaurants. The objectives are specified for each theme. For each activity, the function is defined and the necessary surface area allocated. Surface areas are of three types: open air, covered and built.

The presentation of the main activities is based on a fundamental distinction between activities grouped and concentrated in a centre of activities (*pôle d'activités*), so that they have a high admission capacity, are constantly lively and of a great diversity, and dispersed activities (*activités déconcentrées*), which are situated throughout the site.

The list of all the facilities to be provided is, in brief: an open-air theatre, covered multi-use spectacle site, cultural information centre, kiosks, workshops, discovery gardens, glasshouses, discovery areas for children, covered space for permanent expositions, exhibited objects (Ariane rocket, radio telescope, sundial, etc.), thematic gardens, baths, thermal baths, skating-rink, recreation areas, semi-hard sports fields, training circuit, playgrounds, swimming baths, group of restaurants, snack bars, cafés, buffets, picnic areas, receptions, children's centres, bank, post office, police station, shops, hire companies, markets, administration and management office, cycle paths, storage spaces and workshops, first-aid post, public conveniences, car parks and underground car parks.

The EPPV's ideas concerning the systems and frameworks of the park can be gauged from the following extract from the *Programme*.

The planting structure, the framework of a variety of vegetation, will arrange the space and play a role as 'green architecture' (*architecture verte*), making manifest the general organization of the site and supports: the main access, the most important spaces and atmospheres. The water structure will be one of the unifying factors in the development of La Villette: the canals, paddling and swimming pools, and fountains. The technical structure comprises drainage, spray installations, fire-extinguishing systems, lighting, electricity and sewerage system. The park must be totally or partially lockable. Street furniture, such as benches, kiosks, signposts, must be designed in such a way that it contributes to the aesthetic and functional coherence of the site [ill. 8].

#### *Analysis of the programme's objectives*

The Parc de la Villette—an exceptionally large open space in Paris—provided an opportunity to develop an ambitious programme. This programme reflected certain political, cultural and social aims. The



EPPV tried, by the provision of extensive facilities and a series of programme guidelines, to express the park's specific character. Familiar forms, such as those of the English landscape-style park, the French classical garden, or a fun-fair or theme park, were precluded. Nor was La Villette to become a traditional city district.

The programme was effected in a pragmatic and empirical rather than a theoretical way. Four aspects contributed to this. Firstly, the knowledge of public spaces that are characterized by an interesting mixture of amenities, atmospheres and activities, such as Tivoli in Copenhagen, Ontario Place in Toronto, and Kew Gardens in London. Secondly, the dissatisfaction with the present functioning of traditional parks, especially in Paris, and their recent development compared with the urban and cultural role they played in previous periods. A third factor was the search for a use, for daytime and night-time, summer and winter, with cultural and recreational activities, walking and play, sport and amusement. And, finally, the search too for a new quality through design innovation: La Villette was to be the park of the twenty-first century.

The preoccupation with an open and polyvalent programme was an expression of the desire to make the park inviting for everyone and to stimulate a multiplicity of activities. The objectives and programme were set out in great detail; the tone was lively and ambitious. The following questions had not yet been fully answered however. Can activities be determined on the basis of old and recent experiences? How are experiments in the park to be developed? Can innovation be programmed? How are the requirements of a once-only visit by tourists (who are looking for easily assimilable impressions and imposing images) to be reconciled with those of a place for contemplation for the regular visitors from surrounding neighbourhoods? How does one combine a museum and music centre with the commotion of a fun-fair? How does one fuse all the various elements into a whole? Is such a precisely formulated programme consistent with the desire for something new, something for the twenty-first century? It is up to the designer to provide the answer.

The objectives described both the desired use, the intended character and the anticipated symbolism of the park. Thus, in addition to the functional requirements, there was also an expressive and iconographic programme.<sup>43</sup> The urban park was the starting-point of urban renewal and, therefore, no longer the lung, but the heart of the district. In order to be so, the links with the surrounding area would have to be excellent.

An interpretation of the continuity of the history of the place was requested, particularly as a contribution to the unity of the park and its surrounding area. History had left an isolated complex of various buildings belonging to the abattoir and cattle market and, hitherto, these buildings had evoked no attractive overall image. This would thus permit an extremely free interpretation.

The innovative cultural project with its extensive facilities would have to create new habits of use. The possibilities for developing these would have to be sought not so much in a mere accumulation of activities, but in exceptional, unexpected and daring combinations. This is perhaps one facet of the requirement that the park express a pluralistic and popular culture and serve as a meeting point and place of interchange for various cultures.

In addition, three themes were elaborated: urbanism (man and the city), pleasure (the body and the mind), and experimentation (knowledge and action). The world of science and technology (the Museum) was to be linked, both literally and symbolically, with the world of the arts (the Music Centre). This would, for the most part, coincide with the desired north-south route. At the same time, this could strengthen the relationship between the sections of the park on either side of the canal.

The representation of the relationship between nature and culture (civilization) had to be the source of the diversity and the richness of the project. In addition to the unity of the landscape and the architectural unity of the site, this was the most important aesthetic requirement. The relationship had to be expressed in two ways: as a garden city (the activities area linked to the north-south route, and the space for a new urban lifestyle) and as a garden in the city (the recreational area, where the relationship with nature was to be expressed in a series of gardens). In order to elaborate these worlds convincingly, a considerable area of land was necessary. Because of this, the articulation between these requested atmospheres would be difficult to realize. Unless adequately separated, neither of them could be done justice to.

The programme was constructed with the aid of a grouping of components. This arrangement was an important indication of how the organization of the plan needed to be developed. The great variety of activities was divided into five units. The main activities comprised one of these units. They would determine the character of the park and revolve around four themes. Within each theme the component facilities were divided according to the way in which they were to be dis-

persed throughout the park. For each activity an assessment had been made of whether it should take place inside or in the open air. This schematic arrangement was not always clear, however, because the concepts applied when locating the facilities were not always analogous. Hence questions arose that overlapped or were difficult to relate.

The available site was scarcely sufficient in size to accommodate all the proposed activities. This left designers with little room (literally and figuratively) to add their own ideas about activities; in view of the park's innovative character, this was a disadvantage. In any case, an ingenious—almost cunning—interpretation was demanded of the designer.

An analysis of the requirements of proposed designs made in the brief reveals contradictions, discrepancies and imperfections in the objectives themselves and between the objectives and the location. The recognition of this is always an important step in the design process because, on account of the interaction (harmony/neutral/conflict) between objectives, it is often difficult to meet fully the separate conditions specified.

The terms of the brief appeal to the designer's imagination, but they also set limitations. In this case, the *Rapport d'objectifs*, because of its more broadly formulated objectives, was more decisive in determining design solutions than the more concrete requirements of the *Programme*.<sup>44</sup> There were therefore difficulties in meeting both the objectives and the programme, particularly when viewed in the light of the circumstances of the site and the surrounding area. This resulted in six basic problems to which the designer had to provide an answer. They concern questions of scale, tempo, character, innovation, fragmentation, simultaneity and overfilling.

The scale of the city and of the site, characterized by existing buildings and the size of the park, required an effective spatial organization and a large-scale open space capable of matching the urban surroundings.

Use dictated the need for various tempos: both direct links between entrances and large facilities (resulting in efficient and well-ordered access to concentrations of activities), and the park as accommodation and space for walking (which requires longer and more exciting routes, spacing and tranquillity).

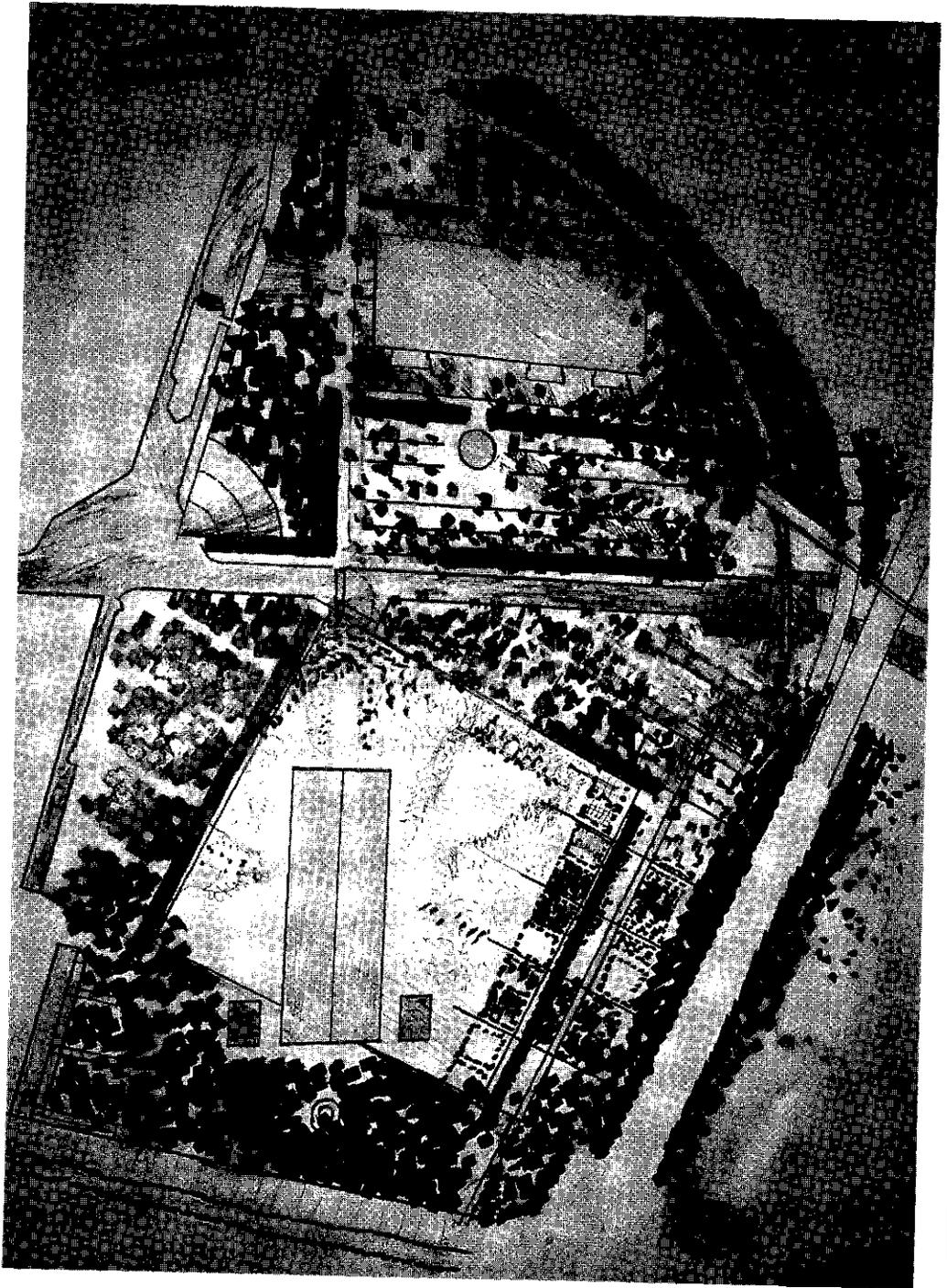
In determining the character of the park, the search for a certain complexity of atmospheres and spaces for the purpose of 'pluralism' and 'urbanism' was not to go to the extreme of an intensive and con-

sumptive amusement park, but nor to the opposite, by subordinating it to nature as the dominant subject; and, in addition to generating international pretensions and allure, the park was also required to invite everyday use by local residents. The park was to have many faces and yet be a unity: a new type of all-encompassing image.

The designer was also faced with the questions of what concept of a park expresses, in an innovative and modern way, the city and the landscape; and what the response to the fragmentation of the city should be. Should this phenomenon be expressed precisely by means of an assemblage of fragments, or could the park repair the disintegration of the city by creating new coherences, whereby the park becomes integrated into the local framework through the treatment of borders, boundaries and transitions? The unity of composition was not to lead to unambiguity, but how were a number of themes to be dealt with simultaneously so that they strengthened each other without leading to disruption or disorder?

The programme was not only complicated and diverse (varied); it was also overfull in view of the available size of the site. This necessitated combining activities and considering precisely the position and size of each component.

In conclusion, the overall objective was a total composition resulting from the search for a spatial and/or intellectual concept capable of lending the site a recognizable coherence. It was with the challenges and problems this presented that the designer set to work to unearth from the multiplicity of desires and requirements, limitations and conditions, difficulties and potentials, those features that were to influence, guide or determine the plan.



9 Chemetoff, preliminary design sketch

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**Part two** *Comparative analysis of the designs*

Our analysis consists of four successive decompositions: firstly, the decomposition of the park as a (representation of a) graphic composition; secondly, the decomposition of the layout and the spatial coherence of the park; thirdly, the decomposition of the design principles; and, fourthly, the analysis of the styling of the design.

The analytical drawings are abstractions that reveal the concept behind the design. Our analysis reasons from the product, via an interpretation of the design process, towards the idea. The stages are, consequently, connected. They proceed from graphic abstraction via spatial reality towards compositional concepts and themes; from reaction to location and programme to traditions of form. In addition, the viewpoint in relation to the plan shifts, both literally and figuratively: from, for example, composition on the flat surface to the spatial scene, or from the practical functioning of the site to the character and meaning of the forms and materials used.

The sequence followed in the analysis, from form via space to design philosophy, does not follow that of the design process. Yet by means of this step-by-step approach, one becomes increasingly immersed in the plan, and the underlying design philosophy is retrieved. With this, the design process is indirectly decomposed.

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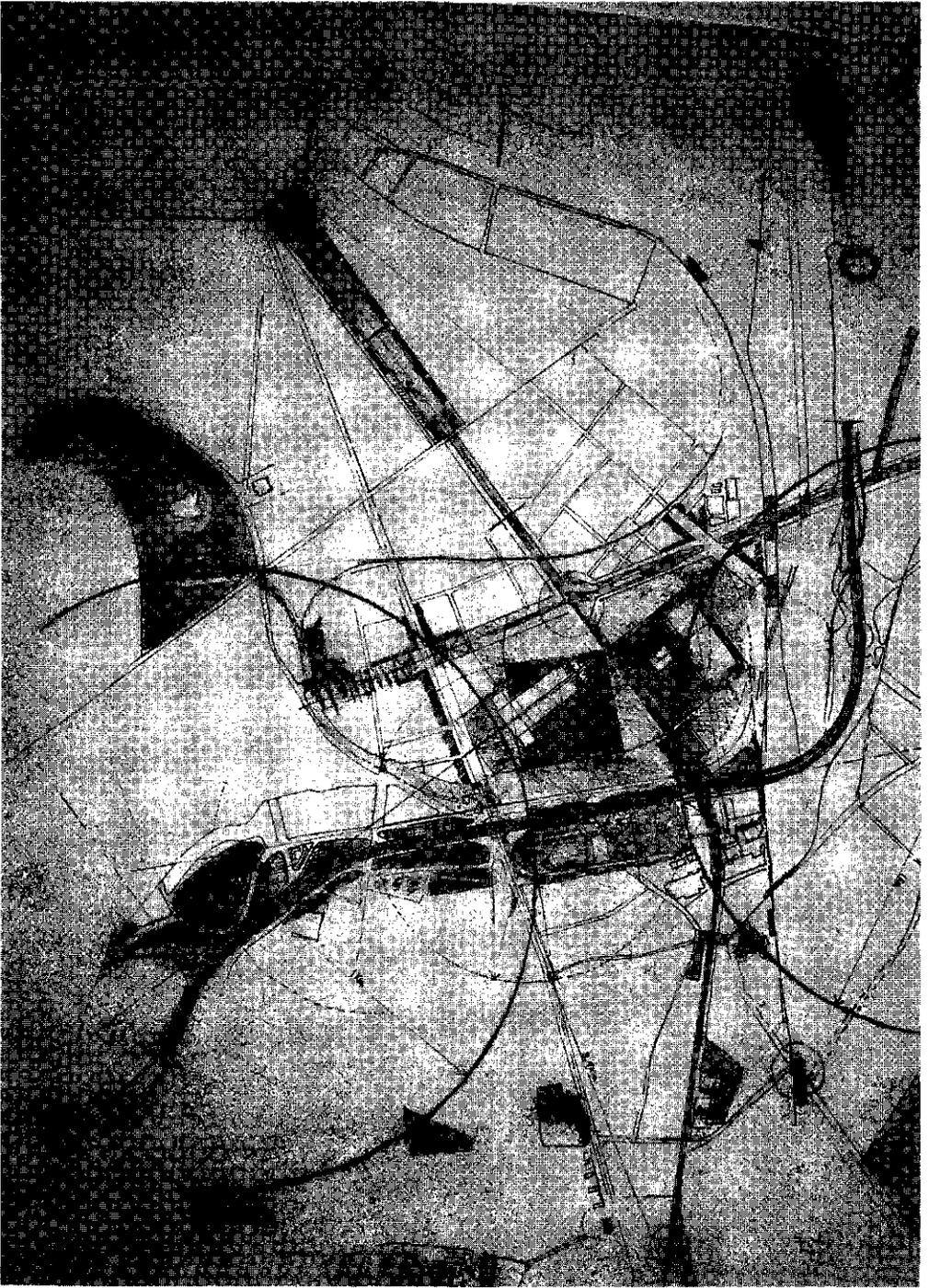
### 3 The park as a graphic composition

For the purpose of this phase, the ground-plan of the park is viewed as a graphic composition. As is the case in every stage of the analysis, the plan drawings are explored by sketching.

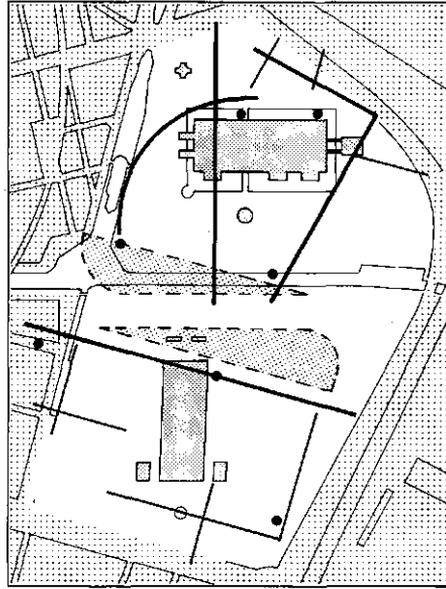
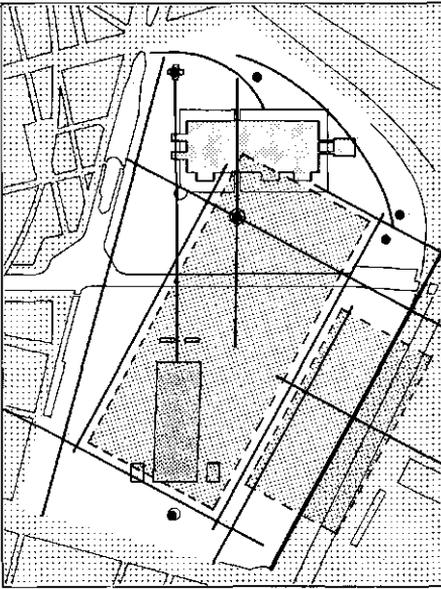
Why is the graphic quality of the design examined first and foremost? The reason is that a park design—before it represents a park—is, at first glance, a flat surface of lines, areas and colours whose arrangement is experienced and interpreted as painterly. This does not mean, however, that at the start of the design process the landscape designer places lines on paper without visualizing what this, expressed in terms of its materialization (the park), means. A preliminary sketch by Chemetoff, for example, shows a markedly graphic composition of lines and surfaces that in the final design materializes in different parts of the plan [ill. 9].

#### Introduction of the graphic composition

The design is decomposed into points, lines and planes. These first lines revealed in the analysis are to be viewed as construction lines or regulating lines that direct the composition. They order for the purposes of the construction and the coherence of the plan. With the aid of these lines, objects, spaces and volumes must find their place in the plan; in this way the design is kept under control. This system can be developed or extracted from the wider surroundings, as happens in a sketch by Chemetoff [ill. 10]. The direction of the lines, in particular, is an important device in the interplay between the elements of a plan to



10 Chemetoff, design sketch of La Villette and its surroundings

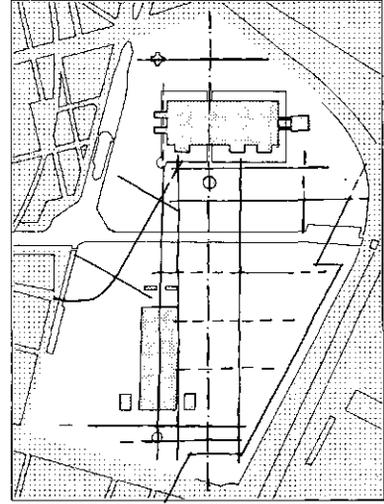
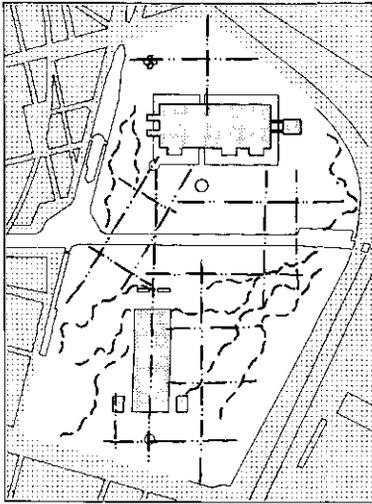
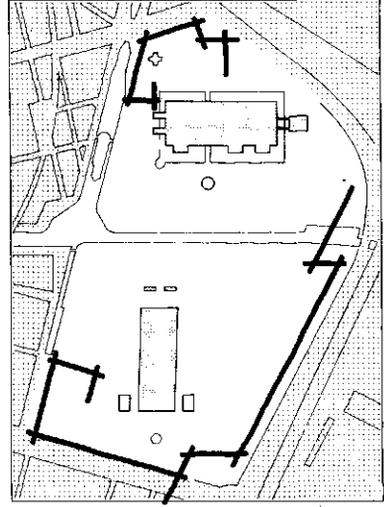
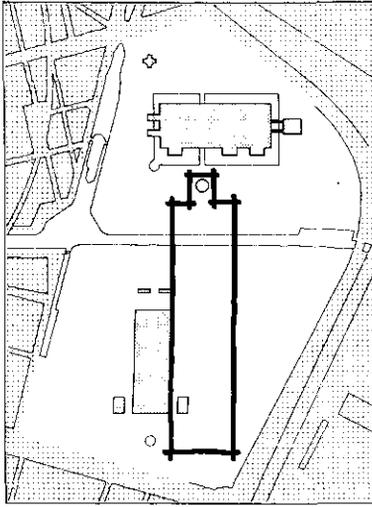


11 *left* Points, lines and planes: Chemetoff  
 12 *right* Points, lines and planes: L'Arbre en boule

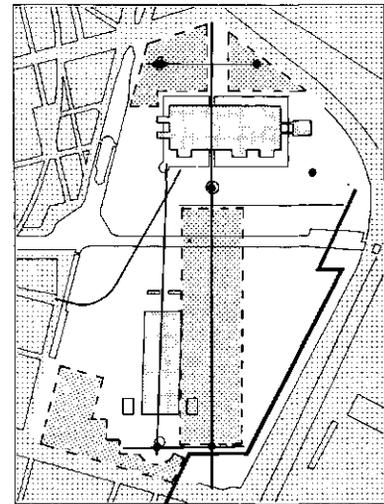
be distinguished in the second stage. It is important though not to see the drawing merely as a pattern of lines; it must also be viewed as an interplay between surfaces and the intersections arising from both. The system of points, lines and planes constitutes the plan's underlying geometry [ill. 11].<sup>45</sup>

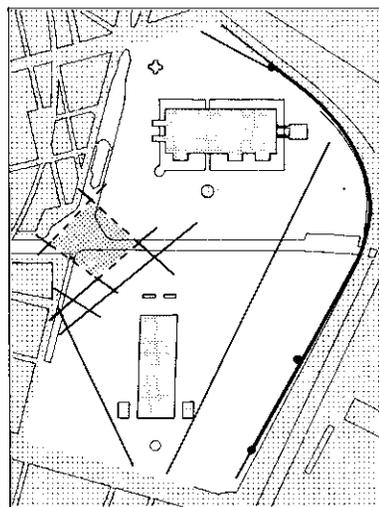
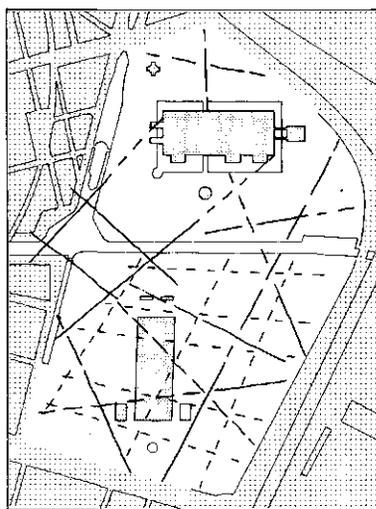
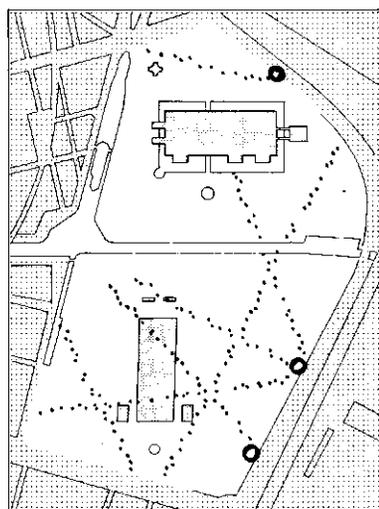
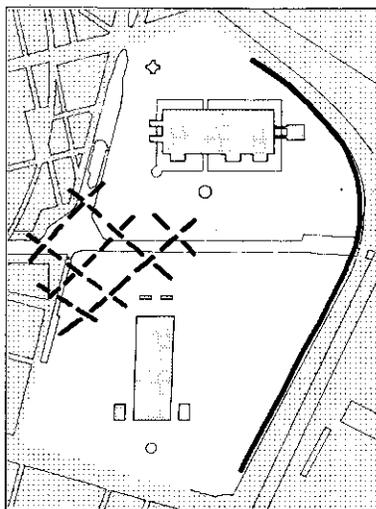
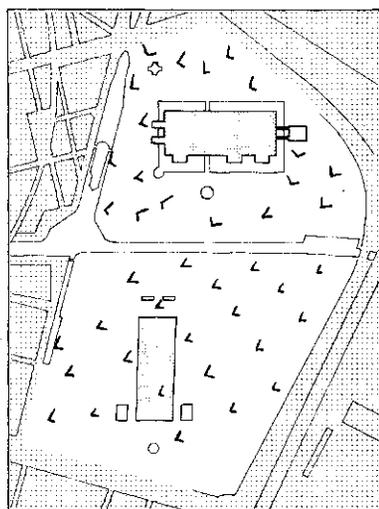
The ordering of planes and lines is sometimes not immediately discernible; this is true, for instance, in the plan by L'Arbre en boule. By sketching the position of the individual parts of the plan, an understanding is obtained of the more concealed arrangement. The visual axis through the middle of the plan thus turns out to have a certain symmetry on either side: it is not an exact mirror, but the hook is a sort of echo of the curve. The construction lines show that the parts of the plan are attached to the lines and alignments of the location. There is an intensive geometrical scheme [ill. 12].

The sketches in this stage of the analysis are an exploration of the graphic composition. This analysis shows which parts of the plan are distinguished in the ground-plan (drawings 1, 2 and 3), with which construction lines the composition is composed (drawing 4: axes, lines and imaginary lines) and, by way of conclusion, a drawing of the points, lines and planes.

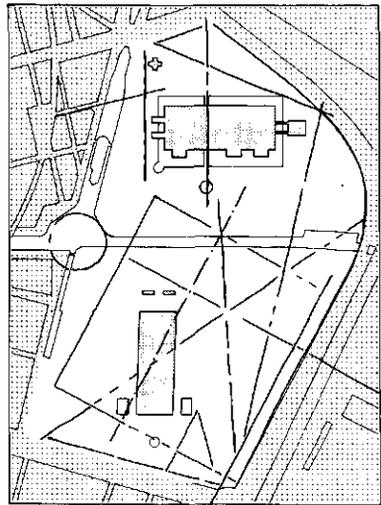
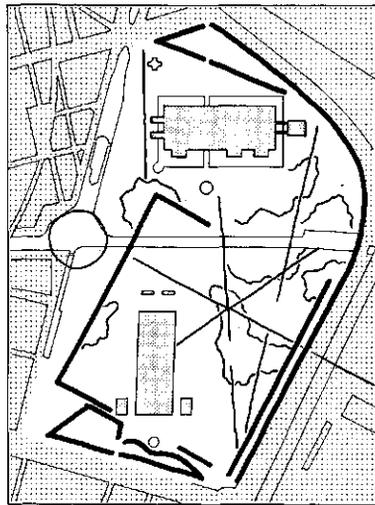
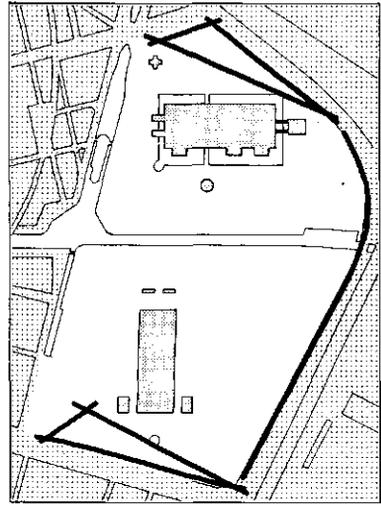
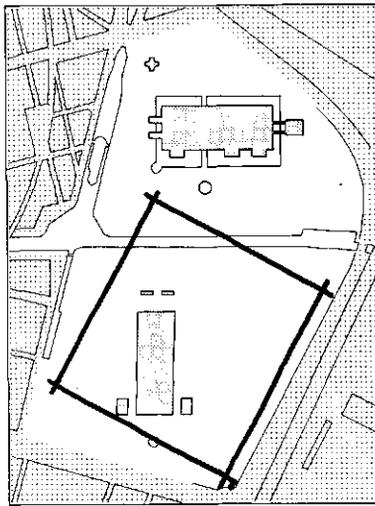


13 Analysis, stage 1: Pilton

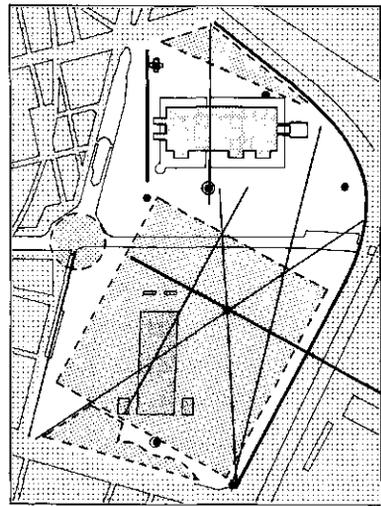


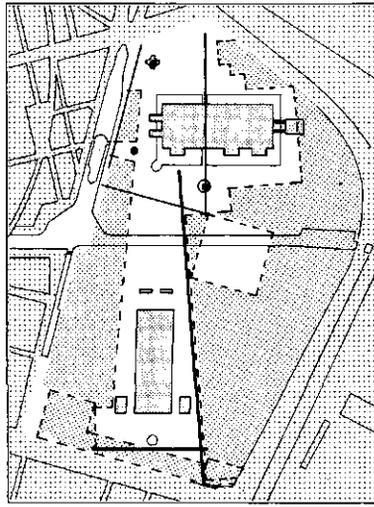
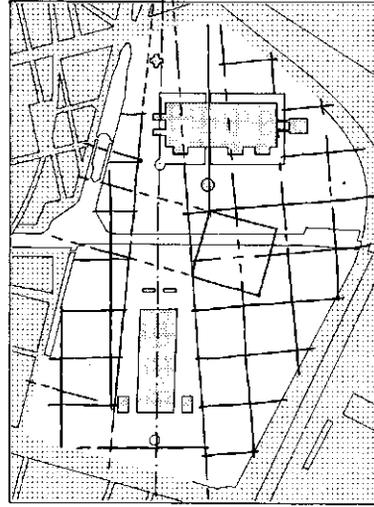
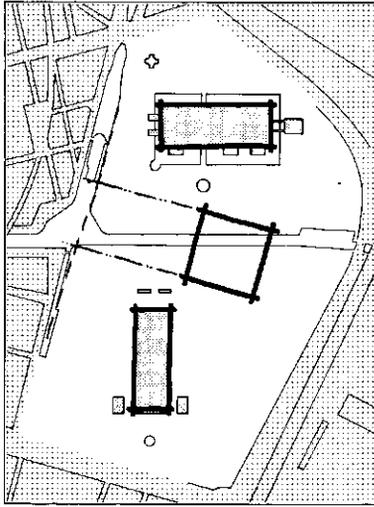
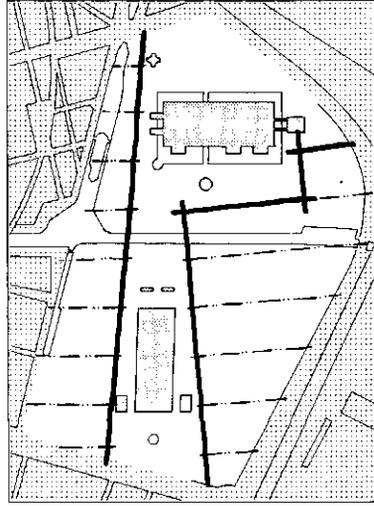
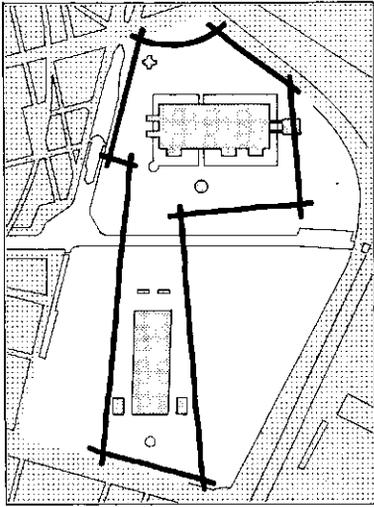


14 Analysis, stage 1: Pesce

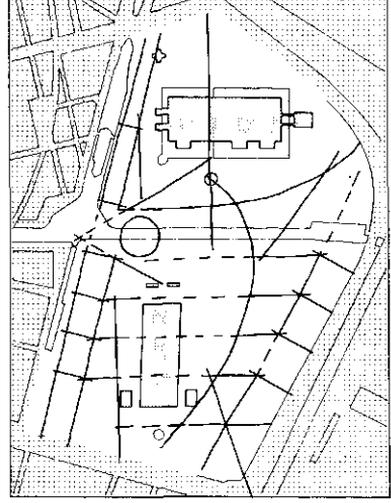
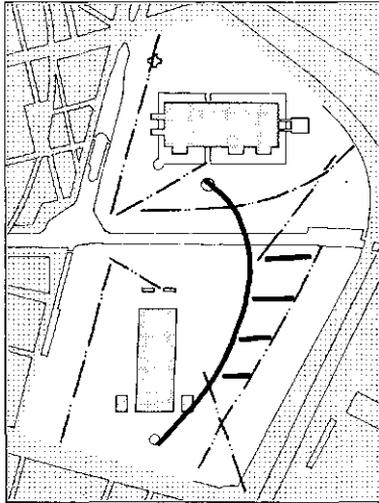
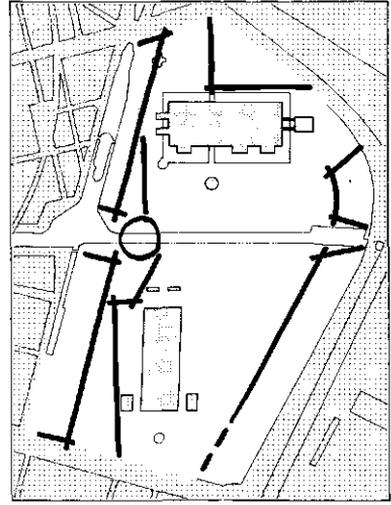
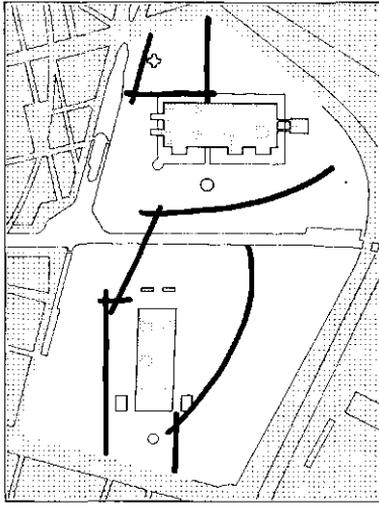


15 Analysis, stage 1: Corajoud

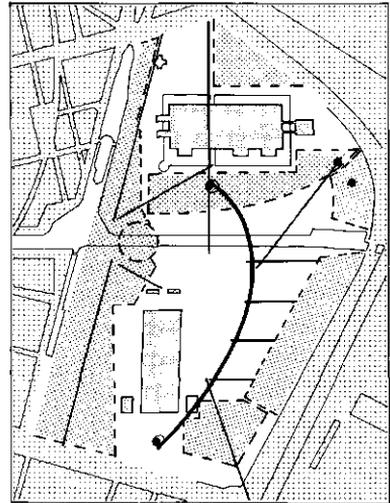


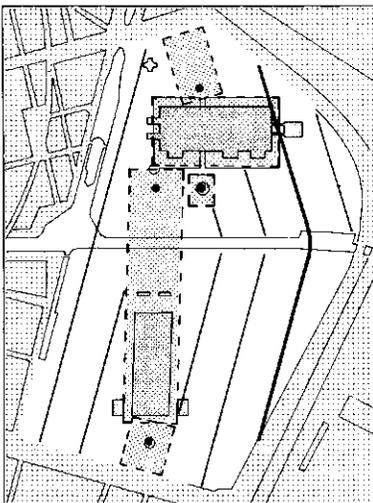
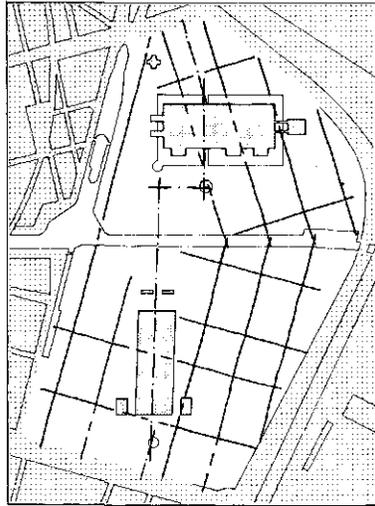
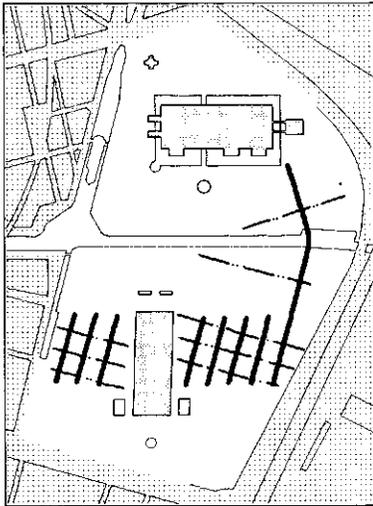
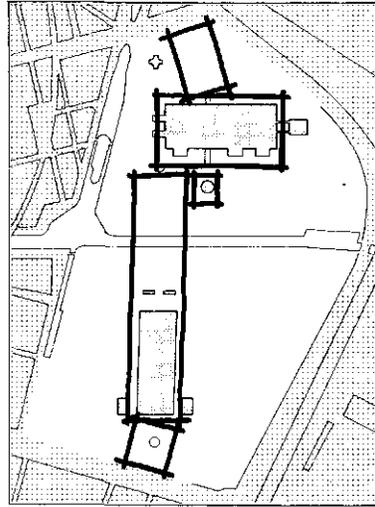
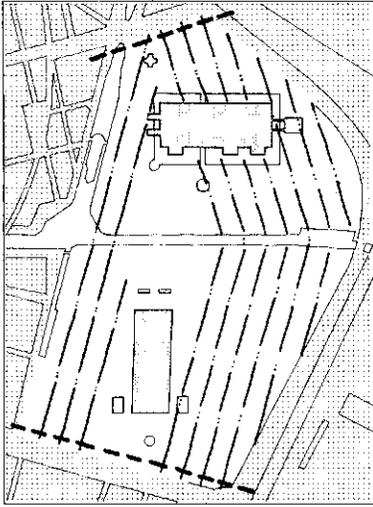


16 Analysis, stage 1: Drewniak

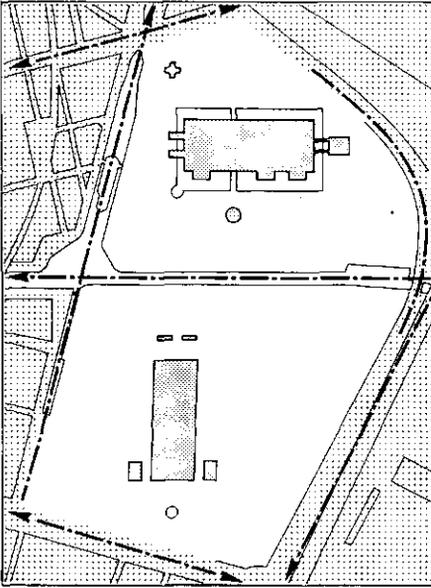


17 Analysis, stage 1: Zagari





18 Analysis, stage 1: Hara



### A description of the graphic composition of selected plans

#### *Pilton*

The ground-plan is determined by a strip in the middle (1) and several strong lines at the edge (2). Grids and meandering lines have been added to this, which gives character to some areas (3) [ill. 13].

#### *Pesce*

Most of the elements are arranged by means of the identical alignment of the building lines (1). A heavily accentuated edge and a gridiron in the centre keep the fragments closer together (2). Over this, trees stand singly on underlying lines, which are linked to the entrance and to the central points at the edge (3) [ill. 14].

#### *Corajoud*

A few simple sections, a square field in the middle (1) and two triangular areas at the entrance with, in between, a line along the edge (2) form the basis of this plan. Adjustments made by adding and interrupting interfere with the principal forms (3) [ill. 15].

### *Drewniak*

A connecting area from north to south over the canal contains the Museum and the Grande Halle (1). This produces two sections; the western section is linked to the city, the eastern section refers to the outside (2). A square field is intermediary between the Museum and the Grande Halle and is linked through its alignment to the canal (3) [ill. 16].

### *Zagari*

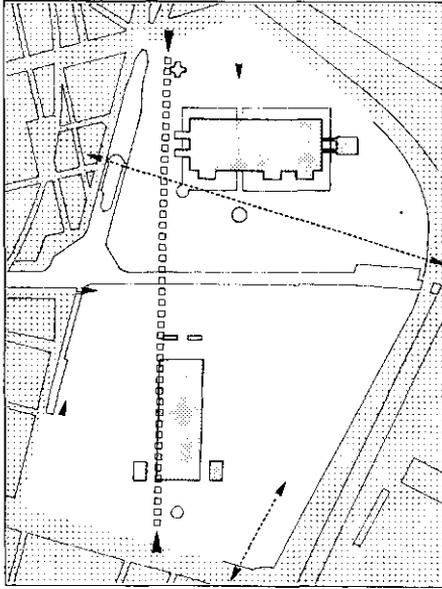
A field in the middle and a plane at the entrance (1) are bounded by a simple line on the east side and by a complex line on the city side (2). Various lines connect the different parts of the plan (3) [ill. 17].

### *Hara*

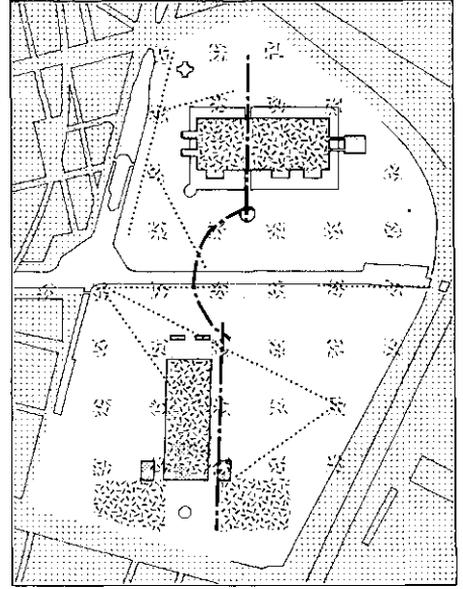
Over a ground-plan determined by strips (1) is a succession of rectangular planes for linking the north and the south entrances (2). Over these strips are lines that link up buildings placed at right angles (3) [ill. 18].

## **Conclusion**

(Construction) lines give rise to a wide variety of patterns: orthogonal grids and/or radial systems and transections in various directions. The geometry of the location (comprising site, buildings and surrounding area) is a factor that can be responded to in various ways [ill. 19]. The scheme either follows the context and is developed out of existing lines and patterns, or it diverges and comes—figuratively, but sometimes literally too—to stand at a right angle to the existing configuration. The effects and meanings of the composition's line patterns are dealt with in Chapter 9. The underlying motives for choosing one or other design philosophy are discussed in Chapter 5, as are the various design principles.



20 Access: OMA



21 Organization: Tschumi

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#### 4 The layout and spatial coherence of the park

After investigating the design by means of decomposing points, lines and planes, the analysis continues by considering the following question: What is the significance of the graphic composition for the spatial functioning of the park? The second stage in analysing plans relates thus to directly readable, spatial characteristics. How are the many and various functional programmatic items (which, added up, cover almost a greater surface area than the site) given a spatial coherence?

The spatial coherence has an important functional dimension in view of the fact that the opportunity for the visitor to identify, to orient and to recognize meanings, is a prerequisite for accessibility and effective action. This stage therefore examines by which arrangement (compositional grouping) and by which means a coherent organization of the site has been achieved. It is an investigation into the practical parameters of park layout, called here 'the components of coherence'.

Coherence is deployed as a general concept because designing is the creation of a certain coherence, of a connection between the elements of a plan, through linkage in the totality. The degree and quality of coherence a plan needs to have is something the designer determines on the basis of the question and the location.<sup>46</sup>

##### **An introduction to the components of coherence**

The concepts introduced here are to be regarded as the components of a plan's coherence. Components are here considered to be the constitu-

ent parts of a resolved force. These are not qualities that simply, and independently of each other and of the location, ought to be maximized. Mere quantity loses its meaning as soon as a satisfactory level has been reached. 'A site should be a coherent succession of spaces or textures or objects, in which each part relates to the next but in which there is a constant play of variation on the basic theme.'<sup>47</sup> Coherence is the connection between the elements of a plan.

For the purposes of this study, six components have been distinguished. Occasionally the concepts overlap to a certain extent, or the boundaries cannot be sharply drawn. The classification is, indeed, an artifice in order to clarify something of reality, a reality that is not composed wholly of independent elements. The components 'access' and 'organization' are of a functional nature, whereas 'anchoring', 'openness' and 'articulation' chiefly have a visual significance. The six components distinguished here are suited to an analysis of La Villette. In a different situation, however, other concepts may be necessary.

In the second stage of our analysis we investigate the conditions, potentials and meanings the designers have discovered in the site in order to shape their response to the design problem (the programme). 'All rational improvement of grounds is necessarily founded on a due attention to the Character and Situation of the place to be improved: the former teaches what is advisable, the latter what is possible to be done.'<sup>48</sup> Aspects of both the site and the programme overlap in the analysis. Indeed, this is characteristic of a landscape design brief: the interaction between the qualities and conditions of the site and the requirements of the programme; between the existing, the potential and the desired.

Along with the questions analysed in this stage, the following are also considered. What measures do designers take to try and reconcile what is requested with what is possible? What approaches have they discovered as a result of analysing the site and attempting designs, what have they selected from and revealed of the aims and requirements of the brief, and how have they interpreted these specifications and conditions?

By means of these questions, our analysis commences with the least comprehensive concepts, which are empirically readable and most related to the site and to the programme. As much information as possible is taken from the design drawings themselves, the explanatory texts only being used if the phenomena described there are also present in the drawings.

## *Access*

How are the park and its surroundings linked? Linkage is important in creating a functional coherence between the inside and outside.

The approachability of the park is in some respects exceptionally good. Two metro lines run from the city centre far into the suburbs to the north-east of Paris; one of the lines has a station on the north side of the site, the other has one on the south side. For motorists there is a direct connection with the city centre and the suburbs via the major avenues and, by way of the intersection with the Boulevard Périphérique, with the rest of France. Extensive parking facilities beneath the Museum and the proposed Music Centre have, therefore, been provided for in the programme.

Problems arise with regard to the accessibility of the site from the surrounding districts. Because of their width and intensity of use, the roads that provide approachability for motor traffic also constitute barriers for pedestrians and cyclists. Moreover, at the moment, access along local streets or canal banks leading to the site is limited since, on account of its former use, it was a closed-off and isolated complex. There are plans, however, to reorganize roads and towpaths along the canals, which will result in attractive through routes for pedestrians and cyclists, both in the direction of the city centre (Bassin de la Villette/Canal St-Martin) and to the suburb of Pantin (Canal de l'Ourcq). The site of the disused railway to the Parc des Buttes-Chaumont can, after being adapted, be used to provide a better link to the residential areas situated to the south of the site.

The backs of the industrial buildings along the Petit Darse make it difficult to link the site to the residential district that lies behind. Through renovation, demolition and the building of new housing, the residential area here can be extended up to the park, as a result of which a suitable intricate connection with the park can be created.

Ease of access is also related to the pattern of connecting routes within the park. In the park itself the EPPV has demanded, firstly, that the north and south of the park be linked in order to connect up the most important attractions (Museum, Grande Halle and Music Centre) and, secondly, an east-west route in order to link the park better to the city centre and the suburbs of Paris. In addition to these direct routes, small-scale access to the boundaries of the park is necessary.

Special attention has to be paid to the designing of the entrances on the north and south sides of the site. These are, after all, also the

'gateways' to the city (Porte de la Villette and Porte de Pantin) and, consequently, a unique place of entry and passage.

The OMA plan shows markedly different types of access; each has its own function and course, with a resulting characteristic design [ill. 20].

### *Organization*

How are the functions combined and distributed over the site, and how are they connected to each other to form an internal functional coherence? What is the overall arrangement<sup>49</sup> of the site; how are the functions distributed or zoned; how are they interrelated; and what activities do they enable or inspire? This a question of the pattern of distribution of functions; what is where, in what sequence, and in what mixture?

The structure of the organization must be such that it gives the user information about the functioning of the plan's elements and the connections between them. The most important functions—importance being determined on the basis of their capacity and the numbers of visitors expected to be attracted, and on the basis of how much space is required or the volume of the element—have, for the most part, been fixed by the programme. The form and content of the Museum have been determined; the designer is free to interpret and adapt the Grande Halle and the pavilions, however, and, as regards the projected Music Centre, the form and place can be chosen within certain limits.

Furthermore, the programme prescribes that all the important functions be concentrated together in order to guarantee areas sufficient animation, even during quieter periods. The main activities must also be dispersed, however, so as to create a differentiated pattern of busy and quiet. Thus the programme requests the creation of two extreme states: *la ville-jardin (la pôle de l'animation)*, and *le jardin dans la ville (la pôle de la détente)*. Both poles, opposed as in a magnet, exert an attraction, both in their contrast and as poles themselves. An important task for the designer is to determine the relation in the plan between the poles: the dimensions, the degree of interweaving and contrast, and the position of the point of equilibrium (the point of balance).

The functional situation, the chosen design and materials, results in a unity of spatial image and use, which determines the atmosphere of a place. This will be considered in our discussion of 'character' below.

The connections (the circuit linking the various elements in the

park) comprise both the direct connections and the system of circulation for the purposes of walking, discovery and relaxation. The system has, thus, to fulfil two requirements: to enable visitors to go directly to the main facilities of the park, and to enable them to wander. The first is related to the concentration of visitors and animation, the second to dispersal and tranquillity. The movement of the visitor along something, through something, or around something, and going somewhere or leaving somewhere produces a succession of images, places and activities. It is for this reason that the system of paths is so important.

Tschumi's plan has explicitly adapted the organization. After unravelling the programme, a point-grid of small buildings, which serve as anchor points for the park's amenities, has been set up. In an ingenious manner, elaborations have been deferred, while there is, nevertheless, clarity in the combinations and relations created. Path systems of different character have been added to the grid [ill. 21].

### *Anchoring*

The spatial context of the park is examined by considering its position in relation to the city and the spatial coherence between what lies inside and what lies outside. The visibleness and recognizability of prominent points, lines and edges makes orientation possible. One can relate certain spatial situations to others, as a consequence of which the position of the park becomes clear. The design of the edges determines how the park is embedded in the city and the nature of the transition to the park.

La Villette is an area on the boundary of the city. This boundary is clearly marked by the Boulevard Périphérique and the transition between different building types. The site is recognizable as an enclave between more or less homogenous areas of the city (suburb, the 19th *arrondissement*, the hills of Buttes-Chaumont, rail yard, ring-road zone).

The urban renewal plans aim at repairing the unity in the façades, so as to strengthen the street patterns. The Avenue Jean Jaurès and the Rue de Flandres are important streets in the 19th *arrondissement*. If the hitherto isolated site acquires a characteristic aspect towards these streets, this will make the position of the park in the city more easily recognizable.

The programme requests clarification of the junctions on the Boulevard Périphérique (Porte de Pantin and Porte de la Villette) as entran-

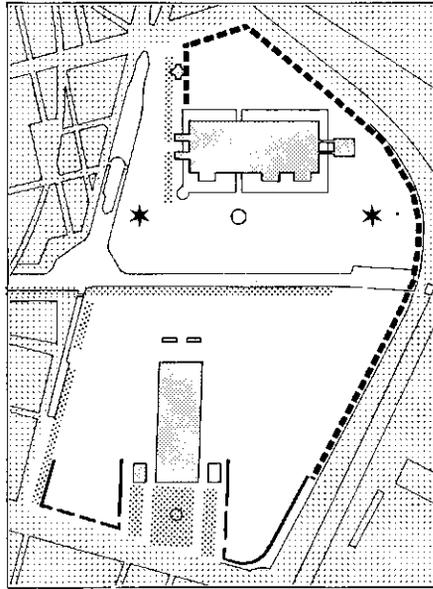
ces to the city: 'les Portes'. They are signals from the park to the outside and are, therefore, a means of orientation, an anchoring of the park in the wider surroundings. They need to acquire a significance as focal points, particularly for the suburbs to the east. In connection with this, the design of the entrances on the north and south sides of the site merits special attention. Besides being 'gateways' to the city, they are also unique places of entry and passage. In addition to fulfilling the immediate function of providing the transition between inside and outside, these areas also constitute the introduction to the park. They are spaces for reception and transition.

Because of its elevated position, the impenetrable barrier, the noise of the traffic and its importance for access to the capital, the Boulevard Périphérique (together with the parallel Boulevard MacDonald/Séruvier) is a dominant element. The soundproofing requested could strengthen the visual presence of this edge of the park. From the ring-road there is a view of the park; this may be lost, however, as a result of the proposed soundproofing. For this reason, the EPPV has retained an 80-metre-high chimney to be used as a landmark.

The canals can provide starting-points for visual and functional relations with the wider surroundings on account of their characteristic form, their dimensions, the freestanding quays and the continuous towpaths.

Unless a park is considerable in size, the orientation is chiefly determined by objects (points and edges) in its surroundings. The Parc de la Villette is large (50 ha.), however, and, at the level of the park, its appearance is decisively determined at the moment by buildings: above all by the Museum and, secondly, by the Grande Halle, with its encircling pavilions. Both are powerful landmarks, around which the internal orientation of the park is developed; they are thus comparable with the position of the country house on an ancient estate.

Because the existing buildings, together with the proposed Music Centre, are close to the edge of the site, they are able to determine the visual impact of the park on the surrounding area and, therefore, the transition from the city to the park. The Museum and/or Grande Halle can be screened off from the street by building or planting, or be directly linked to the avenue by means of a forecourt. The plan by Bakker and Bleeker has employed both solutions: the enormous Museum building has been placed in the background relative to the entrance, while the Grande Halle actually forms part of the entrance section. A rampart-like edge strengthens the city boundary. On top of

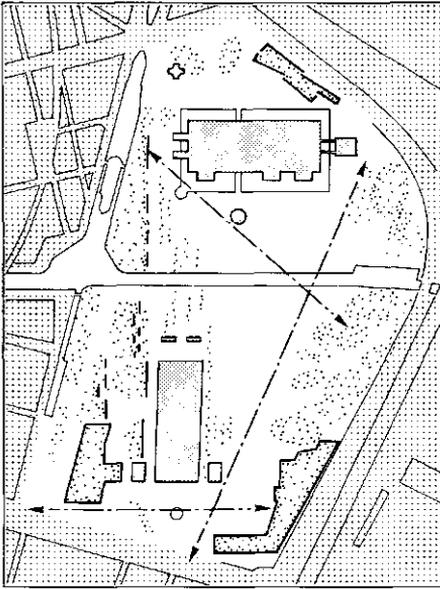


this is a walkway planted with trees, and this gives both a view across the park and of the suburbs. In this way the ending is also the beginning of that which follows [ill. 22].

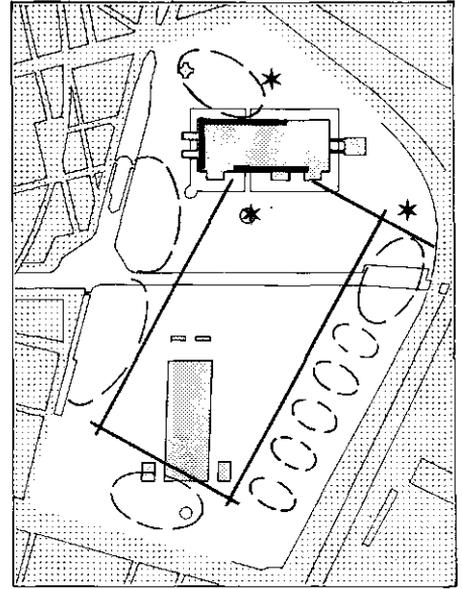
### *Openness*

Spatiality can be considered by asking, in what way the spatial continuity and the visiblensness of the main dimensions and the landmarks contribute to the park's internal spatial coherence. The initial situation is, with the exception of two large buildings, a bare and level site. Every layout will result in greater density and, in view of the extensive nature of the programme, this will have far-reaching effects.

Although the area will become less open, the openness need not disappear. Openness is an important quality for a park: a place in which to look away from oneself, to experience (a continuity of) space and vastness. Sometimes, because of its public nature, one will actually be able to move around in the space, thus allowing one to experience freedom of movement and the largeness of the dimensions directly.<sup>50</sup> This is an important – perhaps even the primary – quality of the urban park. In built-up cities, however, openness will also depend on the suggestion and illusion of continuity and large dimensions through non-absolute limits, diagonal sight lines, and through an intensification of the experience of the principal space by placing objects there in



23 Openness: Andersson



24 Articulation: Chemetoff

such a way that they are clearly independent of the limits of this space.<sup>51</sup>

These aspirations run like a leitmotif through the rich tradition of landscape architecture and can be seen, for example, in the manipulation of form for the purpose of the optical adjustment of perspective by both Le Nostre and his contemporaries:

By means of the theoretical control of perspective, the manipulation of perspective could be universally [in the seventeenth and eighteenth centuries] applied in the arts. The connection between image and reality consequently became uncertain. Anamorphosis [the process by which an image or drawing is distorted in such a way that it becomes recognizable only when viewed in a specified manner or through a special device] was the most advanced technique in the illusionistic spatial art. Together with the invention of the coulisse, the use of overlapping contours and light-dark effects, this was an important device for bringing 'infinity' within the limits of the plan.<sup>52</sup>

The manipulation of the view was also important for the picturesque effects in Repton's landscape style.

By landscape, I mean a view capable of being represented in painting. It consists of two, three, or more, well marked distances, each separated from the others by an unseen space, which the imagination delights to fill up with fancied beauties, that may not perhaps exist in reality.<sup>53</sup>

The spatial continuity and the visibleness of the principal dimensions of the site can thereby contribute to the coherence of the park.

Openness is sometimes difficult to read from the ground-plan since it can be a question of subtle suggestions of spatiality. A play of concealment and partial revealment gives the illusion of more space than there actually is. The devices that can be deployed for this (diagonal views, *coulisses*, the widening and narrowing of space, concave and convex inclines) are not all capable of being reproduced in the analytical drawings though.

Through surveying and the simultaneous observation of prominent points, an understanding can be obtained of the spatial coherence of the park. This is the beginning of a further, refined internal orientation.

Andersson's plan aims at a large open space with the atmosphere of a country meadow, like a green oasis in the dense city [ill. 23].

### *Articulation*

This characteristic can be approached by considering in what way the interaction between volume and space contribute to the internal spatial coherence. The main spatial organization often consists of a type of hierarchy, dominance or centrality.<sup>54</sup> Thus there can be a central space to which all other space is subordinately linked [ill. 24], or a dominant axis that unites various parts of the plan.

Similarly, an entrance can lead via a series of accents to a climax, which gives a strong sense of place: being in the centre, in the heart of the park. This can be both an object and a space.<sup>55</sup>

Articulation often takes the form of dominance (one element or quality dominates the other in a simple hierarchy): the parts of the plan are related to each other by subordinating them to a dominant element. Dominance can be related to both the visual and the functional domination of a space or object, and 'The nature of the dominance can consist of the size (or the domination of one of its dimensions, for example, the height), the place, or of a striking deviation of form, alignment, or relief, or a combination of qualities.'<sup>56</sup>

The dominance of an object is not necessarily good or bad. One's judgement depends on the quality of what dominates and on the coherence between what dominates and the rest. Does it provide the appropriate and desired symbolism? Consider, for example, the difference between the perceptibility of an object through repetition, such as the

white villa in a Romantic park, or the wellnigh constant visiblensness of the house in a classical garden. If what dominates is limited in relation to the immediate surroundings, then it is a question of accent.

Because of its dimensions, the Museum dominates the area. In what way is the Museum visible? Is the Museum screened by means of buildings or plantings, or is the visitor's eye led along it? Or is the building brought into balance with its surroundings through being placed on or in a large space? The latter is the case in Chemetoff's plan, in which, by placing the main alignment of the field along the building, the position of the Museum is somewhat relativized.

Functionally, too, the Museum occupies an important position as a major public attraction. Various connected elements of the programme, such as space for exposition, experimentation and discovery areas, and an astronomical garden are to be accommodated around the building.

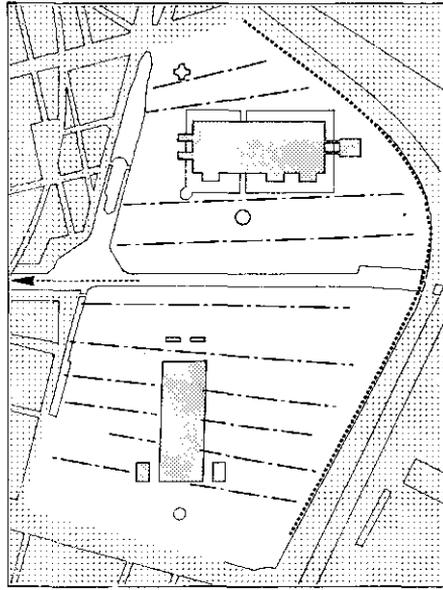
On the southern part of the site the Grand Halle is, indeed, a large and imposing object. On account of the form of its slightly sloping roof, the transparency of the forest of cast-iron columns, the ornamentation of the detailing and the absence of a specific layout, however, it is equal to the surrounding nineteenth-century pavilions, the square with the fountain, and the open plain.

### *Character*

Architecture as the conveyor of meaning is related to the coherence (both mutual and in relation to what exists and to the surroundings) of images, atmospheres and meanings. What is the quality (nature) of the whole, which directs the effect of individual places and determines the appropriate mood of form, dimensions and material? What is the overall image of the park of the twenty-first century, which the programme expressly demands?

The perception of the form also contains the possibility of assigning meaning and of symbolism. The designer can, consciously or unconsciously, include references to and associations with what was previously, or is elsewhere, present, or to and with what is anticipated in the future. The associative meaning of forms and materials fulfils an important function in landscape architecture, for this determines to a considerable extent what people are able to imagine in a park and what a designer seeks to convey with a park.

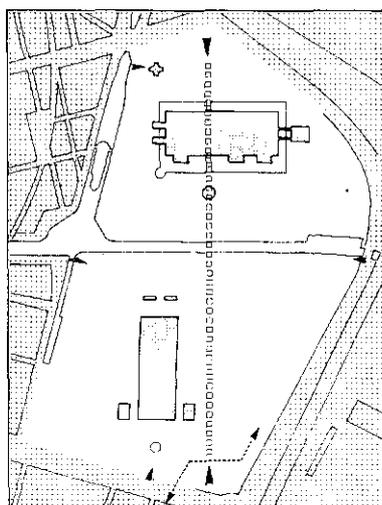
In this stage of the analysis we restrict ourselves to that part of the



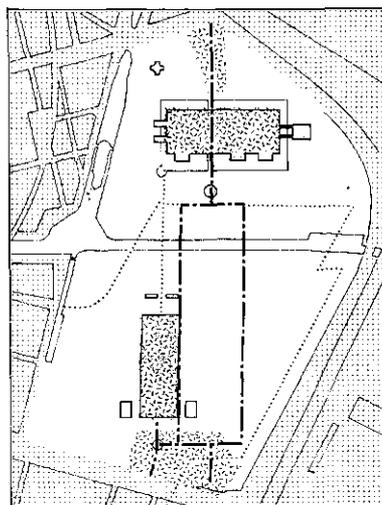
meaning which contributes to the spatial coherence of the park, both in relation to the city and within the park itself. In view of the broadness (and, therefore, superficiality) of the concept, the word 'character' has been chosen here. Part three discusses the meanings in the designs in more detail.

The programme provides for various themes. The objectives indicate that in determining the character of the park, the plan may not employ extremes. The search for a certain complexity of atmospheres and spaces for the purpose of 'pluralism' and 'urbanism' should not result in an intensive and consumptive attraction park. Neither is it the intention that the opposite result—the subordination to nature as the dominant idea. Moreover, in addition to generating international prestige and allure, the park must invite daily use by local residents. In short, the park must have many faces and yet be a unity: a new and powerful all-embracing image.<sup>57</sup>

Ariola's plan is determined by the lines of trees converging on the city centre, or, to be more precise, on the *Rotonde de Ledoux* on the *Bassin de la Villette*. The pattern evokes a certain mysticism, as if it were a primal landscape. Because the infilling is scarcely visible, a sense of melancholy is suggested [ill. 25].



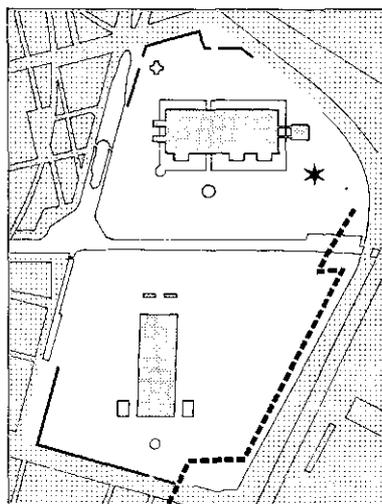
a



b

## 26 Analysis, stage 2: Pilton

- a access
- b organization
- c anchoring



c

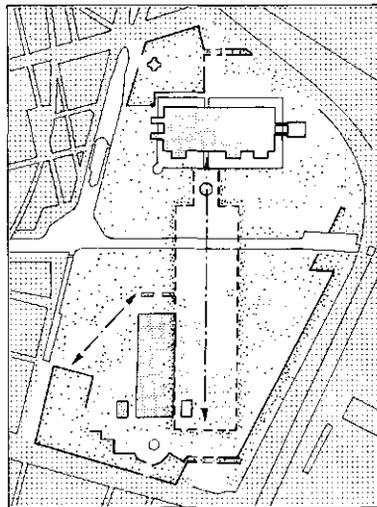
### A description based on the components of coherence

*Pilton* [ill. 26]

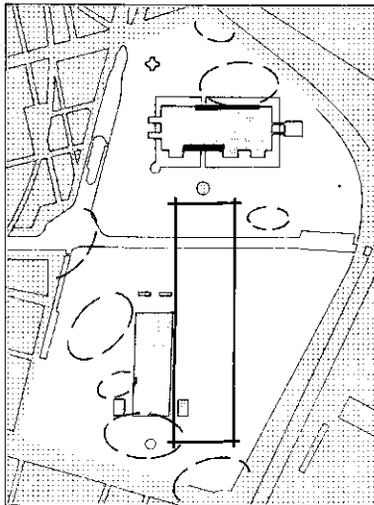
**ACCESS** The entrances at the north and south ends of the park are small forecourts left open between the buildings along the avenues to form a transitional element and link between the city and the park. An access bridge has been built across the Avenue Jean Jaurès, and this is linked to the eastern edge of the park. The connection between the Museum and the Music Centre is formed by two parallel roads with, in

26 *continued*

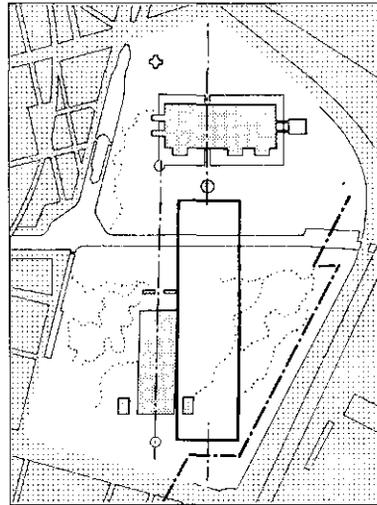
- d* openness
- e* articulation
- f* character



*d*



*e*

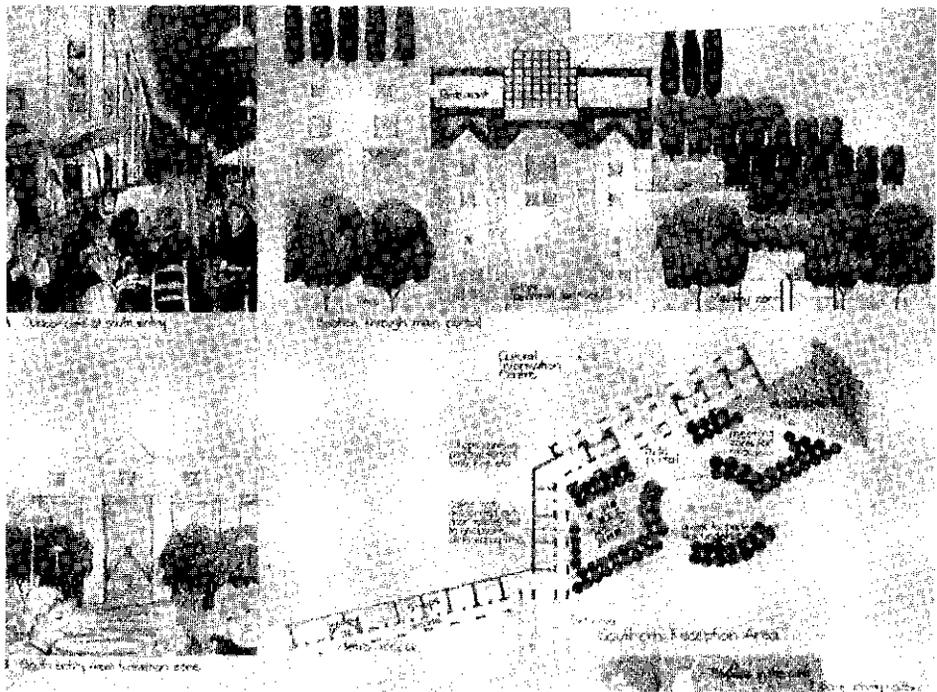


*f*

between, a stretch of water 150 metres wide and up to 8 metres deep with small islands of gardens and pavilions.

Because the central strip is situated so deep, it can be conducted under the canal (aqueduct). The difference in height creates an orderly axis running through the centre of the park; as a result of the small elements lying on this, the axis is decorative and, if one actually descends, diverse images and uses are apparent [ill. 27].

Pilton has partially obviated the bisecting effect of the axis through the space by deepening the axis. An excessive monumentality of the Museum axis is counteracted by a varied infilling of the central strip.



27 Pilton, sketches of the entrance to the park

**ORGANIZATION** The remaining major functions are grouped, both on the north and the south sides, between the main buildings and the avenues. As a result, the concentration of functions and the confrontation between them are directly linked to the city. The central part of the park remains free of large attractions. The smaller functions are situated here, chiefly grouped together along the deepened main axis. The direct links between the north and south of the site run along the boundaries of the park. Along the eastern boundary there is a supplementary route along a gallery-shaped wall. The distribution of visitors through the park is uniformly organized by means of fragments of a path grid and a few free meandering paths. Because the intricate network of paths partly intersects the main axis, the centre of gravity in the park (and the direct connection) is closely interwoven with the subordinate routes within the park. In this way the extremities of the park, where the buildings and the accompanying cultural facilities are concentrated, are the busiest, whereas in the central part the emphasis is on green gardens and more traditional park elements.

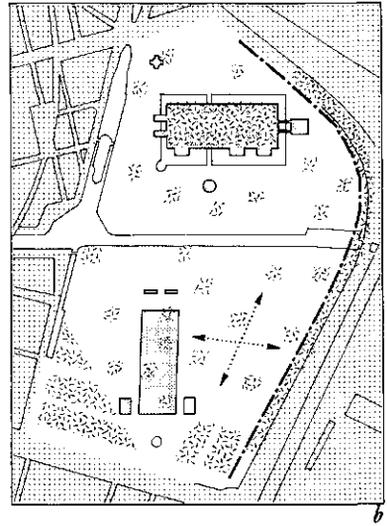
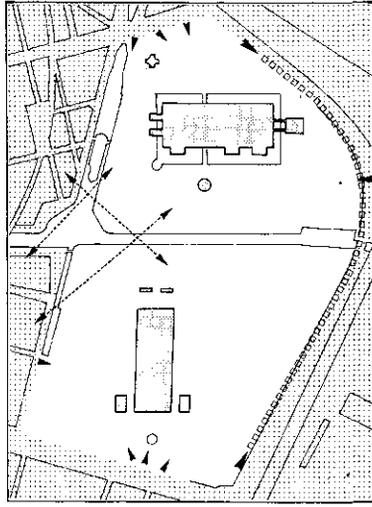
**ANCHORING** Along the Boulevard Sérurier is a high embankment/wall planted with trees; this marks the city boundary. From on top of this wall a panoramic view is obtained over the park, the city and the suburbs on the other side of the Boulevard Périphérique. The 'wall' is a line that both separates and connects. Various buildings have been placed along the avenues, forming a continuous façade; this façade is interrupted only by small squares, which also act as gates to the park. The bridging of the Avenue Jean Jaurès creates a gateway to the city.

**OPENNESS** A vista is possible across the deepened central axis, but accessibility is restricted by the water. Movement is chiefly along the two paths that follow the boundaries of the axis. There are no large-scale spatial units or views. The planting, designed in a variety of ways, fragments the park into equal parts, which do not give the impression that they are articulations of a larger spatial unit. Orientation within the park is determined by the deepened central part, which is directed towards the Museum.

**ARTICULATION** The deepened central part, situated on a continuation of the passage through the Museum, supports the building's dominant position. Moreover, the north and south entrances are located at the far end of the axis. A degree of relativization has been introduced in the elaboration of the plan by means, for example, of diverse islands in the water.

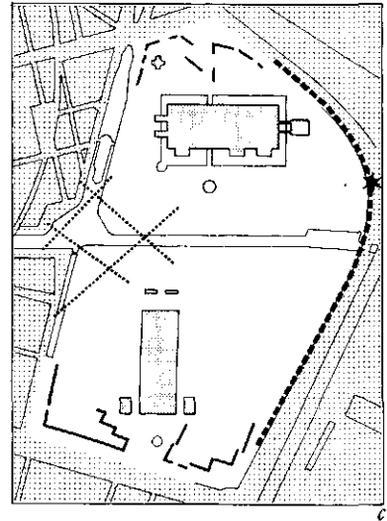
The Museum is linked to the city by means of the buildings along the Rue de Flandres. A narrow forecourt allows only a limited part of the façade to be viewed. Pilton approaches the Museum ambivalently, or at least responds to the various qualities of the building's façades. From the side of the avenue the Museum's gloomy north façade is hidden away behind buildings that come right up to the Museum. On the other side the Museum axis is resumed.

**CHARACTER** The park is linked to the avenues by elements more urban than park-like. Furthermore, the other facilities of the park are largely underground and only come to the surface as small pavilions. The way in which the embankment/wall bounds the eastern edge of the city refers to the former ramparts. The decorative layout of the deepened central strip calls to mind Byzantine or Eastern ornamentation and is a sign of urban culture surrounded by the meandering forms of a more stereotyped park. The grid of gardens and orchards near the



28 Analysis, stage 2: Pesce

- a access
- b organization
- c anchoring

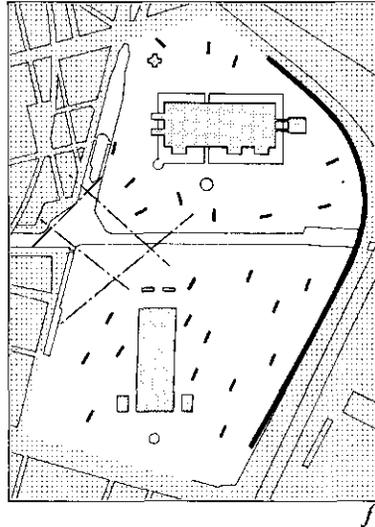
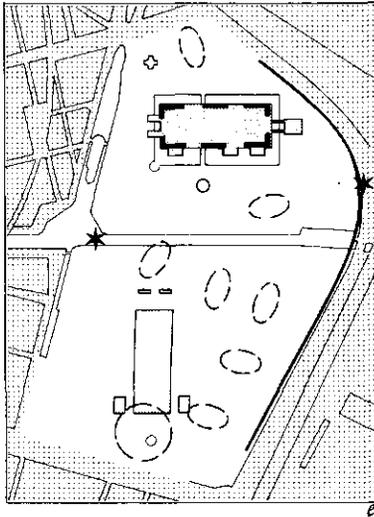
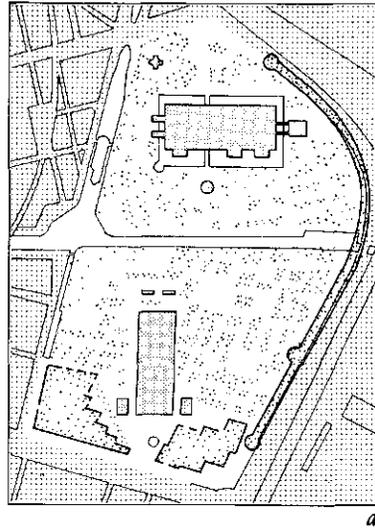


Rond-point des canaux suggests an earlier type of land use through which the canals have since been dug. The Museum too seems to impinge on this ostensibly older pattern. Around the lucid central part of the park a skin of disorientation and complexity has been laid.

*Pesce* [ill. 28]

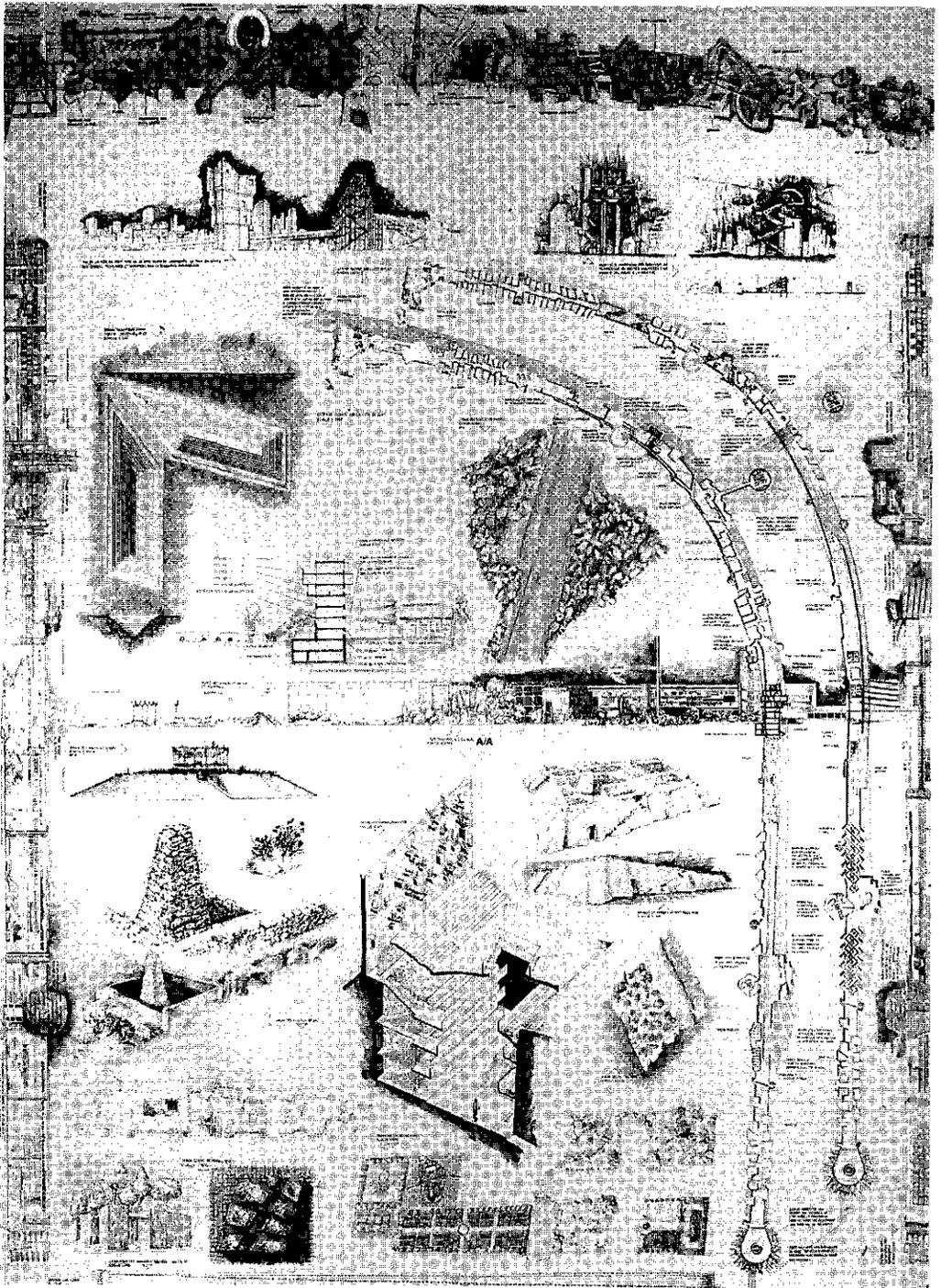
**ACCESS** The plan seems to consist of 152 independent islands set down with apparent negligence. In between, the visitors are dispersed. The most direct connection between the north and the south of the site

- d* openness
- e* articulation
- f* character



runs through an elongated structure along the eastern boundary. The entrances are not pronounced. The complex of bridges over the Rond-point des canaux is a heavily accentuated entrance section from the city. The east-west route along the southern bank of the canal is interrupted by a pond.

**ORGANIZATION** With the exception of the Museum and the Music Centre (whose functions had already been determined in the programme) and the wall-like building, the functions are completely uniform and finely spaced. In this way a grouping around a climax is



29 Pesca, sketches of fragments

avoided. There is a constant and rapid alternation of functions [ill. 29]. As a result of this subtle blend, the contrast between the various activities will be limited; black and white can no longer sufficiently be separated from one another, so that the total effect is grey.

There is no discernible main line in the routing, because the site between the fragment-like objects is everywhere accessible.

**ANCHORING** With the exception of the 30-metre-high wall-shaped building that completes the eastern boundary of the site, the site and its boundaries are completely penetrable. This emphasizing of the barrier and the boundary is also—because of the form, the function, and the view it gives—a linking element. The 1070-metre-long building, partially situated above the Boulevard MacDonald/Sérurier, encloses the site like a wall with a gesture of embrace. At the centre of this curve lies the Rond-point des canaux, spanned by a system of bridges. These elements provide orientation in an archipelago of fragments.

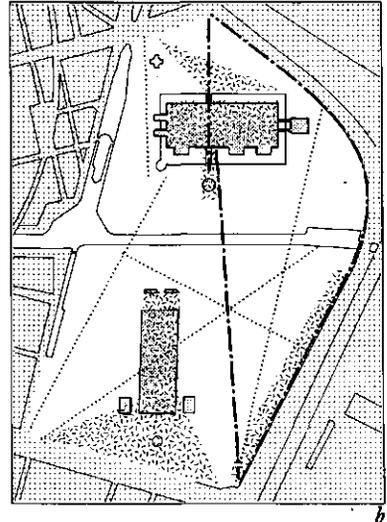
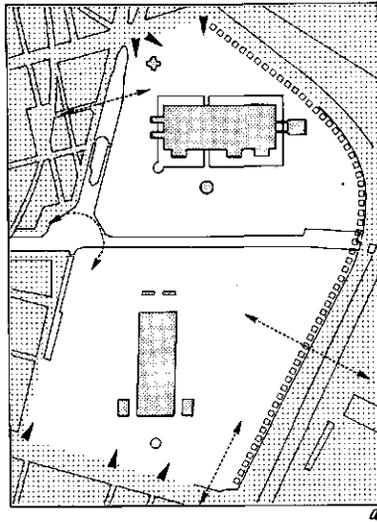
**OPENNESS** The open site is emphatically completely filled with numerous small objects, as a result of which only limited spaces remain. The equal orientation in the building lines of the fragments creates short views.

**ARTICULATION** The only large, closed building mass, the Museum, stands in a multiplicity of fragmented objects. Even the dimensions of the Grande Halle and the Music Centre are reduced by a strong articulation. The Museum seems, thus, to have become the undisputed dominant element. There is so little open space between the fragments, however, that the view of the Museum is repeatedly partially obstructed by other objects. In addition, to the east the wall-shaped building is constantly present in the background.

The complex of bridges at the Rond-point des canaux is a new dominant element on the site, on account of its magnitude, height and remarkable form. The alignment of the bridges is partly related to the vertices of the museum building.

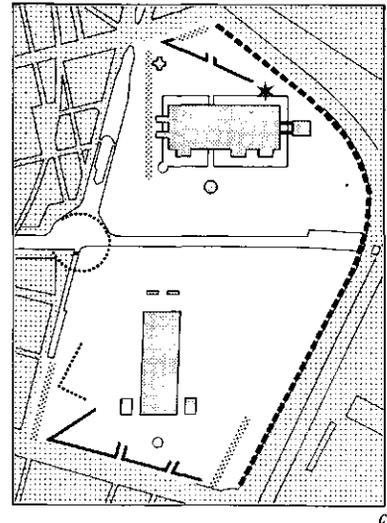
**CHARACTER** The fragments look rather like relics. In the plan the Museum rises from this, intact and unimpaired, like a phoenix. The Museum (or technology in general) is regarded as something ordering or elevated.

Along the eastern edge of the park an elongated building stands like a city wall—even tower elements have been incorporated.



### 30 Analysis, stage 2: Corajoud

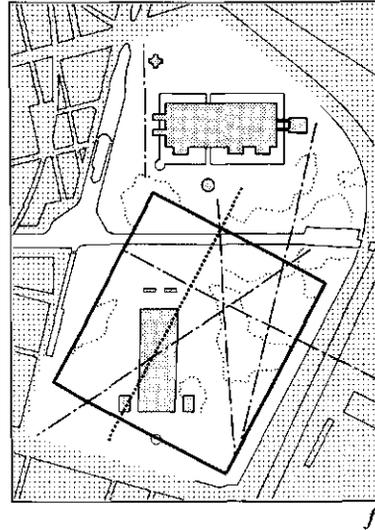
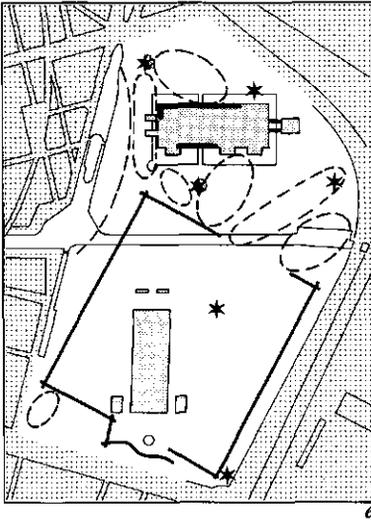
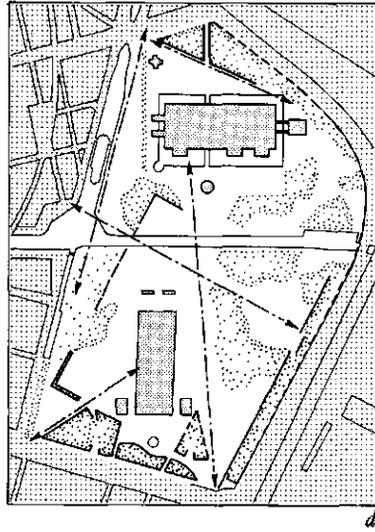
- a access
- b organization
- c anchoring



By means of orienting fragments, a certain relation with the surrounding city is established. The entirety of fragmented pieces deviates decisively from familiar park or urban forms. Movement between the fragments creates the impression of a kaleidoscope. The innovative programme is expressed as a new type of urban district. As a result of the fragmentation, garden and urban elements are completely blended. The atmospheres are interwoven in such a way that the 'animation' dominates the *détente* (indeed, the *détente* requires a measure of separation from the animation).

30 *continued*

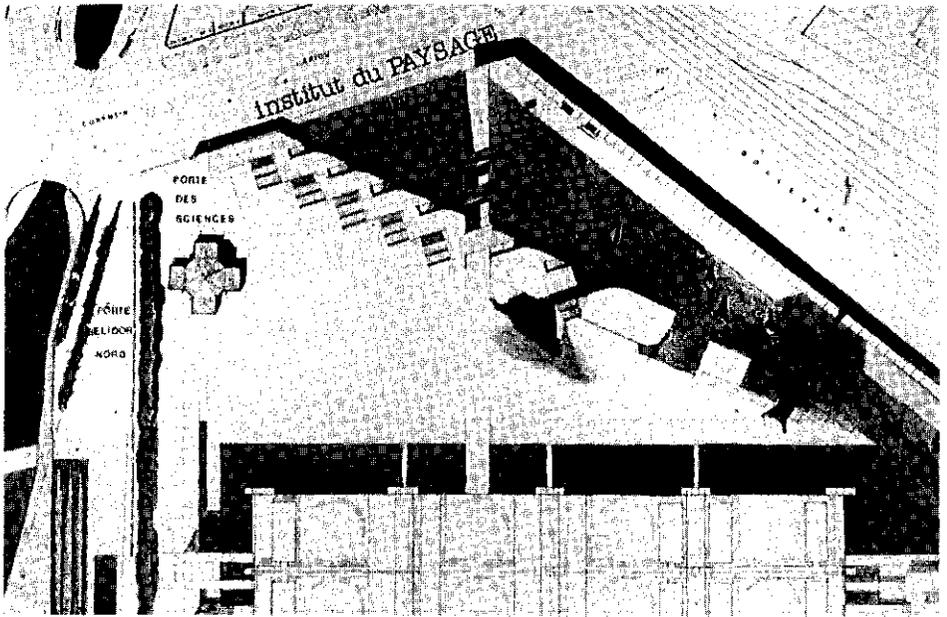
- d* openness
- e* articulation
- f* character



*Corajoud* [ill. 30]

**ACCESS** The north side of the park is screened off from the busy street and the railway by buildings and a high incline. From the narrow opening at the *Rotonde des Vétérinaires*, a wide view is obtained in which the Museum lies slightly to one side, so that a broad prospect of the park behind remains unobstructed.

There is no direct unbroken north-south route. In various directions long lines are repeatedly fragmentarily concretized in paths, roads or footbridges. There is a dispersed routing, supported by a through gallery along the entire eastern edge.



31 Corajoud, north entrance

An extra subway under the boulevards links up to the sports complex situated beyond the ring-road. On the western side, too, access has been increased through the provision of a number of entrances.

**ORGANIZATION** The park's functions are housed in or near buildings concentrated at the north and south ends of the park. They are situated in such a way that the green and open section of the park touches the avenues. The remaining facilities, part of the *pôle de la détente*, are evenly dispersed, with large distances between them.

**ANCHORING** The eastern edge is completely closed off with a gallery, which, as a result of the open character of the site, is constantly visible in the background. Buildings partially screen entrance squares from the avenues.

**OPENNESS** There is a relatively open tilted field about 500 x 500 metres in size, partially jutting up out of the existing plain, partly subsiding into it. The tilt makes the openness more exceptional. The whimsical mounds are subsidiary, and the plantings that have been added are sparse. The paths and the differences in height have been introduced in such a way that constantly varying views are created.

**ARTICULATION** A relatively open field has been placed in the centre of the plan in order to reduce the dominance of the Museum. To give the surface in front of it sufficient solidity, a number of artifices have been employed: the field has a sharp geometrical form (it is a square, 500 x 500 m. in size), the surface has been tilted in relation to the original surface level and has been placed in a direction away from the Museum, namely, parallel to the park's eastern boundary. On the north side the predominant position of the Museum has been counteracted by positioning the entrance as far as possible to one side of the building; as a result of which a broad view of the park is created along the canal. The Ariane rocket has been expressly placed on the other side of the Museum as an (ironic) comment.

On account of its function (Institut du Paysage) and design (large grassy incline as a façade), the building along the Rue de Flandres acts as a harbinger of the park [ill. 31].

The detrimental effect of the boulevards, the noise of the traffic, is screened off by a gallery, which, at the same time, accentuates the form of the eastern boundary as an embrace.

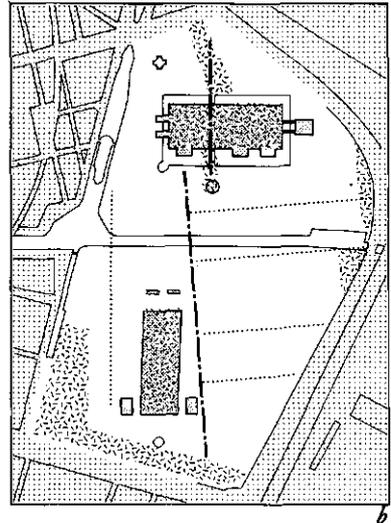
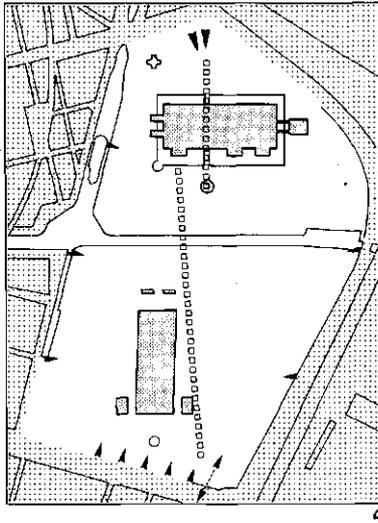
**CHARACTER** The tilted field and the whimsical mounds refer to landscapes far beyond the city, where nature can still be experienced as an unrestrained force. The openness of the park is that of a vast agricultural area.

By their length, the sharp lines refer to the axes in a classical garden; but the arrangement deviates considerably from this. The rotating of various parts of the site in relation to each other also contains a suggestion of stratification; a stratification that, in turn, refers to (old) cultural patterns.

*Drewniak* [ill. 32]

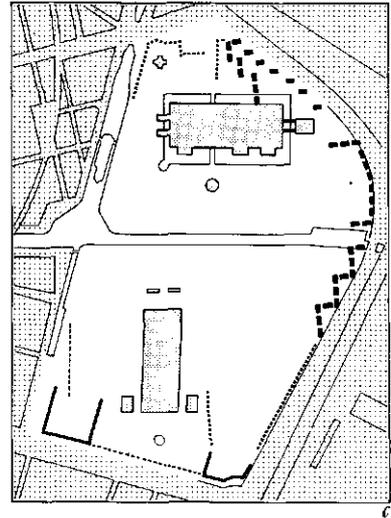
**ACCESS** The Museum's north façade is, as it were, the front of the park on account of the fact that a large open square is situated in front of it. A wedge-shaped strip, wide enough to be able to absorb the Grande Halle, directly links the north of the park to the south. In this way the north-south route is continued spatially along the Museum, with the passage through the building providing a parallel main route to the north.

**ORGANIZATION** Several buildings have been added to the fore-



32 Analysis, stage 2: Drewniak

- a access
- b organization
- c anchoring

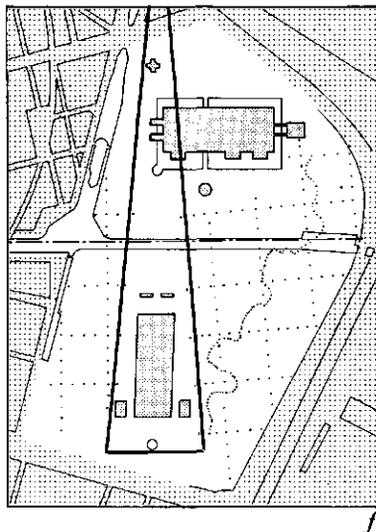
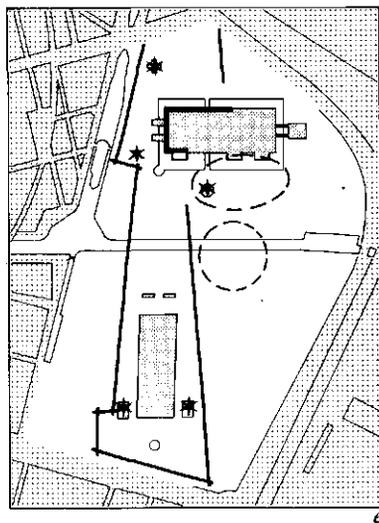
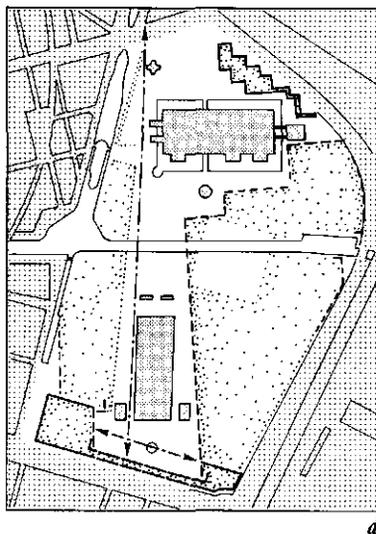


courts of the Museum and the Grande Halle. The attractions, in the form of gardens, pavilions and arcades, have been positioned according to a grid pattern, which is interrupted in the middle by an open wedge. Visitors are evenly distributed by means of a grid of paths; the transition from the main route to the finer network of paths is sudden. Wedge and grid are directly adjoined.

The square-like strip is, in terms of its dimensions, in harmony with the large buildings. In view of the arrangement of its functions and the pattern of circulation within it, it is doubtful, however, whether it also has the corresponding animation.

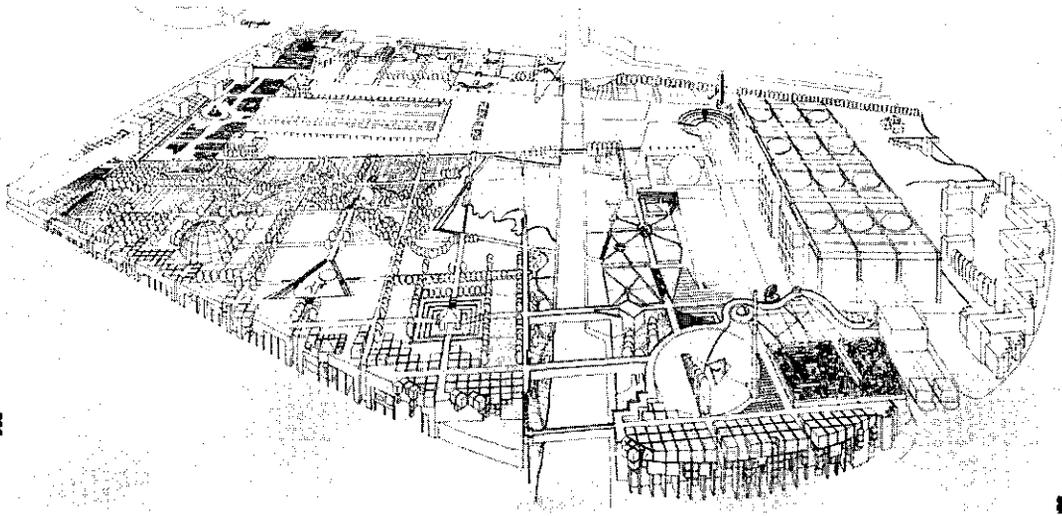
32 *continued*

- d* openness
- e* articulation
- f* character



The distribution of visitors is effected by means of an orthogonal network, partially situated above surface level on account of the fact that the paths rise to the east. Here, they merge into buildings that form the park's boundary. In this way the thematic gardens can be demarcated and the canals bridged.

**ANCHORING** The museum façade is linked through the receding buildings to the Rue de Flandres. The actual entrance is narrow and lies directly in the continuation of the passage through the Museum. This elaboration guides the visitor directly towards the Museum en-



33 Drewniak, bird's-eye view

trance as the entry to the park behind. The square consequently becomes a rigidly fixed link between the avenue and the park.

Between the two parts of the Music Centre a building with many gateways provides access to a square in front of the Grande Halle and the start of the gallery/pergola to the north.

The network of paths rising to the east emphasizes, on the one hand, the city boundary and, on the other, the wedge-shaped central open space [ill. 33].

**OPENNESS** The openness is concentrated in a wedge-shaped space: a large attenuated square oriented along a north-south axis. Along the west side there is a view across the entire length of the site.

**ARTICULATION** The diameter of the wedge-shaped strip that broadens out to the south runs precisely along the west façade of the Museum. The dimensions of this strip are in keeping with both the Museum and the Grande Halle, which is located in this strip. There is no transition between the strip and the intricate grid of paths and gardens that borders it. Because of its dimensions and alignment, a square cut-away appears on the ground-plan as a third element between the Museum and the Grande Halle; the spatial effect lacks the power to actually fulfil this role however.

The Museum is surrounded by a large open space that appears

consistent with the dimensions of the building. The area is elevated in relation to the Rue de Flandres and is slightly autonomous because of the retaining wall and the pond. Partly as a result of the restricted entrance in the Museum axis, the visitor is immediately and insistently confronted with the massive Museum building. All the entrances to the park proceed literally via several steps.

**CHARACTER** The grid has been employed for the gardens as an efficient system for the distribution of the visitors and for increasing the flexibility of the infilling. In between lies an open strip, connecting the north and the south of the park but, as a symbol of freedom, devoid of any specific layout. It links the entrances of the park ('les Portes'). The entrances are treeless, as are the boundaries, as a result of which the confrontation with nature is deferred.

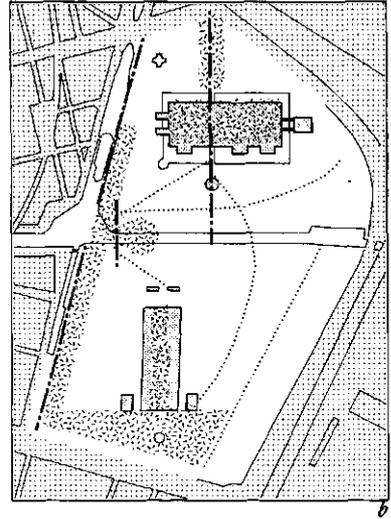
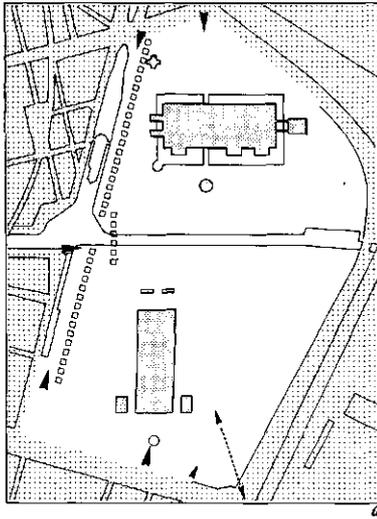
The meander of trees, stream and path appears to be an impairment in the perfection of the classical grid and a reference to the rural, and—in conjunction with the pavilions and the design of water and plantings—to the landscape style.

The Museum and Grande Halle, held together by the wedge-shaped strip, seem to form an element that overlaps the site, like a new part of the city with, on the west side, an old area of the outskirts as a garden and, on the east side, a country area with caricatural references to the classical and the Romantic garden.

*Zagari* [ill. 34]

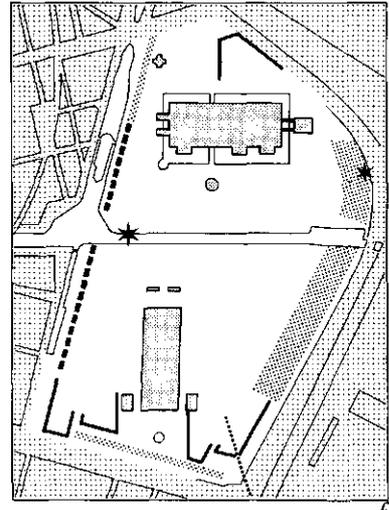
**ACCESS** Directly opposite the doorways to the Museum and the Grande Halle are entrances. With the aid of a metal framework construction, the Porte de Pantin has been bridged from the park to the suburbs. An elongated complex of pavilions, gardens, galleries and greenhouses along the Canal St-Denis and the Petit Darse forms the most important link between the north and south. The continuation of this line to the avenues creates direct entrances.

**ORGANIZATION** In combination with the Canal de l'Ourcq and the Petite Darse, the functions have been concentrated in a solid, largely built strip. At the intersection of the canals there is a knot of routes. Paths have been designed on hierarchically different levels, depending on their position in the organization. Several less important functions are situated where the open field and the hills meet.



34 Analysis, stage 2: Zagari

- a access
- b organization
- c anchoring

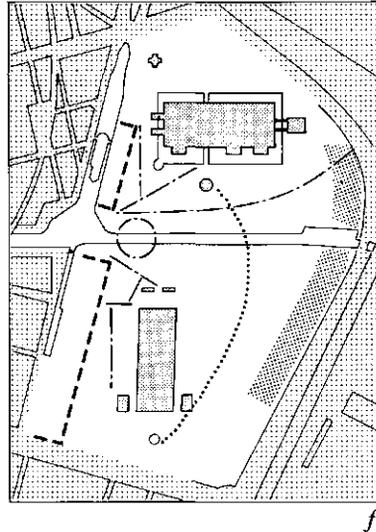
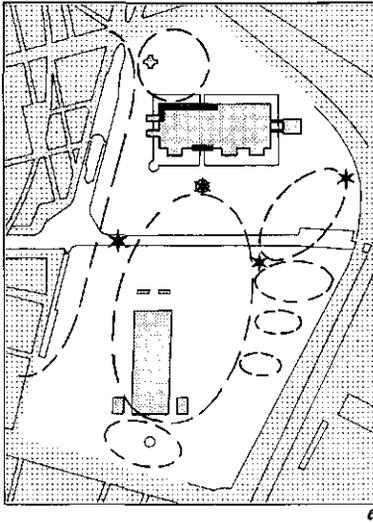
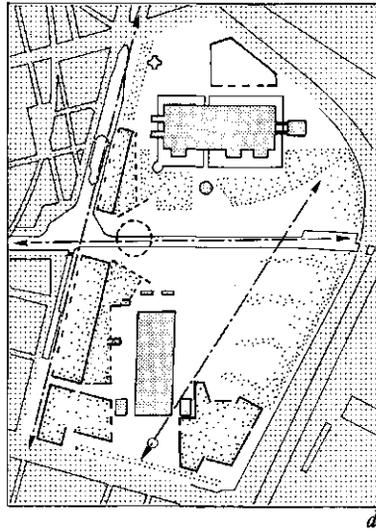


The passage through the Museum has been extended to just over the canal and culminates in a large open field. A ribbon of ponds and hills to the east bounds this valley-like space between the Museum and the Avenue Jean Jaurès.

**ANCHORING** The singular structure for the bridging of the Porte de Pantin appears to be symbolic rather than practical. Within the park the knot near the Rond-point des canaux has been voluminously elaborated. From this high canal bridging there are wide views over the canals to the city centre and the suburbs. On the eastern edge the park is bounded by a chain of hills.

34 *continued*

- d* openness
- e* articulation
- f* character



**OPENNESS** The elevations constructed to the east and west of the centre of the site create a valley-like open area in the heart of the park. This place has been kept free of more detailed arrangement. For special occasions trees in mobile containers are placed in appropriate patterns.

**ARTICULATION** A strip of facilities along the water on the park's western boundary has been embellished with greenhouses, pavilions and bridge constructions to such an extent that this entity begins to dominate. The knot in the middle of the element at the intersection



35 Zagari, bird's-eye view

with the Canal de l'Ourcq reinforces this impression. The 'city' has been concentrated in this element so that the rest of the site remains open for a large field of grass, bordered by a chain of hills articulated by plantings [ill. 35].

**CHARACTER** A chain of ponds denotes the connection between the Museum and the Music Centre. The chain can also be seen as a defence against the woods that threaten to burgeon from the hill side into the valley (the landscape encroaches on the city, but also shows the relativity of the tranquillity in the valley). To this end, the chain is strung between the central points of the park.

The large field of grass with the chain of hills refers to a spacious and peaceful landscape. In sharp contrast, the boundary on the city-centre side of the open field has been designed with greenhouses and buildings constructed to form an artificial hill. This arrangement along the canal is an intensified rendering of the city within the park. The buildings intercept the alignments of the city. The entrance squares both have a green side as an introduction to the park. The references are relatively more direct and less excessive than in many other plans.

*Hara* [ill. 36]

**ACCESS** A plaza, in which the Grande Halle has been inserted, connects the north and south parts of the park and forms the core of the park. The square is situated next to the axis of the passage through the Museum, whereby a bayonet-type connection between them is cre-

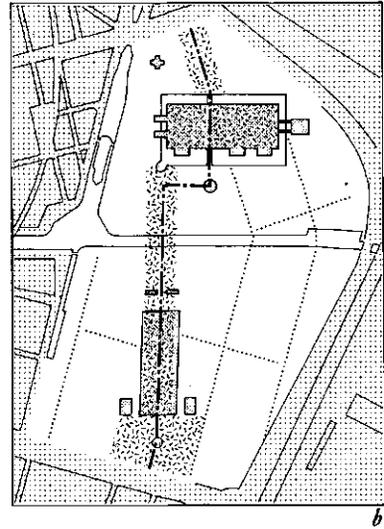
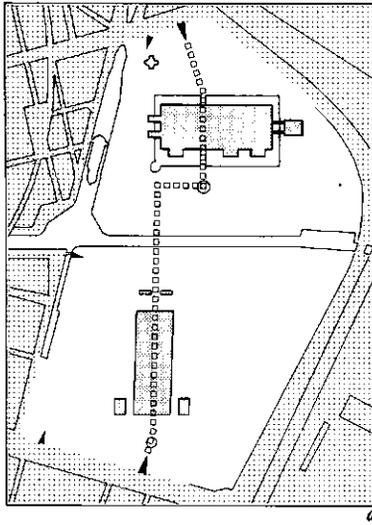
ated. In front of this a monument has been erected near the Geode. The entrances to the park are situated in the continuation of the main route.

**ORGANIZATION** Terraced strips, at right angles to the avenues, surround the square. These strips provide a series of parallel north-south routes. The entrances to the strips are along the avenues and the canal. Although the strips suggest a uniform and linear organization of the functions, the areas next to the Grande Halle and the eastern boundary are the most intensively arranged. Here, at regular intervals and subordinate to the main route, are side paths between the terraces. Rigidly planted square forecourts form the entrances to the Museum and the Grande Halle and the introductions to the centrally, north-south connecting plaza.

**ANCHORING** The tall and attenuated 'glass slabs' situated at right angles to the alignment of the avenues are, both from the point of view of the surrounding area and that of the park, new landmarks. The closer one is to the periphery of the park, the higher the terraces and the plantings and the longer the glass slabs. The fact that the strips are precisely at right angles to the avenues emphasizes the importance of the connection between the park and these main streets. The small squares situated along the avenues and that provide entry to the Museum and the Grande Halle form a link between the city and the park.

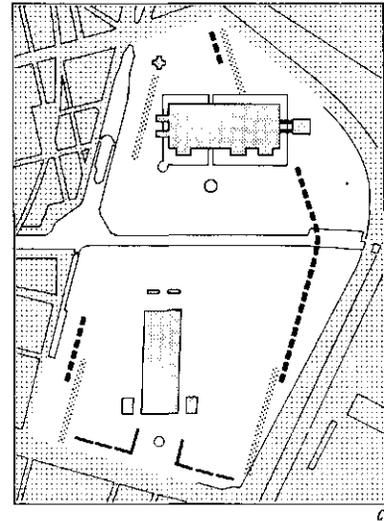
**OPENNESS** The centre of the plan is the most open and empty. The site rises in terraces towards the boundaries, and the items of the programme have been accommodated in increasingly high planting strips and increasingly long buildings [ill. 37]. A strip on the western boundary along the canal continues visually in a single line.

**ARTICULATION** A succession of squares leads from the Rue de Flandres to the Avenue Jean Jaurès via the two most important buildings. The strips do, indeed, form a large gesture, but their plantings play a subordinate 'garden-like' role in relation to the buildings (glass slabs). The animation is thus not restricted to the square in the centre of the park, but extends along the elongated buildings erected in strips. The strips evoke an effect in the plan comparable to the dominant in music: by means of a preponderant motif, individual elements are fused into a whole.



### 36 Analysis, stage 2: Hara

- a access
- b organization
- c anchoring

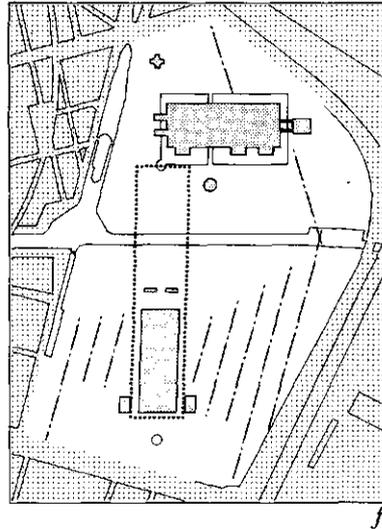
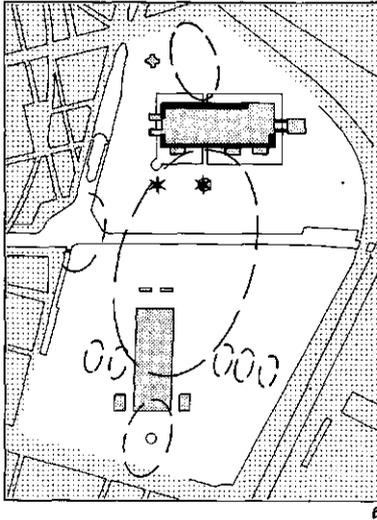
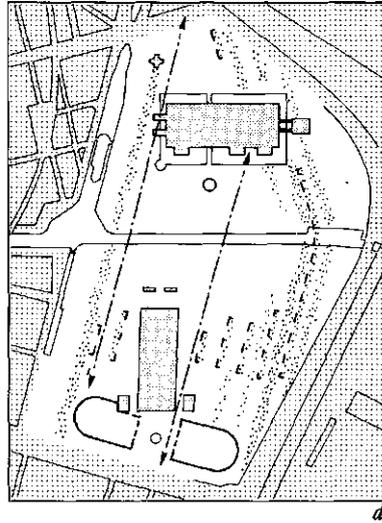


**CHARACTER** The contrast between the rigidly terraced strips and the whimsical plantings is limited; it is nature within cultivated limits. The plantings are both the materials of the park and an attraction in themselves.

The glass of the slab-shaped buildings seems to want to suppress the presence of these buildings by giving the transparency a simultaneous lustre and radiance: a clean technique for the benefit of plant growth. The square, place of encounter and interchange, is the centre, the heart, of the park. The idea of stratification is present in only a very limited way.

36 *continued*

- d* openness
- e* articulation
- f* character



### Conclusion

The above analysis allows us to draw several conclusions concerning the qualities of the programme and the site.

#### *Access*

The position of the north-south link and the way in which this route is elaborated have far-reaching consequences for the plan. The most obvious solution is to continue the passage through the Museum to the

south by way of the Geode. The large space to the east of the Grande Halle is transected as a result. The axis opens out in the corner near the Porte de Pantin, where there is little space for the development of a worthy conclusion. The axis is therefore divided into two and the southern part is shifted to the west, in the line of the Grande Halle. Another option is to continue the north-south route spatially and functionally along the Museum, possibly with the passage through the building as a parallel main route to the north. The route can also be shifted completely to the west and the alignment of the Canal St-Denis emphasized. The Museum then remains wholly to one side.

Other plans take a dispersed routing as their departure point, with, as a support, a gallery or building along the entire eastern edge. Direct connections and dispersal are then simultaneous. These completely uniform types of access deviate from the other plans, in which the circuit proceeds directly from the entrances to the climaxes, supplemented by a secondary system for access to the remaining elements.

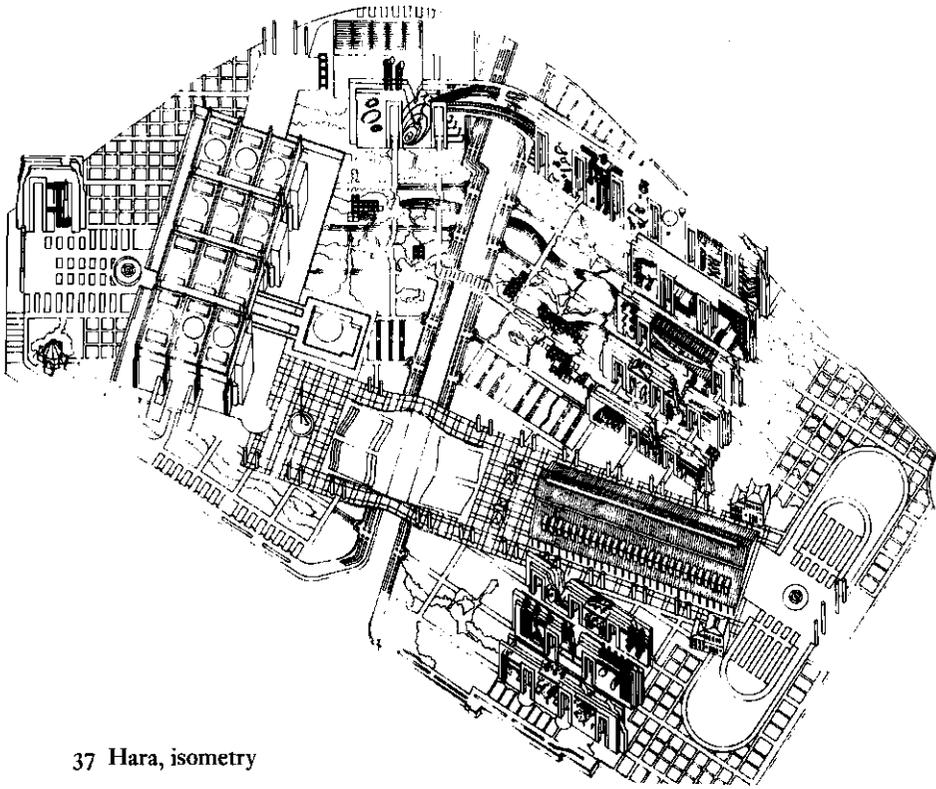
The requested east-west connection along the canal can either be completely incorporated into the park, or remain more or less autonomous and to one side.

### *Organization*

Although several important functions (judged important on account of their capacity, potential attraction, and size) have been predetermined, with due ingenuity a wide variety of results can still be obtained. Whatever is linked to the avenues, the existing buildings or the canals is determinant.

The circuit along the various elements of the park frequently consists of fragments of uniformly distributed grid networks. These are sometimes held together by a main axis as a direct connection.

Because of the relatively small size of the site (in relation to the facilities requested), it is difficult to achieve an equilibrium between the two poles in the park, between busy animation and relaxed tranquillity. The accumulation or combination of functions is typical of every form of composition. This was, moreover, unavoidable here because of the scale of the programme. The confrontation or concurrence of functions can create extra value, however, to the extent that the whole is more than the sum of its parts. Few plans contain enough room to provide the tranquillity of an unlimited park space.



37 Hara, isometry

### *Anchoring*

The park can be linked to the city in a variety of ways: isolated from the surrounding area by means of the well-defined boundary of a solid edge with only a few large entrances, or by means of a diffuse boundary formed by a subtle intertwining with the neighbourhood. In this way transitions can be created that vary from abrupt to gradual. The city can be excluded from the park and its influence only sparingly admitted, or allowed to penetrate far into the park.

A general desire to clarify the city boundary with hills, walls, buildings and galleries is discernible in the plans. This is possibly prompted by the necessity to screen off the noise of the traffic. This also indicates the position of the centre of the capital though.

The interface with the avenues—and thus the initial appearance of the park—is variously elaborated with, at one extreme, a closed façade and, at the other, the continuation as far up to the street as possible of plantings and other characteristic park elements. The Museum, whose presence in the park is preponderant, appears from the outside as a landmark.

### *Openness*

Openness on a limited site with an overfull programme is a question of suggestion and illusion: suggesting more space than actually exists. Light and dark, sky and horizon, are important elements in this. These are difficult to read from the ground-plans however.

A striking aspect of the situation of La Villette is the possibility of utilizing the difference in height afforded by the elevated position of the Boulevard MacDonald/Sérurier (4 to 6 m.) and the bridging of the canal (headroom 4.5 m.) for the purpose of openness.

Spatial continuity can be successfully suggested or represented by means of water: its flowing and streaming.<sup>58</sup> Water is permanently open, and the reflection of the sky increases optical space. The water in La Villette does not have these characteristics though. The canal cuts transversely across the plan rather than longitudinally. This does, however, produce an exciting transverse view, comparable with the canal in Vaux-le-Vicomte. The water around the Museum takes the form of a deep moat, which makes the building seem larger on account of the reflection.

### *Articulation*

First and foremost, the designer has to take up a position with regard to the existing spatially dominant elements: either accept the preponderance and elaborate on it, or attempt to neutralize it by demolishing, disregarding, disguising or by introducing a new dominant element. One can, for example, respond to the various qualities of the façades of the voluminous Museum. By keeping as much space as possible open around the Museum, large dimensions are created. A new dominant element can be added, both in the form of a built volume and as an open surface.

The second problem concerns the treatment of the two poles. This can lead to the separation of the two atmospheres, as a consequence of which the—mainly cultural—facilities on the avenues are linked and, subsequently, the intermediate part remains as a more or less traditional park. The animation can also be accommodated in a more or less concentrated north-south strip however. In addition, there are various types of interweaving and blending possible; they are sometimes so intensive that the atmosphere of the city predominates.

## *Character*

There are various views concerning the role of the park in the city. They vary from regarding the park as a green oasis (pastoral rural or nature refuge), articulating the stone mass of the city, to an exuberant metropolitan 'pleasure garden' (recreation machine or cultural park). Most solutions seek an equilibrium, such as is present in many urban parks, between interdependent complementary atmospheres.

The EPPV clearly points the way to associative representation in the design by including in the programme certain requirements concerning the park's symbolic and expressive qualities. Expression needs to be given to the pluralism of metropolitan society and the enticing perspectives offered by twenty-first century technology.<sup>59</sup> This aspect of meaning is dealt with in a wider context in Chapter 8.

Because the programme explicitly rejects existing park forms, the entire tradition of park design appears to be side-tracked. Designers cannot simply fall back on the familiar. Images and associations cannot be directly employed in an existing park form. Neither can a designer simply break free from traditions however (for a discussion of the use of historical styles see Chapter 6).

The combination of the difference in height between the site and the surrounding roads, the desire to exclude the noise of the traffic, the necessity to bridge the canal, and the position of the historical city boundary have been elaborated in many designs as a city wall. At the same time, this produces a gesture of embrace, a symbolic quality for the purpose of the requested unity (*unité*).

Many of the designs suggest stratification. This is intended as a reference to the site's honourable and ancient past. In some plans the park can also be seen as an exposed fragment of the city's foundations. Viewed more superficially, the various patterns could be a reference to the multiformity of (French) culture.

The superimposed location of the Museum in relation to the multiplicity of patterns and their orientation can be seen as a reference to the unique position of technology in the history of the site.

## *Interplay*

A comparison between the analytical drawings from the first and second stages of our analysis provides some insight into the result of manipulating lines for the layout of the park; the meaning, the effect

and the efficacy of the composition. This interplay between the components of coherence is chiefly executed by means of alignments. Most designers seek a coherence in which there is space for tension and dynamism in the composition. This is achieved by using components with divergent alignments or orientations [ill. 38], as in Chemetoff's plan, in which the direction of the eastern boundary of the park is echoed in the main field. In Chapter 9 these line patterns are discussed in more detail as one aspect of composing in landscape architecture.

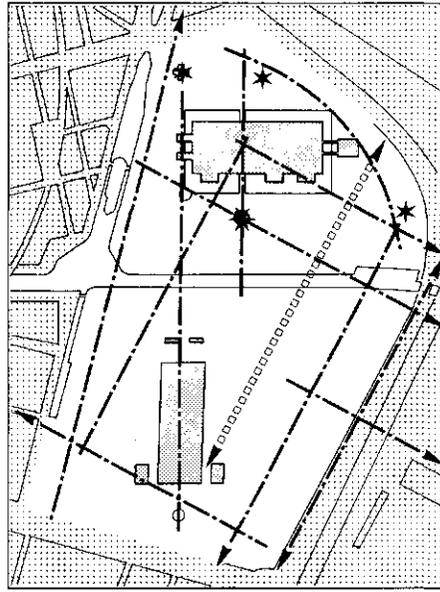
The degree of detailing in the plans determines the interpretation. It is, of course, impossible to proceed beyond the material provided by the designers. Had the designers' preliminary studies and sketches been available, more would have been possible in this stage.

### Qualities of the coherence

Coherence has been deployed as a general concept in the second stage of our analysis. Coherence is the relation between a plan's constituent elements. It concerns the clarity with which the parts form a logical whole; the degree to which main and side issues can be distinguished; the strength with which the parts are joined. This relation has various aspects, which can be viewed as the components of coherence. These are concepts that to a considerable extent determine the nature of the plan in this brief; six have been selected here (access, organization, anchoring, openness, articulation, character). What is the sum of the various components? What is the resultant? What is the aim and the quality of the coherence between the components?

Coherence is a qualitative concept; that is to say, not only can we distinguish the degree of coherence, but also the quality. None of the components is an absolute desideratum—a quality that ought to be maximized. The components can be deployed in such a way that they strengthen or weaken each other. A comparison is useful here between the components of coherence and the vectors in which a force can be resolved. If the vectors are identically oriented, a maximal force acting in a particular direction is created; similarly, in a plan this means that excessive coherence can arise: the plan becomes too obvious and inevitable.

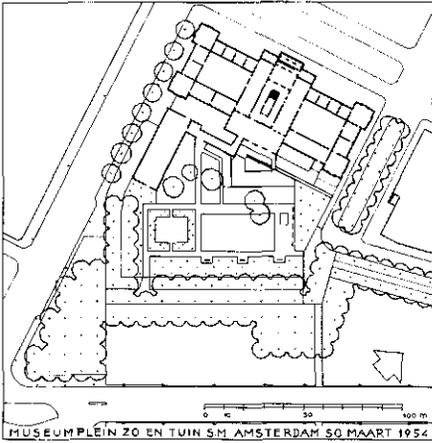
Designers often speak of the tension in a design, by which they mean the interplay between the components of coherence. Here, the designer's virtuosity (command of the tools of the art) has to be apparent.



This interplay is based on whether or not the components are allowed to coincide. The effects and meanings of the interplay are dealt with in Chapter 9.

Coherence, if well-balanced, is a quality that gradually unfolds in a location and becomes apparent to the observer. Analysing the interplay between components provides an understanding of how the designer utilizes the observer's receptivity to discover and to construct in his or her mind the coherency conceived by the designer. How does the designer turn the visitor into a participant in the order introduced into a site? What are the elements through which the construction of the plan becomes clear, how are they to be achieved, and what is the sequence? Are there places where the coherence between two or more landmarks can be perceived?

In order to describe these qualities of coherence, two concepts are introduced here: orientation and scale. 'A simple, readable [orientation], well-proportioned [scale] space in the outdoors is a powerful event.'<sup>60</sup> An important effect of coherence is orientation: the determination of the location and direction of the moving observer according to their spatial surroundings. Orientation is a concept with a different dimension in the array of aspects to be analysed. For it is not a descriptive feature of the location or of the design, but a possible response of visitors. It is a response that results from the coherence, thus of the



39 *left* Plan of the garden, Stedelijk Museum, Amsterdam, 1954

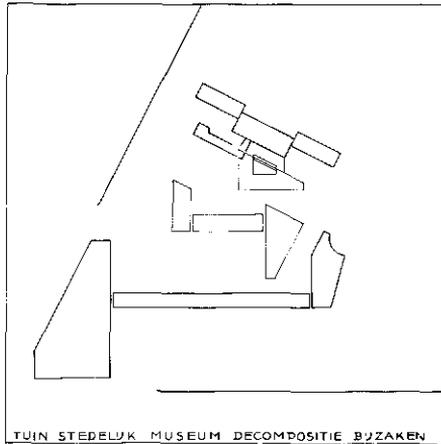
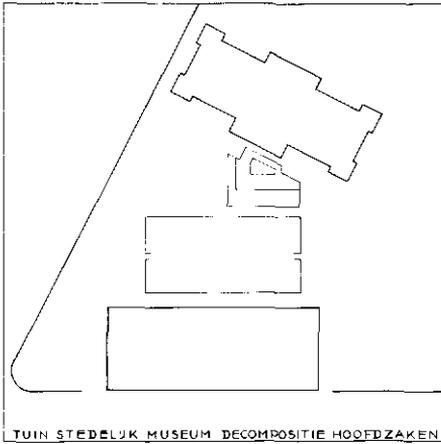
40 *right* Decomposition of the Museum garden, showing principal and secondary features

total of the analytical concepts employed here. Indeed, the spatial perceptibility of coherence (by means of openness, articulation), supported by the functioning of the design's elements, determines the orientation.

An orientation can arise thus: 'the apparent direction toward a goal, the marking of the distance traversed, the clarity of entrance and exit, the explanation of the basic structure and the observer's place in it [...] Each event should prepare for the next one without completely foretelling it, so that the observer receives each as an ever-fresh but coherent development.'<sup>61</sup>

A second quality that results from coherence concerns the concept of scale: the measurable or perceptible relations between spaces and volumes. Finding the right dimensions and the right relations is often the key to a successful design solution. There must always be a small dimension in a large dimension, and by this means the designer controls the scale in the plan.

Scale is often used in the sense of meaning agreeable relations between parts. It is, then, a quality; absolute, in the case of the relation to the human dimension, and relative, in the case of the interrelationships of the elements of a plan. Landscape architects (such as Eckbo, Fairbrother, Church, and Lynch) often regard scale as exclusively a question of the relation between the elements of a single place—trees, paving, walls, grass, etc.—and not of the relation between different spaces. The first aspect of scale is particularly difficult to objectify, for, like orientation, it is a possible response on the part of the visitor to the park.



But why the relations of a particular space are more agreeable than those of another, and why certain relations in the division of a surface are more balanced or more exciting than others, is scarcely possible to determine, despite the fact that in the evaluation there is a certain objectivity, for it appears that many people—and especially those with a ‘trained eye’—arrive at the same evaluation. An understanding of the effects of relations is not to be gained by theoretical means, but only through empiricism: experience shows that certain relations are right, but not why. This observation implies that one of the most important characteristics of quality in the composition is the least tangible, and, therefore, also the most difficult to test.<sup>62</sup>

The concept of scale is used in the second stage of our analysis in the sense of meaning the relation between successive spaces and surfaces. The composition of the garden of the Stedelijk Museum in Amsterdam, for instance, is constructed from planes. The larger planes are situated parallel to the main axis of the Museum square, which is clearly not connected to the Museum building. The pond is a leftover form between garden and terrace. As a point of friction, it is kept relatively compact. In this way the designers, Warnau and van Eesteren, have made a distinction between the garden as a pocket park for the daily use of passersby, and the statues that are exhibited as *Fremdkörper* [ill. 39 and 40].<sup>63</sup>

Scale is not one of the components of coherence, but rather an overall quality of a design. It is not so much a question of what one does, as how much of what, and where: the appropriateness of the chosen form, the dimensions, the material.

Closely connected with the concept of scale is proportion.<sup>64</sup> In the initial situation a number of dimensions are so exceptional that many



41 Andersson, sketch of the field

designers made errors in scale. Perhaps unfamiliarity with such a brief, notably in the case of the (constructional) architects, misled them. Thus the site is too small for Moye's extensive park design, whereas the site is too large for Bellini's plan, with its square-like design.

Proportions of space, volumes and surface divisions are of vital importance for the quality of a composition [...] Why certain proportions appeal to many people cannot be objectively determined. That an architectural composition has to have a structure of a coherent sequence of dimensions is understandable when one realizes that human observation is based on the ascertainment of analogies and differences and that an image in which no order has been introduced can only be assimilated with difficulty.<sup>65</sup>

The best general rule to follow is: when in doubt, make it larger. The eye detects a meagre dimension more easily than it does a too-generous one.<sup>66</sup>

Alongside the large field in the plan by Andersson there are smaller spaces, tailored to the facilities included there. The transition between places for specific activities and sheltered rest on the one hand, and broad and unlimited space on the other, is loose and free and, as a result, subtle [ill. 41].

In the park a strong spatial sensation can arise through experiencing the intimacy of small closed spaces, the exhilaration of large open spaces, and the mysteriousness of the transitions between the two.

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## 5 The design strategies

In the preceding chapter we examined the coherence realized within the designs by means of an analysis of the descriptive features directly readable in the plans. In the following stage of our analysis we ask in what way the end result has been effected and from what can this be read. This involves ascertaining the designer's design philosophy: the ideas, ideals, and intentions that direct the designer's approach to the design. Which preconceived approach is used to confront the conditions, potentials and meanings, both of the site and of the requirements of the programme?

It is, indeed, possible that designers believe they have no freedom of choice with respect to the design strategy. The 'choice' is determined by the characteristics of the context of the brief, or there is an established way of thinking imposed by schooling or office formulas; it is, then, a dogma or a tried-and-tested method, rather than a choice.

Every design strategy can be excessively employed or maximized, as a result of which other strategies are considered subordinate or irrelevant: a dogmatic glorification without counterbalance. Often there is a combination of strategies. This is certainly so in the case of the plans for the Parc de la Villette, for the programme expressly demanded a representation of pluralism. This does not mean an uncontrolled mixing of extremely diverse elements to form a chaotic spatial multiplicity, but rather the rejection of one use, one style and one meaning. For this reason it is not possible to make a clear analytical drawing for each of the six designs focused on in this study.

In the following, a number of distinct design strategies are defined and clarified using examples that are as clear-cut as possible. They are

formulated on the basis of a study of competition designs and a reading of the literature. In the case of highly divergent circumstances, other design strategies are theoretically possible.<sup>67</sup>

The following design strategies have been distinguished: firstly, strategies relating to use and time (historical continuity, functional relations, flexibility); and, secondly, strategies with regard to design and layout (wholeness, fragmentation). During the creation of the plan, the designer can choose to emphasize any of these.

### **An introduction to the design strategies**

The choice of a strategy or the combination of several strategies partly determine the nature of the plan and can as such be read in the plan.

#### *Strategies relating to use and time*

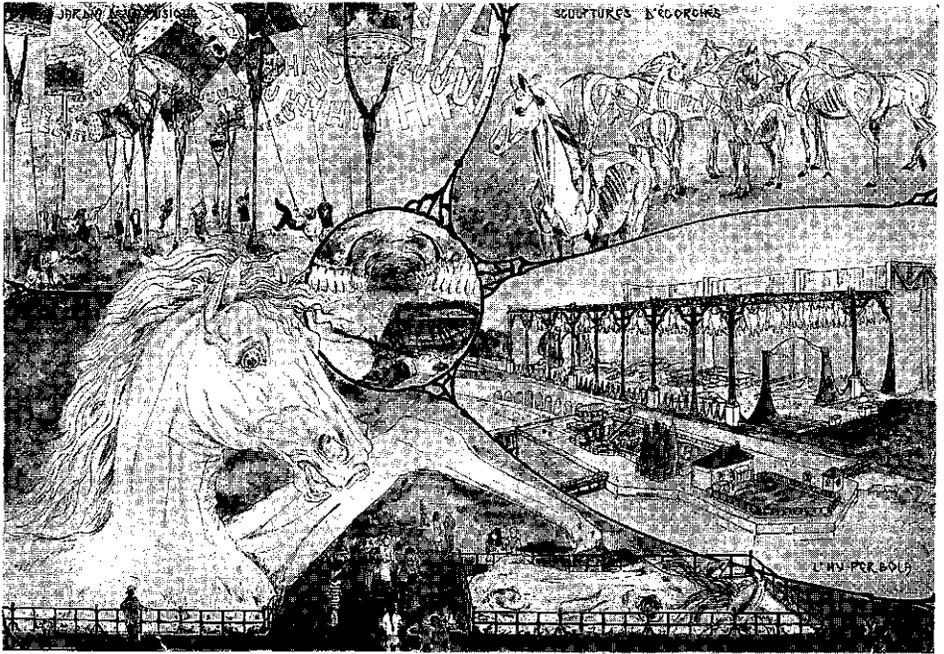
**HISTORICAL CONTINUITY** The role of time in human experience is of great importance and manifests itself in a sense of connection with the continuum of past, present and future, in which a form of certainty about human existence is found.

The landscape can strengthen our sense of the passage and organization of time. The cycles of the sun and of human activity can be celebrated, and our orientation to the past can be maintained. Even some features of the possible future can be made visible. Moreover, current transitions can be explained and eased [...] A good design saves evidence of the previous occupation of a place, especially that which conveys a sense of intimate human use or of profound symbolism. By contrasting new with old, we feel the depth of time.<sup>68</sup>

Designing with a view to preserving historical continuity does not mean that the designer's aim is simply to maintain the existing: there are various ways of approaching this.<sup>69</sup> In practice, the design often has to solve the dilemma between preservation and renewal.<sup>70</sup> It is basically, however, a question of celebrating change and of forging a link between the processes of the past and present-day and future interventions: the preservation of that which is conducive to the continuity of the place.

One can focus on the pursuit of this aim as a way of enriching our image of time, as happens in superimposed landscape patterns, in objects and other relics from successive periods. The plan then reads like a palimpsest, in which the original letters are still vaguely legible





43 Thomas, images of the park

beneath the new text.<sup>71</sup> The way in which these are incorporated into the design can vary considerably. The reference to history can be effected directly or abstractly and incidentally or integrally. The foundations or the surroundings can be expressed in the design either directly or in a more stylized fashion. Certain elements of the history of the site can be more sharply highlighted than others.

New developments can literally be projected on to existing patterns that are to be preserved. History can also, however, be linked to the new by means of analogy or contrast. In a stylistic contrast, the new can emphasize the existing, and vice versa: historic architecture can lend that which is to come the lustre of the new.<sup>72</sup> Consider, for example, the representation of fragmented layers of culture frequent in French plans, from which the new rises (like a phoenix): this is a reference to the—sometimes disorderly—layers of historical periods built on top of one another, in which the present (usually in the form of the Museum of Science, Technology and Industry) is presented as the culmination. In Coulon's plan everything appears to be shifted over each other and pushed up like drifting ice. It is abstract and symbolically whimsical; each whimsical form has a fragment of a straight line that provides a

certain orientation. There are no perfect, whole forms; everything has been impaired, with the exception of the new Museum, which rises above, and the circular gallery, which refers to a unity between the old city and the park. The lines, which suggest old plot boundaries, roads and building lines, give no real historical information; they simply say 'this place is old'. This could then be said to be the 'impingement' of the new on the old [ill. 42].

An interpretation can be generally characteristic; in the case of La Villette, for example, in the sense of the 'Parisian', expressed in plans with axial systems (see Gautier's design for example) or with simply a monumental main axis (see Drummond's design for example), a reference to Haussmann's boulevards and French classical garden design.

The Museum, the gleaming Geode, the glittering greenhouses and water gardens, and the large and colourful structural details banish the memory of the concrete body of the abattoir complex and allude to the enthusiastic embracing of technology and industry—in keeping with the idea of world exhibitions from the mid nineteenth century onwards, and clearly, too, with the idea of the competition organizer concerning La Villette as the park of the twenty-first century (see Nouvel's design).

The Grande Halle and the pavilions are masterly examples of nineteenth-century engineering and neo-classical representation. Together they symbolize Haussmann's Paris (see Pilton's design).

Conversely, the uniqueness of the place itself is also explored. For the design for the Parc de la Villette this approach entails, at most, the search for a link with the pattern of the site's historical occupation, or at least with its remains: the canals and roads, the city boundary, and the abattoir complex. In view of the fact that the power of these traces is limited, instead of designing with the physical historical vestiges or the retrieval of traces from beneath the site, an illustration of the history of the area can be created. This can be seen clearly in the plan by Thomas, with its references to the death of countless animals—at the same time, food for human beings. The depiction of what once took place there is not sufficiently ominous in this design, however, and, because of the reference to Art Deco forms, it is too decorative [ill. 43]. It is a monument to commemorate, a final point in history and, therefore, no longer an active attempt at continuation through linkage with the present.<sup>73</sup> The perception of a place can be an adventure in time. 'When we stand before a prospect, our mind is free to roam. As we move mentally out to space, we also move either backwards or forward in time.'<sup>74</sup>

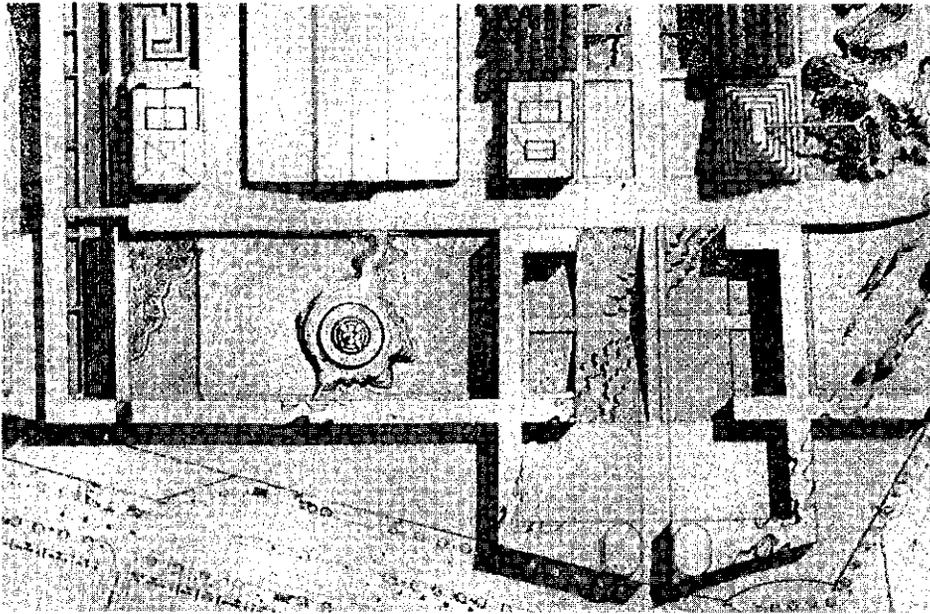
In conclusion, it is a question of the designer, often even at the stage of sketching the plan, unearthing from the existing situation thoughts and images, and often unsuspected meanings, that are considered worthwhile recirculating.<sup>75</sup> In La Villette there were, except for the two large and a number of smaller buildings, few inviting vestiges of the past present on the site. Erased traces can also be reconstructed however. The former ramparts are a potent subject for this purpose. A few plans, such as the one by Mazzucconi, literally re-create them in their original form. This design utilizes no other old traces, though, and the ramparts are isolated, and, as a consequence, alienated and inexplicable.

A more abstract form is also possible; the design by Bakker and Bleeker employs a rampart-like edge, for example, while Pesce uses an elongated building. Such plans illustrate the rounding-off gesture and the screening off from the motorway that results. The marking of the elevated Boulevard MacDonald/Sérurier by a heavy retaining wall also calls to mind the ramparts that were situated thereabouts.

An entirely different reason for wanting to promote continuity is provided when the site inspires the continuation and consolidation of existing ecological conditions and processes. The growth of natural phenomena requires considerable time, and radical intervention can suppress a valued phenomenon for a extremely long period, or even cause it to permanently disappear. The natural processes in La Villette are not such that they can be taken as a point of departure.

**FUNCTIONAL RELATIONS** An entirely new functional pattern, evolved from the programme, can be set down, as if the location were totally empty and without historical and topographical precedents. There is a break in the development: a new purpose, a new beginning. Designing with functional relations as a point of departure is an important basis for design practice in north-western Europe and North America.<sup>76</sup>

Where possible and desired, the functional relations already present can be resumed, both inside and outside the site. In the case of La Villette this concerns the links between the park and the avenues, the north-south axis, and the routes along the canal. Thus in the plan by Magerand and Mortamais there is an emphatically elaborated main axis from north to south, strung between two squares linked to the avenues like lock-shaped entrances [ill. 44]. The park's facilities are concentrated within a walled strip. Had this courtyard been narrower,

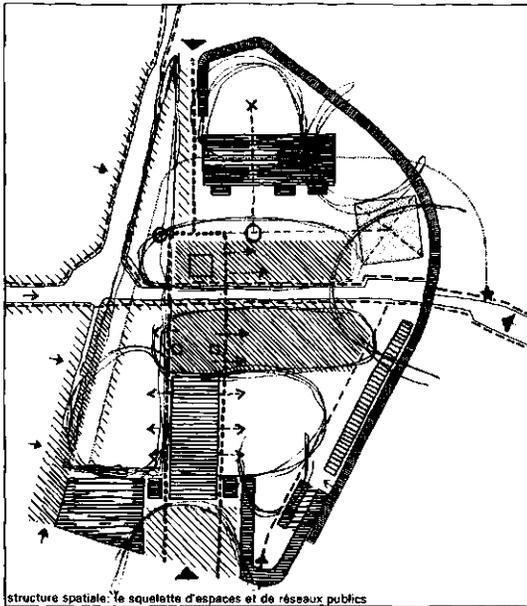


44 Magerand and Mortamais, south entrance

then the contrast with the surrounding area would have been greater; the walled form emerges as a perfect unity, standing free in relation to the indeterminable sides.

The emphasis is therefore on functionalism, and the most advantageous location of facilities in relation to each other, with short interconnections and good visibility. This objective not only determines the arrangement and layout of spaces geared to functions, it also has to be visible in the design. An important potential effect is the pursuit of spatial continuity, which gives rise to orderliness and clarity. In the plan by Bakker and Bleeker the various areas are fixed, along with their connections, in a solid structure of a central open space, a series of enclosed spaces, and objects intended to accentuate the features of the design, linked through a hierarchic system of promenade and paths [ill. 45].

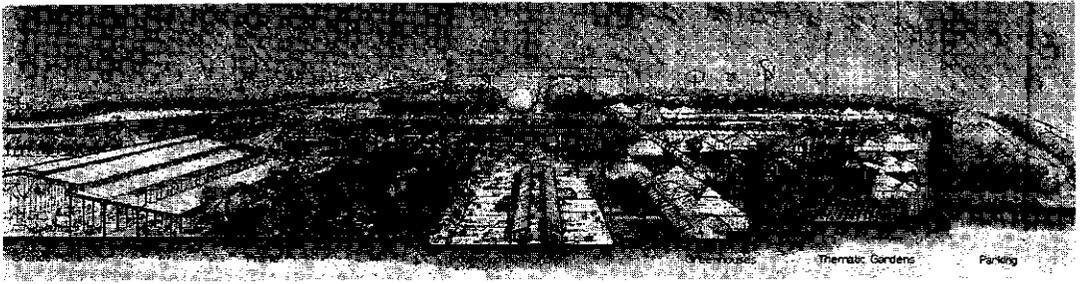
Large numbers of visitors are anticipated in La Villette. For this reason the internal relations between the attractions and facilities are important. In the plan by Myer all the 'space' is circulation area, so that the park is effectively one large route. There is a simple hierarchy of roads. The various spaces all have more or less the same dimensions and are exclusively geared to the efficient accommodation of the pre-



scribed functions. As a consequence, no free space (that is to say, space not determined by a specific use) remains [ill. 46].

In a functional pattern the relationship between the elements of the programme, in the sense of objects and spaces, is predetermined in a scheme of activities. The activities can be distributed across the site in various ways. Lynch suggests 'site arrangement by Local pattern' and 'site arrangement by General pattern' as possibilities.<sup>77</sup> In the first, activities are localized according to the fortuities of the site or the programme; the plan can thus acquire a rich, though scarcely organized, content. In the second, the pattern can be developed as a logical disposition of the functions and their connections, usually on the basis of a general abstract form; the plan appears orderly, surveyable, and efficient. The structure of plans is often elucidated by making an analogy with the functioning of a living organism or a machine. Ideally, both of the possibilities identified by Lynch are developed, in order subsequently to transform them through use and criticism until a new pattern has been discovered that has the value of both.

**FLEXIBILITY** One use follows the other more and more rapidly. In building flexibility into a plan, the designer assumes that changes in the future will be both inevitable and unpredictable in terms of their direction, speed, dimensions and means of transition and transformation. A



46 Myer, bird's-eye view

plan in which flexibility is a predominant objective often has a neutral character, thereby leaving space open for uncertain future developments. As a consequence, problems can arise with regard to the stability of the plan and the meaning of the surroundings.

Although flexibility appears to be an indispensable and indisputable quality in a plan, and is in some cases an unavoidable precondition, the designer needs to answer a number of difficult questions concerning this. For example, which of the plan's elements will be the least subject to change? Do historical developments in general, or that of the situation in question in particular, provide indications about a possible extrapolation of developments in the future? Do they thus say anything about the sense of stability and permanency on the one hand, and changeability and changeableness on the other? Which of a park's elements are, by virtue of their nature, the least changeable? In what way can adaptability be provided for?

Designing a fixed framework or outline with a high degree of permanency and containing an excess of space or capacity enables a plan to be made sufficiently strong and spacious to be able to incorporate changing or new activities. Plantings are an important building material for a park's framework. Trees require time, tranquillity and space to develop; a degree of stability and continuity of form is necessary. Between site and use there can exist then what Lynch calls a 'loose fit'.<sup>78</sup> The framework has, as it were, to carry within it the conditions for future development. It is possible that each framework will, nevertheless, be overtaken by developments in the long run. The plan by Künnapu and Padrik is constructed around a loose framework of galleries and pavilions. It looks as if it has existed for a long time, and as if it has developed continuously since the era of the Vauxhall parks [ill. 47]. This recreational and cultural machine is densely packed and overfull.

The gradual decrease in flexibility over time is, to a large extent, an unavoidable problem, however, especially when change is accompanied by growth. If the plan's pattern is expandable, this increases its flexibility to a considerable degree, because there is then also room for growth in use.

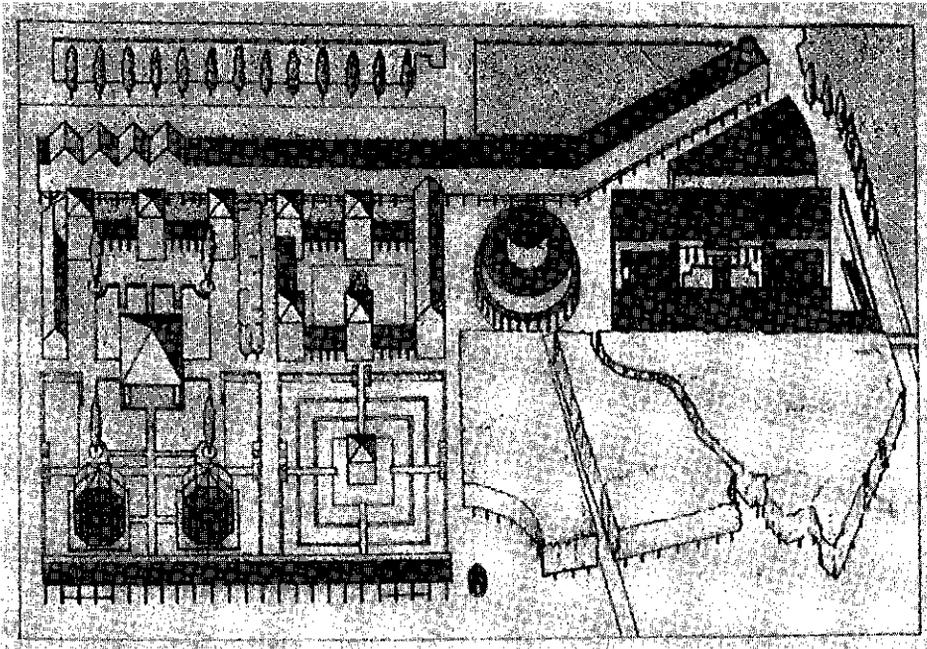
By reducing the degree of interference between the elements of the plan, flexibility can be increased. This can be effected by accommodating the activities in separate spaces, so that alteration in one area can take place independently of the other. Use can also be organized around fixed focal or anchor points, such as Tschumi's *folies* or Pesce's slices.

The programme for the Parc de la Villette is comparable in part with that of an exhibition ground with permanent and temporary events, and the plan needs to have a flexibility geared to this. The programme is so extensive, however, that infilling on the existing site itself results in an overfull situation, as a consequence of which the overlapping and interweaving of functions becomes inevitable. Moreover, there is the requirement of adaptability. Another aspect of the exhibition character of the Parc de la Villette is that there needs to be space for special events. This requires enough flexibility to enable tens of thousands of spectators to flock to a place one day, and to enable the same site to revert the next day to a pleasant space for just a few visitors.

The pursuit of maximal flexibility and complete mobility would, in this situation, produce a bare and largely hardened site, or at least extremely large dimensions and no interweaving of functions. There is then no spatial organization that directs, i.e. invites, (combinations of) use.<sup>79</sup>

In order to ensure flexibility of use and the involvement of residents, Lassus chooses as large an open meadow as possible, in which only the vertices of the site are used for anything. In spite of the incline in the site, the field is not a powerful void; the Grande Halle is insufficiently bare, because all manner of things have been affixed to it. The form and the position of the ponds and the groups of trees in this void seem, however, to be intended to provoke so much irritation that one will quickly begin work on a more detailed layout.

One of the remaining possibilities for elaborating the site is to design the permanent framework such that it is composed of buildings and plantings, water, earthworks (hills, embankments and terraces) and access. Further, this must be sufficiently sturdy that all manner of things can be inserted into it, and of such a timeless character that it

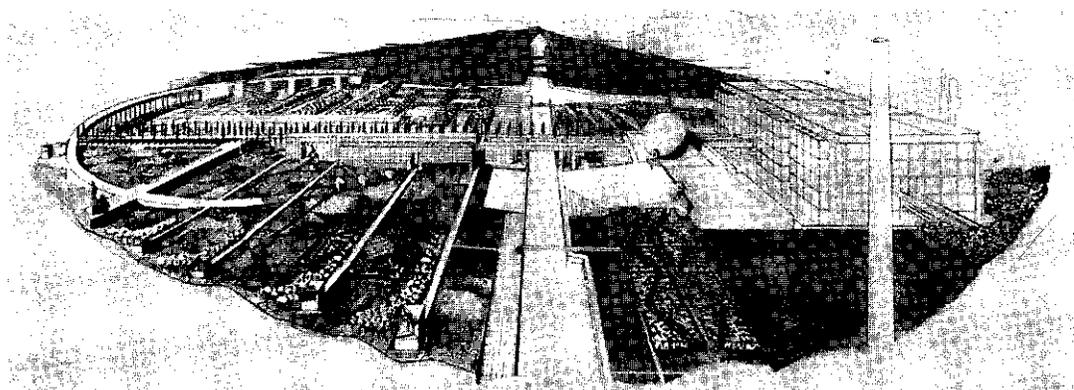


47 Künnapu and Padrik, isometry

does not easily appear outdated. At the same time, it will have to appeal to the imagination in such a way that it invites or provokes the new use requested in the programme. This leads to what in land development is called 'framework planning'.<sup>80</sup> In creating a framework that permits such change, a great deal is demanded of its characteristics.

The examination of the dimensions and proportions of frameworks is the essence of the landscape designer's task. Dependent on this, entirely different infillings can be created. The nature and the dimensions of the frameworks can prelude changes [...] Both modernists and post-modernists agree that the simple or even an elementary form contains the right preconditions for the assimilation of changes over time.<sup>81</sup>

In a park constructed with the aid of a permanent framework, continuity and flexibility can be consistent with each other. The grid is often presented as a model of flexibility on account of its objective and practical geometrical basis and its successful utilization in pioneer settlements. The grid pattern appears in so many plans that it often seems a panacea. Sometimes the plan consists solely of a grid, in which the desired larger spaces are formed by joining several blocks together, as in the plan by Diepen and van den Bosch.

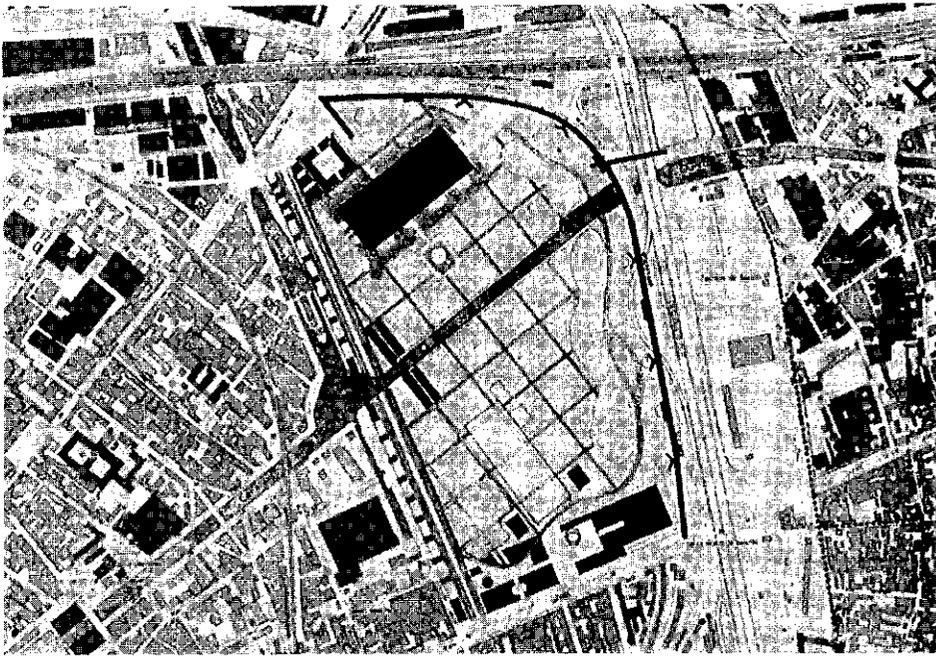


48 Desmoulin, bird's-eye view

Though a pattern of strips (as used in the plan by OMA) or a combination of both strips and grid (see Desmoulin's plan [ill. 48]) can be used instead of a grid pattern, the grid is an obvious choice for the garden-like intentions of the programme.<sup>82</sup> Castro's plan is also composed using a grid of narrow canals and rows of trees, within which various gardens are situated. The design is not supported entirely by the grid however; on the eastern boundary it terminates in a hill with clumps of trees and a meandering watercourse, while along the canal on the western boundary a promenade with heavy lines of trees and kiosks cuts the grid off. This promenade strengthens the overall organization however [ill. 49].

The grid can be an addition to a main axis or an orthogonal extension of it, as in the plan by Drummond, which has a small-scale, neat system of lines of trees and garden plots next to the monumental linear series of buildings that cross the site from north to south like a bridge. As a way of relativizing the rigour of the grid, the meandering watercourse is too weak.

As a result of the grid, many plans are indeed flexible; but they evoke nothing further, they are not successful without the addition of a centre of gravity, or they would be lacking in tension without contrastive elements. The dimensions of the spaces dictated by the grid or strips are often too limited to create a true freedom of use and infilling.

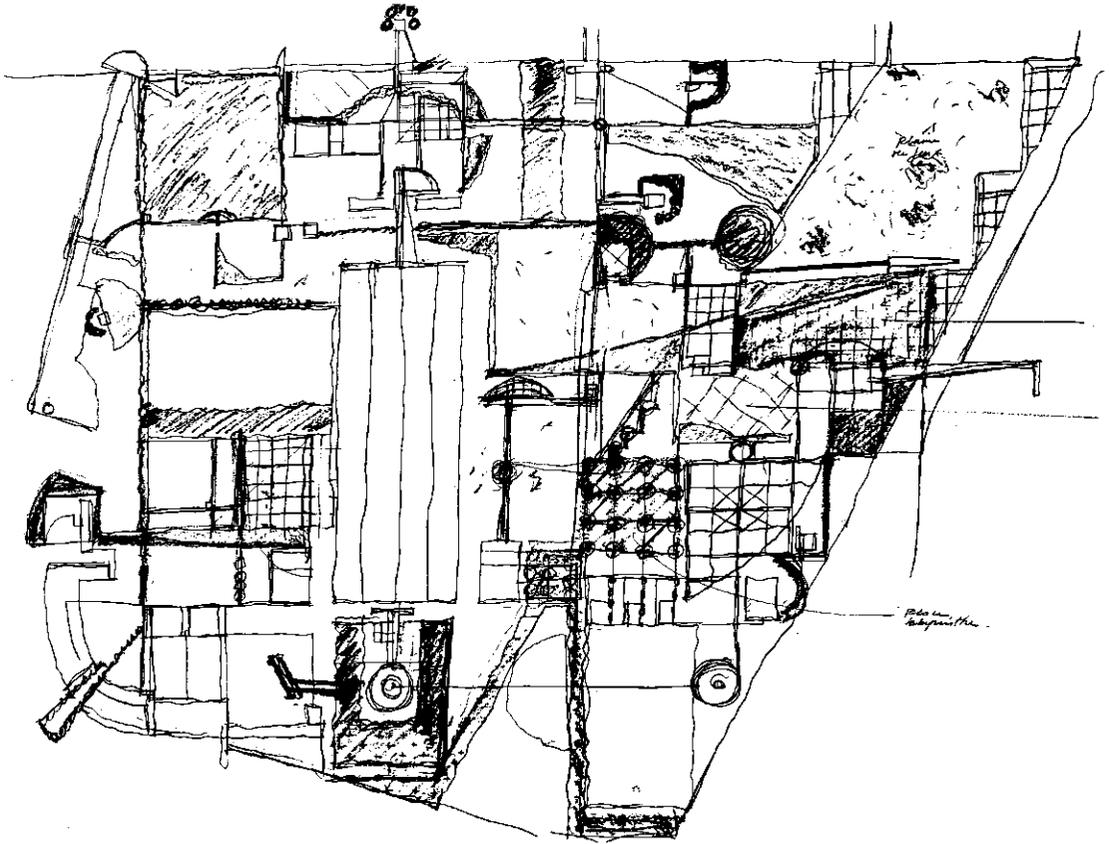


49 Castro, the park and its surroundings

*Strategies relating to design and layout*

In addition to the three design strategies mentioned above, which relate to use and time, there are two that relate to form, or at least the composition and arrangement of forms in a plan: in solving discrepancies (if there are none, there is no need to design) in designing, wholeness or fragmentation can be pursued. The choice is dependent on the designer's perception of reality. How is reality experienced and interpreted, and how does the designer subsequently wish to render this reality (the problem of mimesis)? As a unity that expresses a (utopian) ideal, or as fragments of a disintegrating society and progressive individualization? Tschumi put it as follows.

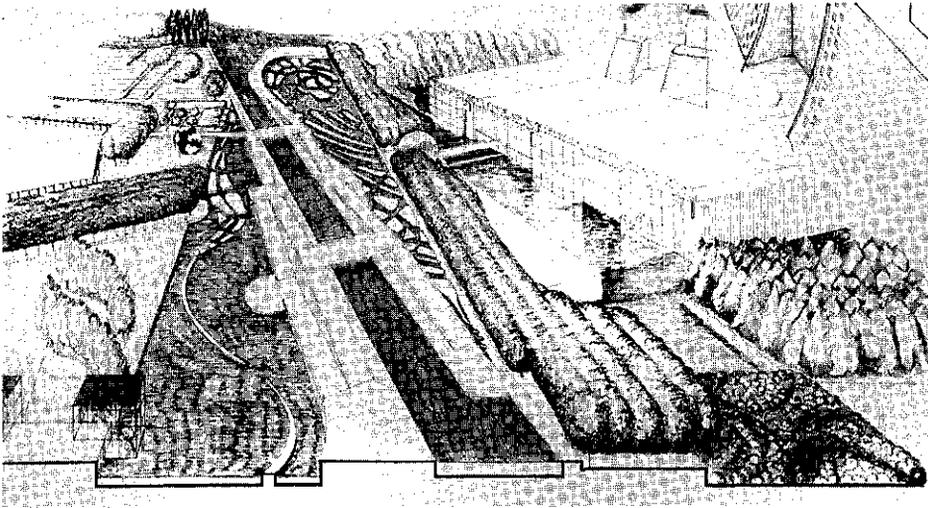
The paradigm of the architect passed down to us through the modern period is that of form-giver, creator of hierarchical and symbolic structures characterized, on the one hand, by their unity of parts and, on the other, by the transparency of form to meaning. A number of well-known correlatives elaborate these terms: the fusion of form and function, programme and context, structure and meaning [...] Yet, at a certain point, this long-standing practice, which accentuates synthesis, harmony, the composition of elements and seamless coincidence of potentially



50 Meier, design sketches

disparate parts, becomes estranged from its external culture, from contemporary cultural conditions.<sup>83</sup>

In traditional landscape architecture, including modernism, the contradictions and irregularities are solved in order to produce a 'pure' design. Conversely, an approach is developing in which the dilemmas in architecture peculiar to designing are expressed. 'A deconstructivist architect puts the pure forms of the architectural tradition on the couch and identifies the symptoms of a repressed impurity.'<sup>84</sup> Furthermore, the designer is not concerned with creating a large-scale unity, for order can only occur incidentally, as small enclaves in a sea of chaos. Architecture becomes a system of contradictions in which, at the same time, the relationship between signifier and signified is not perceived as being fixed.<sup>85</sup>

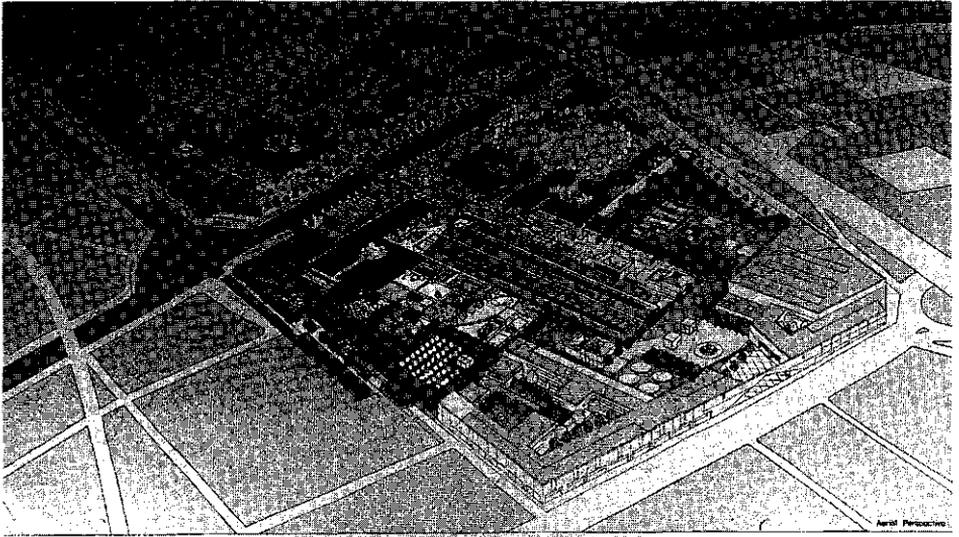


51 L'Arbre en boule, bird's-eye view of the canal

**WHOLENESS** The classic pursuit of designers is order and harmony in a single spatial composition. Although this traditional point of departure is being challenged by a society that is becoming increasingly multiform and disintegrated, it is a powerful objective with a strong appeal to the imagination. It involves designing a spatial unity, the construction of a composition, and the linking of the elements of the plan, whereby a whole is created that is more than the sum of its parts.

By tradition, the designer focuses on the totality, the synthesis, finding a way of uniting all the requirements and preconditions in a coherent whole that is restrained and harmonious. The designer seeks a unifying concept through which the contradictions are kept in check in a controlled composition.

Within an orthogonal pattern in which lines of trees are arranged like walls in a building, Meier's plan creates flexibility. At first sight the composition resembles a collage. Integration and unity have purposefully been worked towards within the site boundaries however. An unobtrusive point-grid of transparent white pavilions plays a role in this, as does combining circular and rectangular geometry to create forms with a certain organic pretension. The sketches accompanying the designer's explanatory text show how equilibrium and unity in the composition have been sought through a multiple repetition of surfaces using the theme of the integration of curved and straight lines and a partial axial system [ill. 50]. The plan is not hierarchical; tranquillity

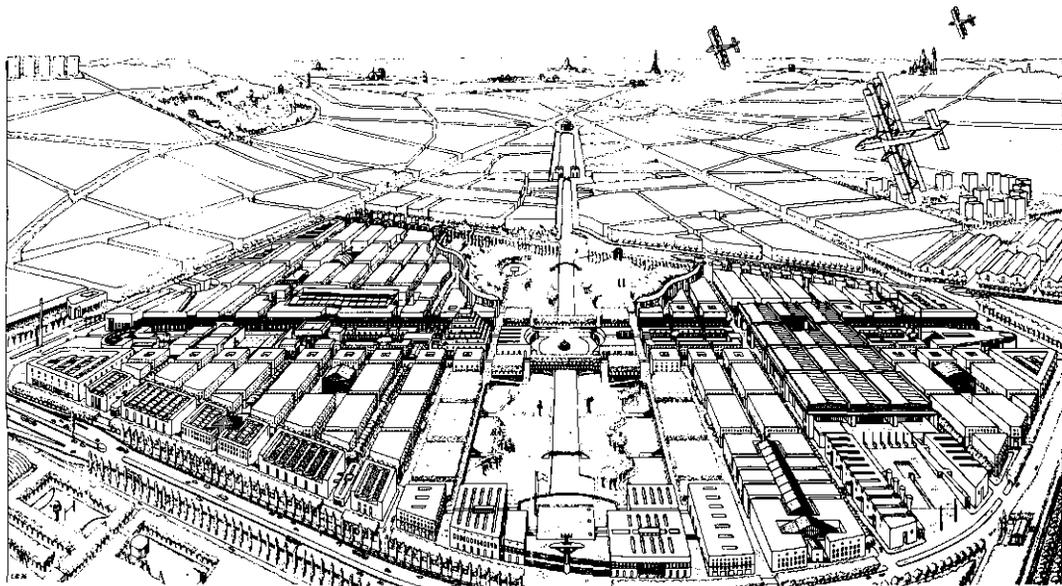


52 Lyon, bird's-eye view

and harmony are created as a result of the balanced co-ordination of the compartments.

Wholeness in the composition can also be rich in contrasts. The plan by L'Arbre en boule initially appears to be a collage of fragments. The exploration of the graphic composition in the first stage of our analysis reveals a concealed order however. Points, lines and surfaces are fixed to lines that arise from the situation. Although rigidly coherent in composition, the plan's parts differ greatly in character and directly adjoin one another. Occasionally, they are even cut out of the surface, as, for example, in the case of the path diagonally across the canal. This creates a connection here over the canal, while, at the same time, the canal emerges more prominently [ill. 51].

In Lyon's plan the contiguous spaces are seamlessly joined. There are no dramatic transitions or sharp contrasts. The design has been organized with a few simple axes and a direct zoning, similar to what can be found in the classical tradition. A functionalist knitting is produced, however, because too many elements and spaces have been designed for the various functions, and because the dimensions do not reflect those of the larger whole. Inherent in the professional (i.e. skilful) and careful elaboration of the plan is the pursuit of an international and timeless design; everything is intended for a carefree day out [ill. 52].

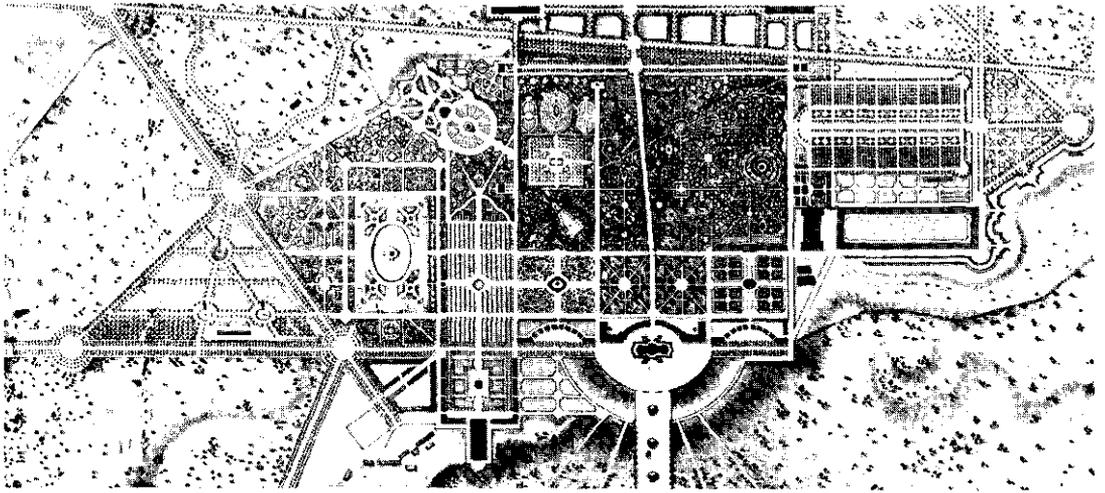


53 Krier, bird's-eye view, competition entry, 1976

Unity, in combination with the strategies of historical continuity and functional relations, results in the pursuit of completing the city by elaborating on its existing urban structure—a mode of working often used in the revival of run-down city areas. This is difficult to realize in La Villette, however, because of the site's isolated location. Léon Krier designed a clear example for a competition in 1976 for the same site (but with a different programme); this example was chiefly based on the closed block [ill. 53].

The pursuit of order and wholeness need not necessarily always result in simple and well-organized plans. Particularly at the end of a stylistic period, a mannerist approach often develops, with intricately composed and multiform ground-plans as a result; the rococo/Regency parks of Veitshöchheim, Solitude, Lunéville are good examples [ill. 54]. The design by Meier and the final plan by Tschumi could be termed mannerist.

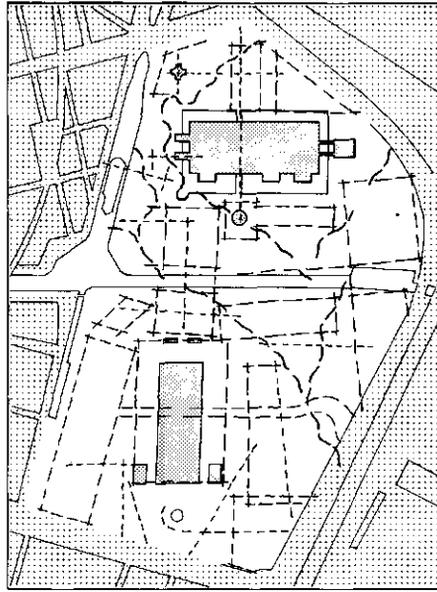
In the extreme case a 'perfect' solution is created that has an answer to everything; the plan is complete and stable. It is a whole and, consequently, provides certainty. There is an unequivocal relationship between form and function, between activities and an architecture that is derived from these activities. This relationship is reciprocal (see the discussion of functional relations) or indifferent (see the discussion of flexibility), whereas in the case of fragmentation the relationship is, on the contrary, full of conflict.



54 Rococo park Solitude, 1776

**FRAGMENTATION** For many designers the disintegration of the spatial environment is undesirable because it results in insufficient coherence. A collection of entities, of fragments, has a latent design quality however. It can be transformed into a positive strategy.<sup>86</sup> Rather than ignoring the difficult or unsolvable problem, a virtue is made of necessity. A world is reflected that is a complex whole of forces and counterforces; the laws of causality no longer apply, conventions and consensus do not exist.<sup>87</sup> There is no harmony, because there is no certainty with regard to its sources.

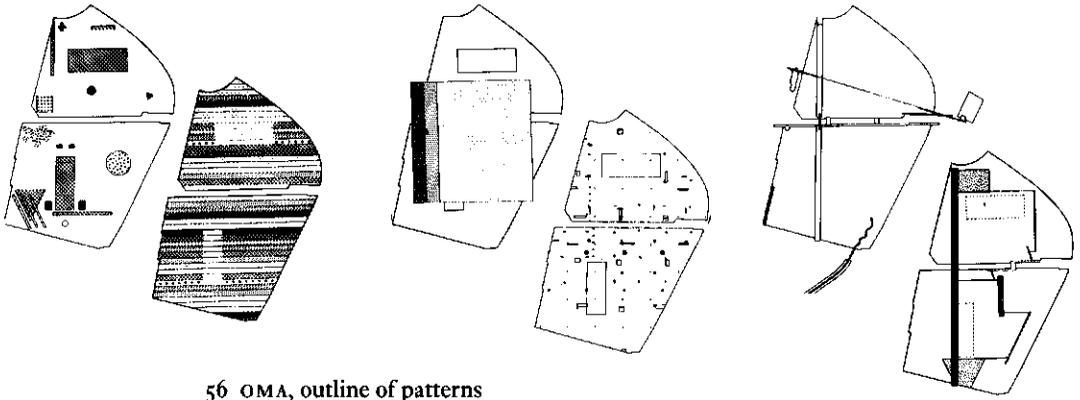
If the fragments can no longer be stuck together, they can be refurbished. The designer can play with breaks and discontinuities, and the reinforcing of these. The relics in the present situation are made autonomous, like fragments placed in a new context, or are framed by means of an overlay. The aim is to reduce the excess of diversity and complexity to a number of 'readable' contrasts. This can be effected, for example, by giving the fragments an identifiable form, as in the plan by Causin, in which use is made of pieces of grid with varying alignments and dimensions. In order to heighten the contrast, the site has been ripped open in the middle by a whimsical stream running along a valley [ill. 55]. The fragments do not enter into a sufficiently interesting relationship, however, as a result of which the collage gets bogged down in a medley of not unpleasant images. The fact that not a single detail about the borders has been incorporated into the plan suggests that the frame enclosing the whole has been forgotten.



Such a composition shows up best as an exception in rigidly designed surroundings. The contact with the existing is made by means of abrupt deletions and discordant relationships. Elements respond to their context by extricating themselves from it, by contrasting with it, and they can sometimes, because of their dominant presence, establish order as a point of orientation or attraction—a point that draws the surroundings towards it and to which they bind. The connections between sections and remnants are often striking events, for they are sharp transitions and of an enigmatic complexity.

Fragmentation can also be a response to the programme, to the multiplicity, diversity and, sometimes, contradictoriness of the requested elements. The intricate complexity is regarded as a potential force and clearly expresses this.<sup>88</sup> The plan by OMA—more of a tactic than a design—revels in the large number of facilities, compared with a minimum of natural elements. The multiplicity is arranged in narrow strips, as if it were a horizontal skyscraper with a promenade as the lift. The visitor proceeds from one sensation to the other, at a great pace, staccato, without stopping [ill. 56]. Information technology is celebrated in a winged *coulisse* landscape.

The designer can go a stage further by expressly pursuing fragmentation; it is not only a possibility, it is a necessity. Fragmentation plays an important role in the current architectural deconstructivist or post-

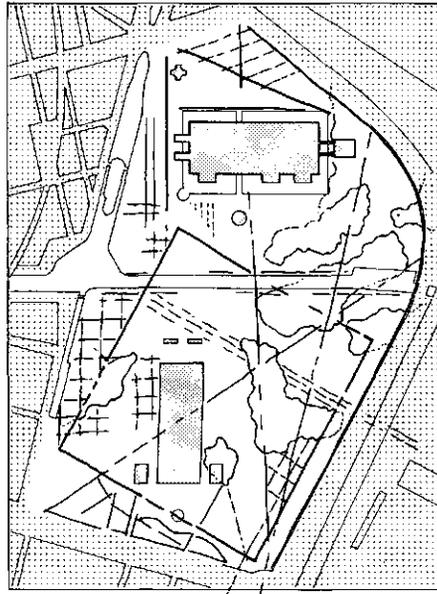


56 OMA, outline of patterns

structuralist movement. According to Eisenman, who is involved in this movement both as an architect and as a theorist, deconstruction involves more than simply fragmentation. 'Fragmentation carries the nostalgia for the lost totality. Deconstruction, on the contrary, does not aim at the reduction of a complex system to a simpler whole.'<sup>89</sup> This tactic has to prevent the designer from pursuing an ideal that develops into dictatorship or failure: 'It is better to think of an aggregation of small and even contradictory set pieces, than to entertain fantasies about total and faultless solutions which the conditions of politics can only abort.'<sup>90</sup>

If the fragment refers to a historical relic or a remnant of historical styles, a collage is created: an arrangement of autonomous, heterogeneous fragments and independent pieces of composition. Time is artificially introduced into the design. The plan by Künnapu and Padrik looks as if the park has been in protracted use. The city carries insistently on through into the park. It is a machine for recreation comprising diverse tightly-packed elements, each of which is a complete unit. Thus the park itself only appears in the form of a cliché in one of the gardens. Galleries and kiosks are methods of binding the joints of the elements. The site can be envisaged as the resultant of a number of patterns superimposed in time ('historical layers', as in Corajoud's plan), occasionally even raised into an intense conflict [ill. 57].<sup>91</sup>

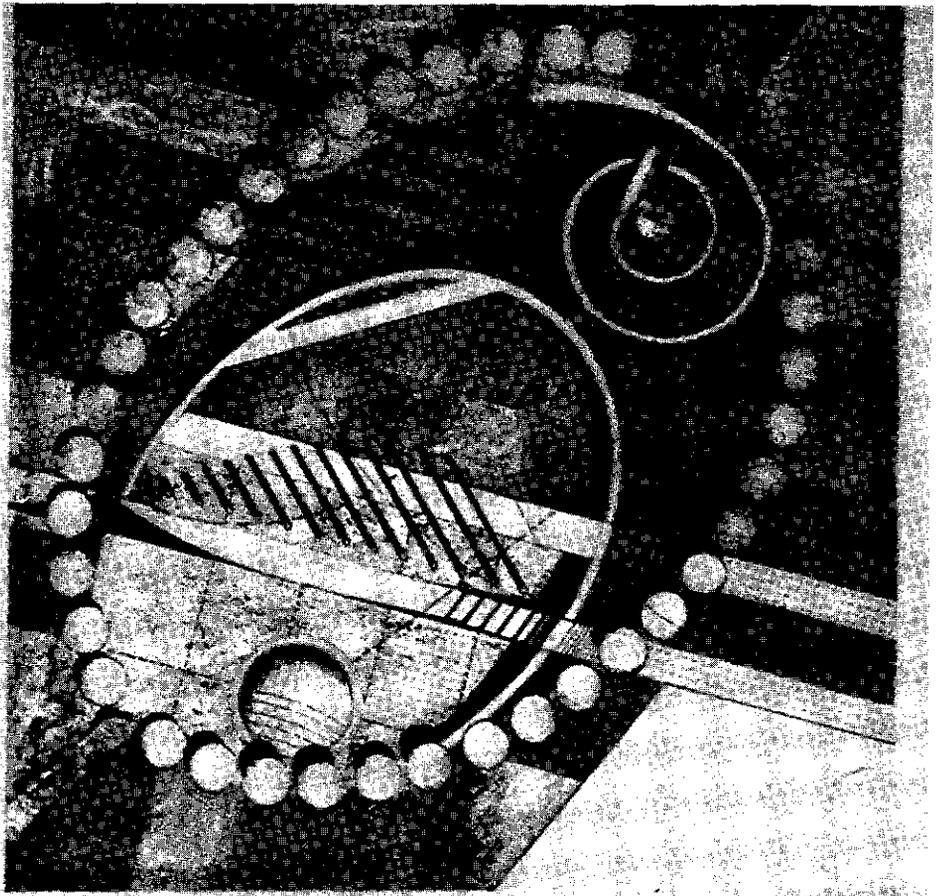
If the fragment does not refer to a lost wholeness, then it is autonomous. Use and form are disconnected by means of independent patterns that do not completely correspond; for example, an avenue planting carries a path only partly and does not form a connection between two points. Such an approach is often elaborated by means of superim-



posing autonomous patterns and/or large geometrical forms over the location, or by means of creating graphic stratification in the ground-plan.

A graphically balanced example is the plan by Desmoulin. The main axis with the three-quarter circle is subtly situated over a mosaic of squares, which are the undermost or oldest layer. The rhythm of the squares is precluded by patterns of rectangles and strips. The play is expressly uncompleted. Even in the layout of one of the gardens, this conception can be seen [ill. 58]. The plan by Aymonino consists of several, geometrical fragments. They are placed separately next to and over each other, in a way that arrests a further, inexorable disposition and infilling. The background is a wholly unequivocal choice: east is a continuous wooded slope, west is an open field. No attempt has been made at landscape gardening; a few details, for example, the square over the canal, show that the plan is more than a scheme however. The city boundary has been shifted and moved within the site. On the border an aqueduct-like building runs from north to south. The architectural style refers to the Romantic classicism of the *Rotonde de Ledoux* at the start of the *Bassin de la Villette*. The small hill at the southern end refers to *Parc des Buttes-Chaumont*, to which the route runs.

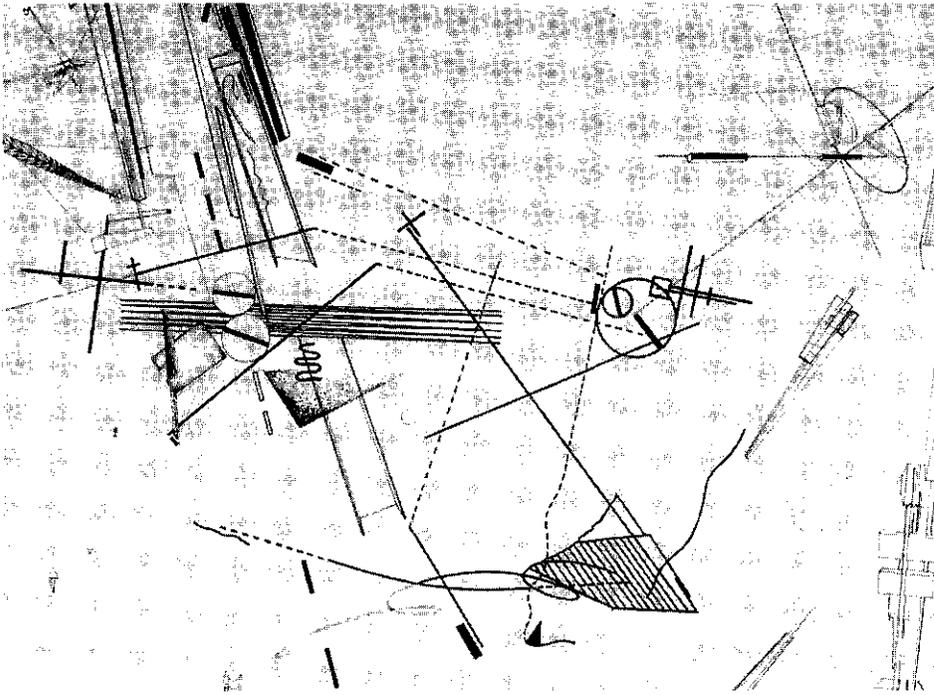
Designing becomes a play with the unequivocal meaning of a more or less elementary form (and with the meaning, in as far as this is



58 Desmoulin, the astronomical garden

determined by the material from which the form is constructed). It can become more elaborate and complicated until it is a subjective interplay between geometrical forms. Functional elements are dislocated or shifted, so that a certain exuberance and complexity is created. Chance and coincidence, incongruity and discontinuity can be the result of the random placing of various systems on top of each other.

Such experiments in form are deemed justifiable and necessary today, because it is not clear what we are to pursue. Although powerful images can be created this way, it is unclear what purpose they serve. Design can degenerate into an intellectual game that the ordinary visitor unacquainted with the design commentary can no longer follow. In this case it remains the personal game of the designer alone,



59 Hadid, composition sketch

whereas, by definition, public projects, even at this level, ought to be accessible if they are to avoid being authoritarian. Otherwise this game can lead to a merriment of collected forms of little substance.

By expressly requesting an entirely new—even twenty-first century—park form, such a play of forms has possibly been encouraged. Designers have, moreover, a distinct preference for constructivist aesthetics (with, as painterly sources, Kandinsky and Klee), not only as an external form, but also as an attempt at continuing the avant-garde of the 1920s (the modernist tradition). Thus Hadid's design seeks a park for a new lifestyle. In addition, a graphically fascinating play of forms is created, and it scarcely seems to settle down in the ground-plan. It is impossible to form a clear spatial image of this Dadaist composition [ill. 59].

A frequent consequence of the use of fragmentation in the Parc de la Villette is a design mode resembling modish video clips. Furthermore, an excess of information is presented: provocative, flashing and complex because of the many undefined primary and direct stimuli. The park is distinctly conceived as an exhibition ground, which is so exces-

sively programmed—without the usual attempt to moderate this by a layering of meanings—that it is difficult to shut oneself off from the surplus of information. Everything is geared towards a once-only visit without time for reflection. It is, one might say, a contemporary form of the gardenesque.<sup>92</sup>

### A comparative analysis of the design strategies

The following discusses the designs and the strategies employed by the six selected designers, and interprets, with reference to the plan, the intentions that have guided them.

#### *Pilton*

The plan is based on a functional pattern. The main axis with the contiguous elements is the spatial translation of this. The openness of this proportionally large elements supports the coherence of the plan. The *fin de siècle* atmosphere expressed in the explanatory drawings is in keeping with the architecture of the Grande Halle and refers to one of Paris' historical heydays. As a form of historical continuity, however, it is laborious on account of the fact that this atmosphere has disappeared both from the site and the surrounding area. The city-wall-like boundary on the park's eastern edge resumes the historical leitmotif in an abstract manner.

The laboured contrast of forms between rigid and geometrical parts and loose and meandering areas results in a measure of fragmentation. This fragmentation is not deliberate, for it is unconvincing; rather it is the consequence of an interpretation that uses crude stereotyped images of the multiplicity of places and atmospheres demanded in the programme.

#### *Pesce*

Constructed as an explosion of many autonomous pieces, the plan is not so much an expression of the fragmentation of the site as of the multifaceted nature of the programme and the dynamism of metropolitan life. The fragments are held together by the repetition of the rhombus form and by a tall and attenuated building along the site's eastern edge. The grouping of the parts of the plan is so regular and

fine-grained that an adaptable network of fragments results, flexible in so far as the small infillings and objects are concerned.

### *Corajoud*

The design suggests that it is composed of several patterns—or at least the vestiges of several patterns—placed over each other. Few means form a complex whole. In this way, a ‘new fragmentation’ is created in which one pattern functions as a context for the fragments of the other and vice versa. The Grande Halle stands as an authentic relic in a square field. On account of its simple form and tilted position, this field is an autonomous element.

The various superposed patterns result in a line pattern that is partly linked to the existing situation and to the historical context. The chronological sequence of the distinguishable layers is unclear. This leaves the visitor in a state of uncertainty as to how time has been manipulated in the design.

The plan is also based on a pattern of functional relations and spatial continuity. Indeed, the plan is such a multifaceted and complex combination of design tactics that the question arises as to whether the visitor can either read or appreciate this intellectual game.

### *Drewniak*

An emphatic north-south axis and a hierarchical pattern of access constitute the functional-spatial strategy. To complete this a grid pattern has been designed in order to create gardens that may be flexibly arranged. The square in the centre attracts attention as an autonomous element because of its simple geometry and its alignment in the ground-plan.

### *Zagari*

The plan is, in the main, constructed on the basis of a functional organization. The megastructure along the canal is the spatial manifestation of this idea. Hill and gallery allude to the historical city boundary. Flexibility has been sought by keeping a large open site in the centre free; this site can be rearranged by the use of trees in mobile containers. Unity in the plan is created through transparent edges surrounding a large open space: hills with grass and trees facing the glass hills of the greenhouses bound the field as if it were a valley.

A system of strips, comprising rising terraces with plantings and slab-shaped buildings of glass, constitute the plan's framework. By placing the alignment of the strips at right angles to the avenues, a link has been sought with the location so as to connect the framework with the context. This is only partially successful since the location has many competing alignments. In the centre of the plan there is a spatial sequence of squares in order to provide a functional main link between the north and south.

### Conclusion

The La Villette site contains few utilizable features and traces. Designing on the basis of historical continuity frequently results in the reconstruction of erased traces, such as the ramparts or the street patterns of the former cattle market and abattoir. Functional relations are created by connecting the avenues with the main route from the north to the south. The organization is, for the most part, grafted on to this.

The grid is often presented as a panacea, enabling the flexible accommodation of the many programmatic items. Without adaptations and additions, however, the grid fails to provide the necessary spatial tension and the desired impetus for use. In addition, a transformation of the grid is necessary at the boundaries of the park.

In the designs the strategy of wholeness has seldom been employed. It is uncertain whether this is a consequence of the diversity demanded in the programme, or because the designers have no clear idea of the form of the park in the future (or is the form of the future park fragmented?). Most of the plans have no unequivocal access, organization and positioning in the city, a characteristic feature of fragmentation.

The difference between wholeness and fragmentation as two design strategies is indirectly considered in the following.

Landscape architects are pre-eminently able to consider the city as an arsenal of spatial forms that, for various 'functional' reasons, is undergoing a steady process of change. In their thinking, time is an elastic phenomenon and they consider it to be their task to condition the long waves of time, the *longue durée*. Architects, on the other hand, are inclined towards the provocation of time. They often endeavour, by means of programmatic innovations, to contrive that changes in spatial

reality take place at an accelerated pace [...] The Delirious Experience could be set against the *Longue Durée*.<sup>93</sup>

The pursuit of wholeness corresponds to the idea of the *longue durée*, whereas fragmentation gives expression to the 'Delirious Experience'. The question as to whether wholeness is still meaningful as a strategy, and whether it is, indeed, an important precondition for a successful park, is dealt with in Chapter 9.

In general, the designers combine several design strategies, in the hope that such a union will prove adequate for this unique brief. As an urban park, La Villette also has to support the functions of an exhibition ground. Possibly this complex composite requires precisely a combination of strategies. These must then be expressed in a certain multiplicity of meanings.

The design's capacity to solve problems is determined by the combination of strategies. Alone, they cannot succeed. The strategies with regard to use and time readily combine; for example, a framework based on historical foundations can be supported by functional connections. Combinations of design strategies can lead to multifacetedness, but also to complex composites. Does the visitor have to understand the game in order to be able to enjoy the park?

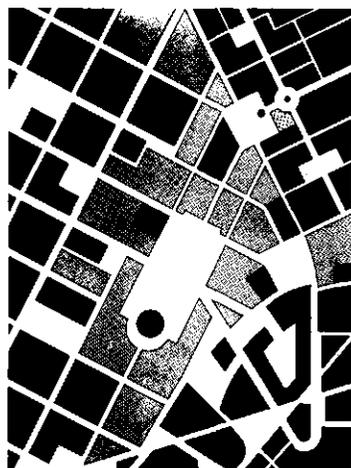
In a landscape-style park the visitor is a plaything driven from scene to scene. A skilful landscape-style designer provides insights (a view) here and there into the rules of the game however: a rapport between observer and creator develops, just as in some good forms of theatre or literature. The visitor must at least intuitively have a degree of understanding in order to derive any pleasure from being a plaything.

In an exclusively intellectual game this seems, as a rule, to be impossible for the public. Like the streets and the squares in a city, the park can be seen as an area with a multiplicity of meanings. Some are evident, others difficult to discover. The visitor, or reader, constructs his or her own story from that which is presented. Meaning is, after all, not the property of a thing, but rather the result of an interaction between the visitor and the park. If the signs are not too obtrusive one can—if one grows weary of the information presented—refrain from constructing meanings and there remains (gratifyingly) little to read. During repeated visits, new meanings can be unearthed time and again.

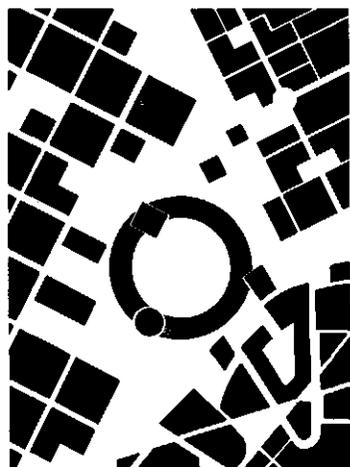
Fragmentation and wholeness are mutually exclusive. Both strategies with regard to design and layout are extremes on a moving scale. A

60 Beune and Thus, design principles

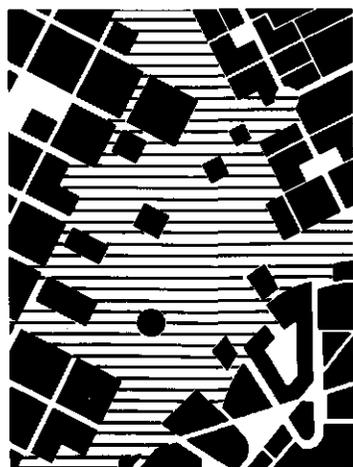
- a* completion
- b* dissection
- c* knitting
- d* dominance
- e* superposition
- f* weaving
- g* hinging
- h* balanced composition
- i* segmentation
- j* collage



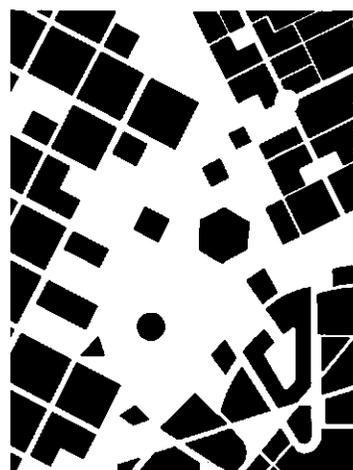
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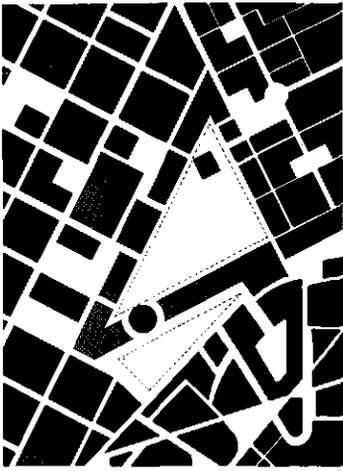
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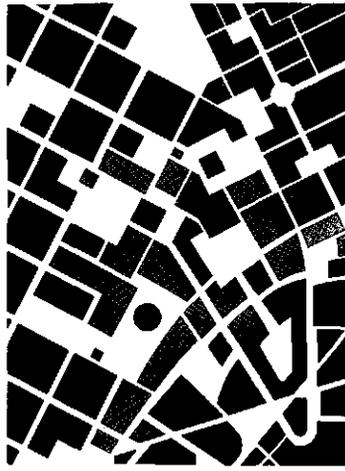
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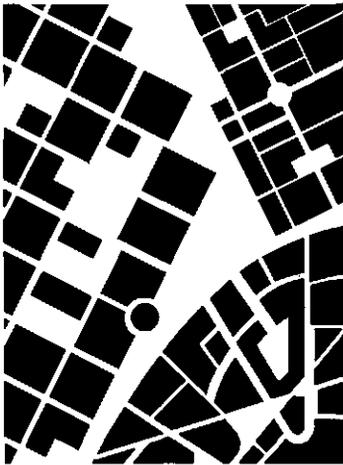
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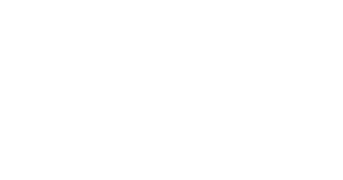
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i

clear example is the overview compiled by Beune and Thus<sup>94</sup> on the basis of research into the various architectural tendencies evident in solutions and how, indeed whether, these solutions respond to the spatial fragmentation of the city. Their categories range from classic ordering, uniform approaches, by way of dialectics of order and complexity, to the multiform accumulation of several images. Thus fragmentation is viewed respectively as a wound in the urban tissue that needs to be healed, approached neutrally and seen as a latent design quality [ill. 60].

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## 6 The styling of the design

The first three stages of our analysis concern the spatial characteristics of a plan's coherence, the arrangement of the elements in the plan, and the way in which these elements are combined. The considerations observed in these stages do not determine the final design in a simple fashion however. A translation of the situational characteristics and of the principles behind the design takes place whereby the spatial structure is materialized in design. The design tools and the themes deployed are derived from the tradition of garden and park design. A design tool is the means by which an architectural-spatial composition is effected. It is the smallest element of a style. A theme is the idea or the subject that is repeated and manipulated in a composition in order to give shape to the spatial structure, the spatial experience and the reference.

Themes are the abstract components of a style; the instrument between intention and material. Design tools are the concrete means at the designer's disposal for realizing the architectural-spatial composition. The forms have been handed down by way of more or less familiar examples from a distant or recent past.

The fourth and final stage of our analysis investigates this concretization of the spatial structure: the styling,<sup>95</sup> the representation by analogy with garden and park styles. To this end the stylistic elements of the various archetypal<sup>96</sup> park styles (and how they have been adapted) are traced in the plans. It is an exploration of design tools and themes, in which the references to historical park forms and the manipulation of these are examined.<sup>97</sup> These design tools and themes are signs and have their meanings. One may wonder what the designer

intends to say with a winding path, an avenue, an open field, a chain of hills (in view of the complex and personal nature of meaning, however, this aspect of the plans will be examined in Chapter 8).

For the purpose of the present analysis, a representation of the designer's method will be given: how does the designer deal with styling? This question is answered by placing the designs against the background of the tradition of park design, by placing them alongside historical plans.

The progress of designing can be visualized as a search for familiar situations, exemplary plans and historical styles with the aid of analogy: the collection and selection of prototypes, followed by transformation and, lastly, synthesization. The search for the new can, at a certain point, evoke associations with the existing. The search can also be restricted to the accumulation and assembling of old familiars and the stereotyped reference to historical styles. This is a crude variant. At this stage the designer chooses and arranges those spaces, volumes, lines and forms that express the essence of what is desired to be felt in the art form.

Styling is not the choosing of a style, as if it were an independent and free choice that can be produced ready-made and randomly from a drawer. Styling is something that develops during designing, something that crystallizes under the influence of the brief. It is thus closely connected to the character, the content and the technique of the brief. It does not correspond to the concept 'styling' as used in industrial design: making attractive the exterior appearance of a product without changing anything essential in the content. Style thus stems from the designer's idea concerning the way in which the designing of the plan must be effected. It is an attitude, part of the designer's realm of thought, which need not be the same in each brief nor have the same effect.

Such a searching method of working could be called eclectic, but then without the negative connotations this term carries. Eclecticism is usually used to denote nineteenth-century stylistic confusion and mixing. Here, eclectic does not mean plundering the history of landscape architecture by combining different styles in a single design, but the successive selection of different approaches.<sup>98</sup> This goes back to a definition by Hope in 1835.

His architectural eclecticism was precisely an attack on the diversity of foreign styles that he saw around him in the England of his day. He considered the use of historical styles to be admissible only if they were enriched with new insights and

discoveries. Only in this way could an architecture be constructed that was rooted in one's own soil, in harmony with one's own climate, one's own institutions and customs, in short, that was appropriate and original.<sup>99</sup>

In view of the fact that not only is a wide knowledge of the history of architecture involved, but also an intensive experiencing and an intelligent assimilation,<sup>100</sup> we may speak here of 'tradition'.

According to Norberg-Schulz, style is an important cultural fact: 'A form can only acquire content if it is part of a system of forms.'<sup>101</sup> Such a system, he calls style. Style is thus a cultural object<sup>102</sup> situated at a 'higher level' than the individual work, and it has a number of possible manifestations.<sup>103</sup> Only a style that is local and contemporary—gives, thus, expression to time and place—can be vital.<sup>104</sup>

Style can be regarded as the expression of the idea of a movement (of Romanticism, for example), and as a set of rules for spatial construction, the design and choice of (planting) material (landscape style, for example). For the purpose of analysis, it is assumed that with the aid of design tools a style is composed of a number of themes, to form principles that constitute the basis of a composition. As in music, such a theme can be manipulated, and it constantly recurs in varying forms.

Meanings are linked to the themes. If the style is pure, then the themes constitute a whole with interrelated forms of expression. If the themes are regarded as separate and independent and freely applied, then there is eclecticism. This can be achieved in a variety of ways: through the idle borrowing of themes such as stylistic fragments, or individual assimilation for example. Thus one finds oneself involved in the current discussion of trends and movements. A historical park style can serve as an example, not so much on account of its content, but because of its spatial structure.<sup>105</sup>

The styling of the plans is decomposed by utilizing the history of garden and park design in a way comparable—possibly even identical—to that of the designer: the development of the art of garden design is a series of solutions to problems resulting from the repeated redetermining and restyling of the spatial representation of nature.<sup>106</sup> The decomposition of the style of a composition points to a number of themes or stylistic elements in a design. Depending on the quality of and the relationship between the themes or stylistic elements, various concepts of form can be identified.

In deploying the decomposition of the styling as a stage in our analysis, the motivation, the artistic pretensions, the desired qualities, the tradition and the value judgements that underlie the final design

are explored. The decomposition of the styling does not precisely mirror what is taking place inside the designer's mind however. It is an interpretation of the designs. The selection process is unclear; to what extent is style a conscious choice that can be isolated and reasoned out, or the end result of sketching and hard work?

The image is—spatially or graphically—pictorially determined: 'The designing of a park is based on a pictorial ideal, in conjunction with a human ideal, tempered by knowledge of the site, material and time.'<sup>107</sup> Furthermore, the entries show a multiplicity of solutions. Not only can the programme and the initial situation be interpreted in various ways, they are clearly not the only factors determining the end result of the design process. In addition to the context (programme and location), an independent stylistic idea (form concept) plays a major role. The fourth stage of the analysis focuses on the choice of form and/or style: which form to choose and how to obtain it? Which all-encompassing image of the park to be created does the designer have in mind? These images can be schematized.

Such a styling scheme is not a means of classifying the designs; it is a schematization of reality on the basis of assumptions concerning the existence of relationships. The model can be used in order to elucidate the content of a plan's forms and themes. It provides insights into the use of form concepts in the design process. In this way elements regarded as incommensurable can still be discussed and compared. Perhaps this can put an end to the timeworn and banal but ever resurgent design debate concerning 'straight' or 'curved'.

Another aim is to include in the analysis the discussion of the revival of stylistic elements from earlier architectural periods (the reintroduction of devices for representation). The undercurrent of the scheme, the implicit recommendation for the design production that can proceed from it, is based on the original meaning of the concept of style: the features of a composition, belonging to the form and expression. 'Style was simply the literary aspect of those rules of decorum which required that the manner of doing something should be in harmony with what was done.'<sup>108</sup> One style, thus, is not superior to another; the style must be appropriate.

## Introduction to the stylistic decomposition

The history of landscape architecture can be viewed as a series of inventions; during the creation of gardens and parks new forms, new artifices, and new rules arise. The architectural inventions arise within (and are, therefore, an expression of) a development of the conception of nature, space and time. This context is determined by natural science, experiencing nature and the arts, in short, by the cultural condition of the moment.

The inventions can be grouped in styles. For the purpose of our analysis, three styles have been taken as a basis. This tripartite division has been chosen solely as an instrument of analysis. It has no art-historical pretensions.<sup>109</sup>

The styling scheme is based on a division into three archetypes of landscape architecture: classicism, landscape style and modernism (or the architectural interpretation of the site and the programme on the basis of reason, the pictorial and the functional). These archetypes must not be regarded as concrete expressions of a particular period (the Renaissance, for example) or of a certain artistic style (the baroque); rather the three archetypes together provide an understanding of the arsenal<sup>110</sup> at the disposal of the landscape architect. These are archetypes – powerful and yet, at the same time, vague and distant<sup>111</sup> – from the art of garden and park design, to which landscape architects refer both during the design process and in discussing design results.

The archetype is the spatial embodiment of a style and is composed of elements and their disposition; they are themes and design tools that are in harmony with each other because they have been collectively developed within a style. Within the scheme they are subdivided into spatial structure, spatial experience, reference and spatial tools. Because the type is also formulated in the language of drawing, it has the power of the form, it is divisible and transmissible. They are, as it were, 'standard' types. They are shown here as a series of canonized plans and illustrated by a few descriptions. The quotations are presented in order to convey something of the profusion of philosophies within a style.

### *Classicism*

The park consists of spaces with various functions: useful gardens (flower, vegetable, herb garden, orchard), ornamental gardens (mirror

pond, parterre) and playgrounds (maze, theatre, cascade). The rigidly articulated spaces are closely connected by means of an orthogonal system of axes and viewpoints, so that the multiplicity contributes to the whole. Moreover, the proportion of the spaces in relation to each other and in relation to the totality is geometrically determined in such a way that the disposition is graceful, symmetrical and harmonious. Through arrangement and nuancing, the parts of the gardens have been made rhythmical: small opposite large, deepened opposite raised, simple opposite complex. The underlying mathematical perfection is an expression of the perfection of nature. The geometry makes manifest the concealed order of the original site (in the terracing of slopes for example) and of nature.

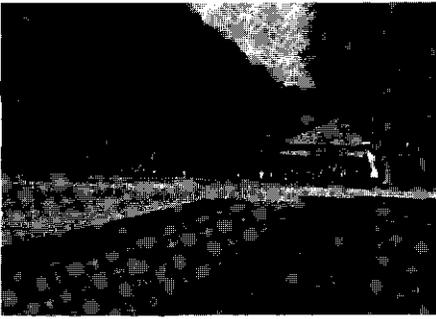
The building is the central point, towards which all parts of the park are oriented. It is situated in an elevated position for the purpose of survey. The design of the park is developed along a monumental spatial axis. The central perspective orders the elements of the house and garden in a sequence. The axis is often strung between the house and an object at the rear of the park and finally expands to form a vista across water and avenues far into the surroundings.

Transverse avenues or canals, which sometimes continue for a great distance into the surrounding area, articulate the park. From the building the garden descends in terraces, the forms become simpler, the dimensions increase, and the principal space becomes more constricted by taller and denser plantings, as a result of which the light passes from even and bright near the house to diversified and highly contrastive in the *bosquets*. There is unity in the architecture, sculpture and decoration.

The orthogonal system of the classical gardens of the Renaissance and the baroque is gradually 'broken open' in Regency and rococo gardens through the use of the ha-ha, as a result of which a view of the surrounding landscape is created; an emphasis on the view of the surroundings across the entire width of the parterre; and also the addition of the *patte d'oie*—previously only used for the entrance towards the building—to the garden.

The following quotes provide a representation of the various interpretations of classicism in landscape architecture [ill. 61 and 62].

Villa D'Este (Tivoli) is not a garden to be seen as a whole, like a picture, but one through which to progress as if through the playing of a sonata, passing through the successive movements and variations of a theme. Unlike most Italian gardens, the interest of the individual terraces is even greater than that of the central vista.<sup>112</sup>



## 61-62 Classicism in park design

In spite of the richness of its detail the Italian garden is essentially simple in plan [...] While the main vista may be symmetrical, there is endless invention and variation in the treatment of the different terraces, their steps and terminal features, and an evocative placing of the occasional asymmetric group of trees. Thick *bosche* frame the view and contain the ends of the terraces.

One of the commonest causes of failure in imitations of Italian gardens is the omission of these supporting plantations. Their role is partly to give scale and solidity to the composition held within them, and a sense of mystery to the views along the terraces which disappear into their shade, but they also play an important part in linking the garden with its surroundings.<sup>113</sup>

[On Vaux-le-Vicomte] The space division is a clear-cut distinction between dark massed woodland and light open space, in contrast to the Italian pattern of light piercing through dark, and the English tradition of misty tracery [...] Within the rigid symmetrical outlines there is a beautiful scheme of contrast and progression in the design of the compartments [...] Keeping pace with the progressive broadening of effect, each cross axis gives a deeper and more seductive penetration into the containing frame of woodlands, thus emphasizing the concentration of interest nearest the building. Interlocking with the progressively deeper penetration of the cross axes is a stepping in at each terrace of the green walls of the flanking trees, concentrating the central view as it recedes.

This opposition of two forces is met with again and again in garden design, the compelling force of a central interest played against the seduction of diversion.<sup>114</sup>

Italian Renaissance gardens were laid out on architectural lines, but in separate compartments usually without a unifying axis or overall spatial design. Le Nostre consummated the development of garden architecture by evolving one grand spatial form and by the unification of decoration, painting and formal design, a synthesis of the arts known to art historians as a *Gesamtkunstwerk* [...] Everything visible was subjugated to the authority of man and to his creative will. The dynamic tension imparted to the garden by this striving for depth and movement was increased by the contrast of light and shade [...] The clear contours of architecturally arranged trees and hedges were reflected in the still surface of pools and

canals. This tranquillity was effectively contrasted with flowing water. Optically, the shimmering haze and the flashing lights reflected from the movement of water disintegrated the rational clarity of the layout, whose every feature had been completely formalized. Even if the natural force of water is harnessed and directed by man, it still appeals to all our senses.<sup>115</sup>

Le Nostre might be said to have achieved a synthesis of the level northern garden and the Italian terraced garden [...] Italian influence is still plainly discernible in the high wall supporting the cascade at Vaux-le-Vicomte. But already at Versailles Le Nostre developed the gentle slope, la demi-côte, soft imperceptible transitions, the gradual sloping of abrupt gradients more pleasing to the eye and more convenient for walking. He preferred ramps to stairways and favored low, grassy banks and gently rising ground since such features interrupt the flow of the terrain as little as possible.<sup>116</sup>

The spatial elements in the garden are also very gracious and provide roof and shade. They mark and articulate the spaces, catch the eye in places, attract one's attention and point to other subjects in the surroundings.<sup>117</sup>

### *Landscape style*

Whereas classicism and modernism also have a significance in other disciplines, such as architecture, urban planning and the applied arts, landscape style is a notion specific to landscape architecture. As a consequence it does not seem to be of equal value. It does show, however, that landscape style is an invention of park design and not the adoption of stylistic principles established elsewhere. Although there are connections with stage design and poetry,<sup>118</sup> in the Romantic and neo-classical periods it was landscape architecture that pioneered the development of a new style.<sup>119</sup>

The scenes associated with the landscape style are based on the Arcadian or romanticized pastoral landscape. The park is an ideal representation of an invented landscape, with a more or less exotic atmosphere. The building stands in a vast, softly incandescent field, with clumps of trees placed in visually strategic spots in order to obtain spatial depth by introducing light and dark contrasts and mysteriousness and intricacy (the disposition of objects, which, by partial and uncertain concealment, excites and nourishes curiosity).

Water and path take an undulating line or free curve form, 'the line of beauty and grace', for 'nature abhors a straight line'. The line of the riverbank is a gradual bend, and its termination is concealed by plantings, as a consequence of which the impression of a slow-moving river is created. Such a linking element provides the spatial sequence of the

various scenes. The avenue is still found as an autonomous element, as a separate attraction, not as part of a system.<sup>120</sup>

The park is surrounded by a 'belt': a walk taking advantage of the relief, with varied views inside and outside, whereby the park and its surroundings are interrelated to such an extent that they appear to be one. Picturesque elements in the surroundings are incorporated into the visual composition. Instead of a literally finite sight line, the spatial axis is indicated by means of relief, groups of trees and built objects. An 'improved' and dramatized landscape is created.

The park is spatially constructed in such a way that it has to be observed while moving. Because of the turnings in the paths and the unexpected vistas of lateral spaces, a certain sense of disorientation is created. The emphasis is on individual views and scenes that unfold during the traversing of a carefully traced-out path. A scene is a picturesque image or view in which foreground (first plan), middle and background become individually apparent. The visual angle is limited by screens of groups of trees or boscajes. More depth and space is suggested in the scene than is apparent in the actual dimensions through the positioning of *coulisses*, the convex and concave shaping of the ground, the texture and colour of the plantings, and smooth spatial transitions and vague and indefinite boundaries. The success of the park lies chiefly in 'the contrasts, the management of surprises, and the concealment of the bounds' (Brown).

A style has many forms. The great landscape style of Brown is formal, 'clean'. Clear and simple forms and a restrained use of materials produce an abstract image aimed at tranquillity, harmony and infinity.<sup>121</sup> The subsequently developed picturesque style is based on a late-eighteenth-century Romantic aesthetic ideal and is pictorial, varied and rich in contrast, irregular and complex.<sup>122</sup> The park is full of literary, emblematic or scenographic infillings, with the aim of evoking feelings of sorrow, joy, wonderment, sublimity and suchlike. It is a paraphrase, an adaptation of the composition with decorative additions.<sup>123</sup> In this way, various forms or genres of the landscape style arise.<sup>124</sup> The architectural style of the buildings is mostly neo-classical, but occasionally Gothic or exotic in order to evoke a particular atmosphere.

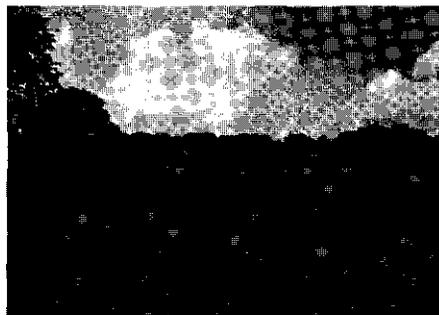
In the development of the urban park the landscape style occupies a prominent place. Scenes associated with the landscape style were adopted in the building of the first public parks in the nineteenth century. 'Stourhead has, on account of the introverted character of its

spatial organization (the views over a centrally situated lake), proved to be a suitable model for nineteenth-century urban parks.<sup>125</sup> Major adaptations are necessary, however, in order to create in the city the idea of a continuous space with vague borders and varied walks. The private place for the few is refashioned to form a public facility.<sup>126</sup>

The following quotes are intended to illustrate the broad range of interpretations associated with the landscape style [ill. 63 and 64].

Sources of Pleasure in Landscape Gardening:

- 1 Congruity; or a proper adaptation of the several parts to the whole; and that whole to the character, situation and circumstances of the place and its possessor.
- 2 Utility. This includes convenience, comfort, neatness and everything that conduces to the purposes of habitation with elegance.
- 3 Order. Including correctness and finishing.
- 4 Symmetry; or correspondence of parts [...] So natural is the love of order and symmetry to the human mind, that it is not surprising it should have extended itself into our gardens.
- 5 Picturesque Effect. This head [...] furnishes the gardener with breath of light and shade, forms of groups, outline, colouring, balance of composition, and occasional advantage from roughness and decay, the effect of time and age.
- 6 Intricacy. That disposition of objects, which, by a partial and uncertain concealment, excites and nourishes curiosity.
- 7 Simplicity; or that disposition of objects which, without exposing all of them equally to view at once, may lead the eye to each by an easy gradation, without flutter, confusion, or perplexity.
- 8 Variety [...] the variety of nature's productions is endless, and ought to be duly studied.
- 9 Novelty. Although a great source of pleasure, this is the most difficult and most dangerous for an artist to attempt; it is apt to lead him into conceits and whims, which lose their novelty after the first surprise.
- 10 Contrast supplies the place of novelty, by a sudden and unexpected change of scenery, provided the transitions are neither too frequent nor too violent.
- 11 Continuity; [...] the delight expressed in a long avenue, and the disgust at an abrupt break between objects that look as if they ought to be united.
- 12 Association; personal attachment to long known objects, or the spot endeared by the remembrance of past events.
- 13 Grandeur. This is rarely picturesque, whether it consists in greatness of dimension, extent of prospect, or in splendid and numerous objects of magnificence, but it is a source of pleasure mixed with the sublime: there is, however, no error so common as an attempt to substitute extent for beauty in park scenery, which proves the partiality of the human mind to admire whatever is vast or great.
- 14 Appropriation; [...] extent of property.
- 15 Animation: [...] seeing life and motion, whether the gliding or dashing of water, the sportive play of animals, or the wavy motion of trees.
- 16 Seasons and Times of Day.<sup>127</sup>



### 63-64 Landscape style in park design

The capital stroke, the leading step to all has followed (was the introduction of the ha-ha, the sunk fence) [...] No sooner was this simple enchantment made, than levelling, mowing, and rolling followed. The contiguous ground of the park without the sunk fence was to be harmonized with the lawn within; and the garden in its turn was to be set free from its prim regularity, that it might assort with the wilder country without.<sup>128</sup>

The Landscape Garden is a garden with open fields, clumps of trees, wide glades leading up to the house. Brown's gardens looked rather shaven, later ones more luscious, but the principle remained the same. Garden structures are essential, partly hidden behind trees, often of exotic derivation. Flowering shrubs might occur, but no flowers, certainly no parterres or flower beds.<sup>129</sup>

Summarizing, one can say that there was a literary genre which might have been influential, but did not actually bring about the landscape garden. Again at some later moment, Claude and Gaspard might have contributed, but the true progenitor of the landscape garden of its first and second phase was stage design and its written emanations, evolving from Vitruvius and particularly from the Renaissance tradition.<sup>130</sup>

Let us again refer for the *Rule of our Conduct to Nature*, she is never so charming as where wildest. There is an easy Freedom and a pleasing Negligence in her Disposition, which charms because it is not regular [...] It is an Air of Irregularity we advise, not irregularity itself; there requires more Art by far in this distribution than in any other; and there requires afterwards the great additional Labour of concealing it [...] Everything we see should be chosen for its place, though it seems the result of Accident.<sup>131</sup>

[On Stowe] There is no place in the composition where it can be said that finality is reached. Always there is the invitation to explore further, the glimpse of another temple on the far side of the water, another archway at the end of the vista. 'The foot should never tread by the same path that the eye has travelled over before.' They [the built objects] are signposts which ensure that the symphony is unfolded

in its proper sequence. They are also frequently used as the connecting links between changes in scene and mood.<sup>132</sup>

### *Modernism*<sup>133</sup>

In addition to classicism and the landscape style, the Modern movement can be regarded as a historical, and thus archetypal, style.<sup>134</sup> The Moderns approached style as a by-product of rational design research, whereby the form emerges from function, material, construction (particularly ecology) and situation and the often less clearly defined objectives regarding experience. In the access, zoning, dimensions and design, there is a close link with the urban development organization of the surrounding area.

The design is 'without illusion, without blurring, without embellishment, without the semblance of something beyond itself'<sup>135</sup> (van Doesburg), 'without meaning, other than that which arises from the construction and the nature of the material' (van Eesteren). The park is not elevated or mysterious, but is recognizable in its elements, functioning and use. The visitor is thereby free to use it, and is not manipulated by irrational forms that refer to a mythical or magical source.

Lucid ground-plans are pursued. The bases of the spaces are made of elementary, geometrical forms; a rectangular field is, indeed, a suitable and practical form for activities. The composition is pure in terms of the relationships between lines and surfaces. The space remains as intact as possible. Additions are visible as such. This does make the original spatial quality of pure forms and relationships vulnerable.

For the purpose of orientation, no concealing groups of trees or buildings are placed in the corners. The visitor acquires a grasp of the space and can see through the situation. Where they arise as a result of torsion or the conflict of alignments, residual forms and left-over corners are kept as small and distinct as possible. In this way a spatial art is created with a spontaneous and autonomous, that is to say, undirected, spatial experience. The visitor can look with 'new' eyes, can see, or rather can see through, the situation because nothing is being referred to other than what can be verified on the site itself. 'Seeing' appeals to a developed power of perception on the part of the user. For this reason the appreciation of modernist parks by professionals and laymen quite often diverges.

The plan must be of a practical simplicity, lucid and sensitive and, above all, not showy, pretentious or pompous, but restrained, detached

and subtle. The forms are simplified to their spatial essence, the major lines are decisive and solid. The use of materials is practical and, certainly in the beginning, traditional. The ordinary and not the exceptional is pursued in design and in the treatment of plant material.

As regards spatial dynamics, the modern park can also be seen as a geometrical interpretation of the landscape style: the fluent pattern of interpenetrating spaces. Smaller spaces are separated from the general space by boundaries that are not entirely complete. There is an additive arrangement of places: an addition of space according to need and a connection through a sequence of articulations. This partly explains the preference for asymmetry and the uneven number of lines of trees. The source of inspiration is the soberly arranged farmyard.

The axes acquire a new dimension in relation to classicism: more informal and more restricted. The garden of Hidcote Manor, for example, is a precursor of the modern. The garden consists of rooms, with the aim (function) of displaying a wide variety of plants and plant arrangements. The main vista terminates in the open air; nor are the other axes—derived from classicism—terminated by an object. 'Instead of giving the eye something on which it can rest and be content, they lure it on by an air of mystery, by the knowledge that there is something round the corner. The great cedar is just off centre, both from the main walk and from the cross vista. This unorthodox treatment suggests that classic features have not been blindly copied, but have been adapted to serve new ideas.'<sup>136</sup>

Nor is the geometrical form that of classicism. The straight line is relativized by flexibly arranged plantings. Square, circle, triangle and oval are, indeed, fixed forms, but they are used as forms that are free and almost suspended in space, reminiscent of abstract painting. The latter is particularly evident in Scandinavian landscape architecture, in which a sensitively controlled naturalism has been added to the simplicity of the New Objectivity (*Nieuwe Zakelijkheid*).

Contrasts between the rigidity and the clarity of the space and the looseness and luxuriance of the plantings are manipulated. Rigid is for the main layout and the framework and signifies regularity, a limited plant assortment, which is indigenous and phytosociologically in keeping with the soil type. Loose is for the subordinate and supplementary in the structure and signifies irregularity and a varied and exotic plant assortment, with effects related to the picturesque and the Romantic. Paths should follow the walker's natural course across the terrain, directly towards a particular goal. Short cuts are welcome. A path

reaches an open field in a T-junction, so that the large, continuous field invites its free traversal, independent of path, avenue or edge of the woods.

The 1960s and '70s can be regarded as the declining years of modernism. Many of its followers had strayed from the original body of ideas that constituted modernism, largely because these ideas had been inadequately formulated. The architectural movement of that time can be termed Functionalism, from which it is apparent that it is a more restricted design philosophy within the Modern movement.<sup>137</sup> This philosophy played modernism false really right from the outset. As Lubetkin recently remarked, 'The Functionalists could not distinguish between the reactionary and imbecilic elements of the Beaux Arts and the great classical tradition. Functionalism is the best method of depriving architecture of its riches.'<sup>138</sup>

Style<sup>139</sup> received little attention in the discussions about designing, as if the subject were one suited only to art history. The concept was circumvented by the pursuit of unassailable and generalizable objective or scientific terms.<sup>140</sup>

The following quotes illustrate the varied interpretations associated with the Modern movement [ill. 65 and 66].

The basic rules are natural simplicity and functionalism, efficiency and modesty. One cannot be simple enough, one cannot be modest enough, to become rich and happy between all the blossoms and the fragrances and sunny joy of the garden.<sup>141</sup>

Reason is our only certainty in this world, and the clear geometric forms of modern architecture are for me symbols of man's desire to shape his surroundings, to introduce order in the chaos. But a rational approach does not preclude emotion. Every artistic creation begins with an emotional impulse. And architecture is ultimately an art and not a science, as the Functionalists maintained.<sup>142</sup>

Otto's plans are characterized by regularity, order and a demonstrable connection with existing structures. In the plans, 'rigid' and 'loose' complement each other. The rigid part of the planting layout always coincides with the given (urban planning) main line, the loose section with the lower scale levels. This loose section is used to retract, relativize, balance and to evoke tension. In places, a more picturesque approach to the subsidiary layout is set against the rigidity of the main layout.<sup>143</sup>

We would do best to reduce the number of paths to a minimum and to lead those few consciously to the destination.<sup>144</sup>

One speaks of nature and something natural and one believes that this is for a garden most worthy of pursuit. A garden, however, is not nature; it is a work of



### 65-66 Modernism in park design

man. I would like to call it almost sophisticated agriculture, maybe as the perfection of farming, although gardening is probably the elder.<sup>145</sup>

An imbalance or friction in the composition of planes (the 'defect') belongs where it originates; it has to be small and compact; it is placed in the margin; makes the defect visible; connects the inner part of the composition with the wider environment; it is the most refined or elevated place; it resembles the red in the compositions of Mondrian.<sup>146</sup>

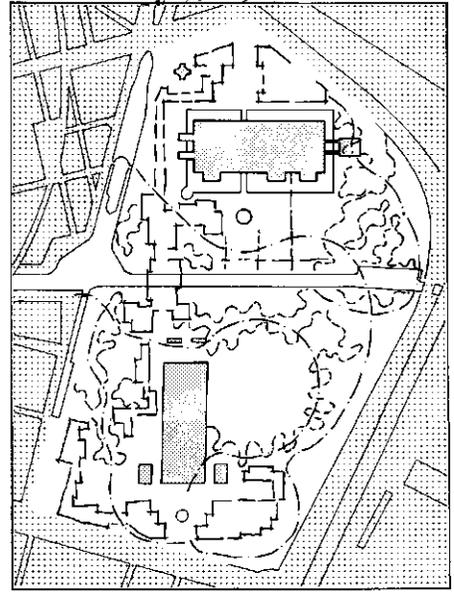
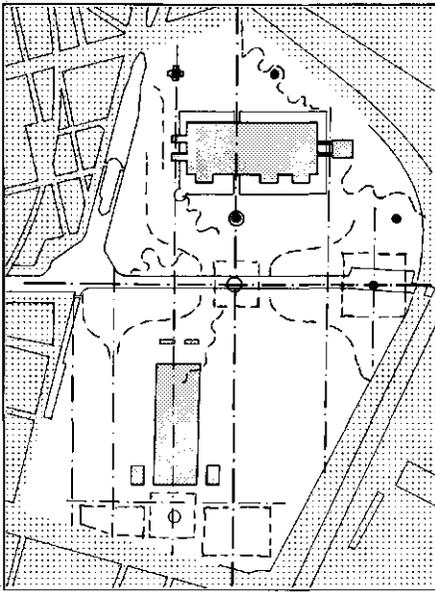
Man is nature, and his civilized cultural imprint is as important as the print of the trees and the fields and the geese. I'm not against having loose landscape, but first you have to have an architecture for the space outside [...] When you organize space in this geometrical, simple way you get much more out of it [...] Efficiency of space makes it imperative that you organize your spaces this way rather than in a loose manner.<sup>147</sup>

#### *The scheme*

An archetype has a certain intrinsic morphological structure because of a coherent system of formal image devices. An archetype thus consists of a number of harmonious themes and design tools on account of the fact that they have been collectively developed. It is the adaptation, repetition and manipulation of themes that provides space-creating elements with a recognizable meaning and gives them power of expression.

Themes are the abstract components of a style, the instrument between intention and material. Design tools are the concrete means available to the designer to create the architectural-spatial composition. They are the smallest elements in a style.

Pages 158 and 159 provide a schematic representation of the themes and design tools used to decompose the styling in the designs examined

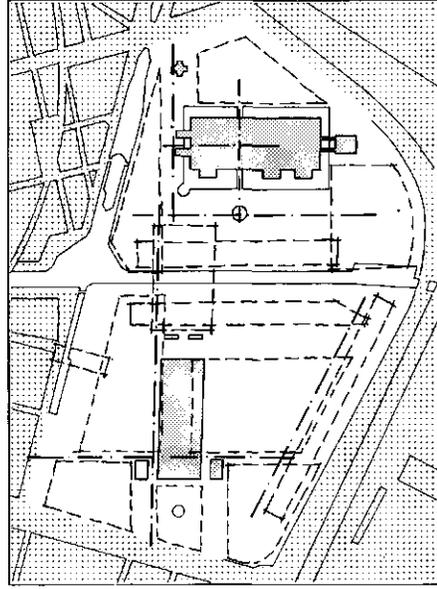
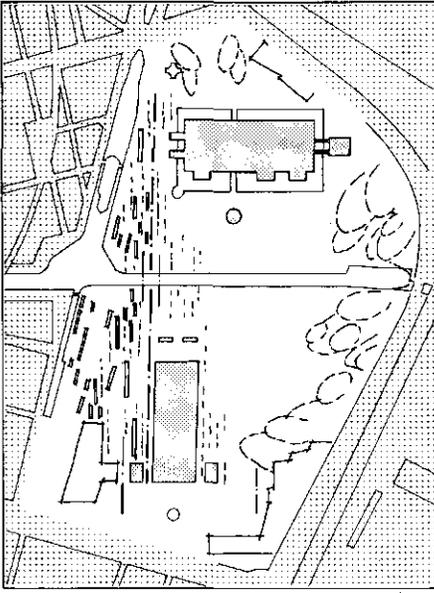


67 *left* Pragmatic classicism: Provost  
 68 *right* Eclectic landscape style: Capart

in this study. By analysing which elements of this scheme are wholly or partly present in a plan, the plan can be decomposed according to its stylistic features. By way of introducing the results of the fourth stage of our analysis, four examples have been taken from the various competition entries. Since pure styles are not much favoured, there is only a partial use of style themes and design tools. The consequence seems to be that, although not inevitable, the traditional tools that have been employed never result in the same quality as they originally did.

In the plan by Provost the spatial structure is exclusively classical, but the plan is less explicit in its use of other themes. References are, in particular, both practical and functional and are based on the programme of requirements. Individual and organic forms have also been added. This appears to emphasize the practical background to the stylistic choice: a pragmatic application of classicism [ill. 67].

Capart's plan is not exclusively in the landscape style. In fact there are few pure landscape-style elements present. There are also various pragmatic additions. The elements in the design are not taken directly from the landscape style but from a derived, eclectic form of the nineteenth-century urban park [ill. 68].



69 *left* Modernistic structure: Andersson  
 70 *right* Modernism: Bakker and Bleeker

Situated next to one other in Andersson's modernist plan are a zone of picturesquely grouped buildings, a pragmatic connecting axis, a central open meadow, and modern stylized scenes of oval hills and groups of trees. It is modernistic in structure, but the spatial experience and references are impure because of the use of spatial devices from the landscape style [ill. 69].

In the plan by Bakker and Bleeker, another example of the influence of modernism, the spatial structure is zoned, clearly organized and composed in a loose geometry of lines and surfaces. It is a practical plan, which –by way of supplement– provides, on the one hand, space in some areas for distinction, parade and more theatrical effects, and, on the other hand, closed spaces for the enjoyment of nature. The meaning rarely goes beyond that of the materials used. It is in this respect one of the most restrained designs and, therefore, to a large extent, modernist [ill. 70].

## A description based on the styling scheme

### *Pilton*

Themes and design tools from all the styles have been employed. Because reference is made solely to the programme of requirements, classical elements, such as the deepened main axis, have been deployed for functional reasons. This strip is interwoven with subsidiary spaces. There is a contrast between straight and irregular, but not between individual patterns of rigid and loose. Had the historical style fragments been elaborated more autonomously and more fully, a clear collage, rich in contrasts, would have resulted. As a consequence, the potentials of the stylistic themes used have not been exploited to the full. The scenes, for example, lack tension and depth. The interweaving of flowing and sometimes whimsical forms with an orthogonal pattern is the clearest thematic form in the plan.

### *Pesce*

Occasionally either a landscape-style or modernist theme is expressly made use of. Mostly there is a partial use of elements from the various styles. It is sometimes difficult to decide which elements in the scheme ought to be highlighted, since a new form has been sought through merging different devices.

### *Corajoud*

None of the themes has been taken exclusively from one style. The plan is in any case modernist, and it generally contains elements from the landscape style and, incidentally, from classicism. Because many different sources have been tapped, and because the elements have been incorporated in an individual manner, a new whole has been created that is rich in symbolism. More themes dominate the plan: an orthogonal pattern of lines is transected by a pattern of intersecting lines, and there is a repeated contrast between square spatial surfaces and whimsical volumes.

### *Drewniak*

In the main, classical and modernistic themes have been simultaneously, and thus partially, deployed. There is a fragmentary reference to the landscape style, with corresponding design tools, and this contrasts with and affects the rigid regularity of the grid. The overlapping of surfaces is a recurring theme that succeeds in emphasizing the tension (the conflicts and the dynamics) of the site.

### *Zagari*

In terms of its spatial structure and spatial experience the plan is quite markedly functional. The references and the design tools are drawn from all the styles. Because of this, a basically modernistic plan is supplemented in pursuit of a number of atmospheres and a wider appeal. Because of the limited extent to which the various themes alongside each other are incorporated, this does not always result in an innovative design.

### *Hara*

The spatial experience, and the design tools in particular, are modernistic. A manifest pursuit of symmetry gives the plan a theatricality that is not in harmony with this. Further, elements from all the styles are present. This sometimes gives rise to a rich confrontation through varying the strips of vegetation and the strips of buildings.

## **Conclusion**

Although the archetypes are derived from the tradition of garden and park design, in terms of art history and architectural theory they have no further significance. The type is an analytical instrument. For the purpose of this study, the plan is considered to be the result of a process that has the type as its basis. By means of characterization, an attempt is made to comprehend the logic of the spatial forms and patterns. The styling, thus, has an underlying idea that is determined by a type and its assimilation. The adaptation can be inventive and spiritual (innovative), virtuosic and ingenious (mannerist), perfunctory and unimaginative (cliché'd), indolent and sensationalist (populist), austere and clini-

cal (formal), or artless and unpretentious (informal or pragmatic: 'whatever comes to hand'). There are also differences between plans within one style, from simple to complex; from the deployment of few devices to great effect, to excess and decoration.

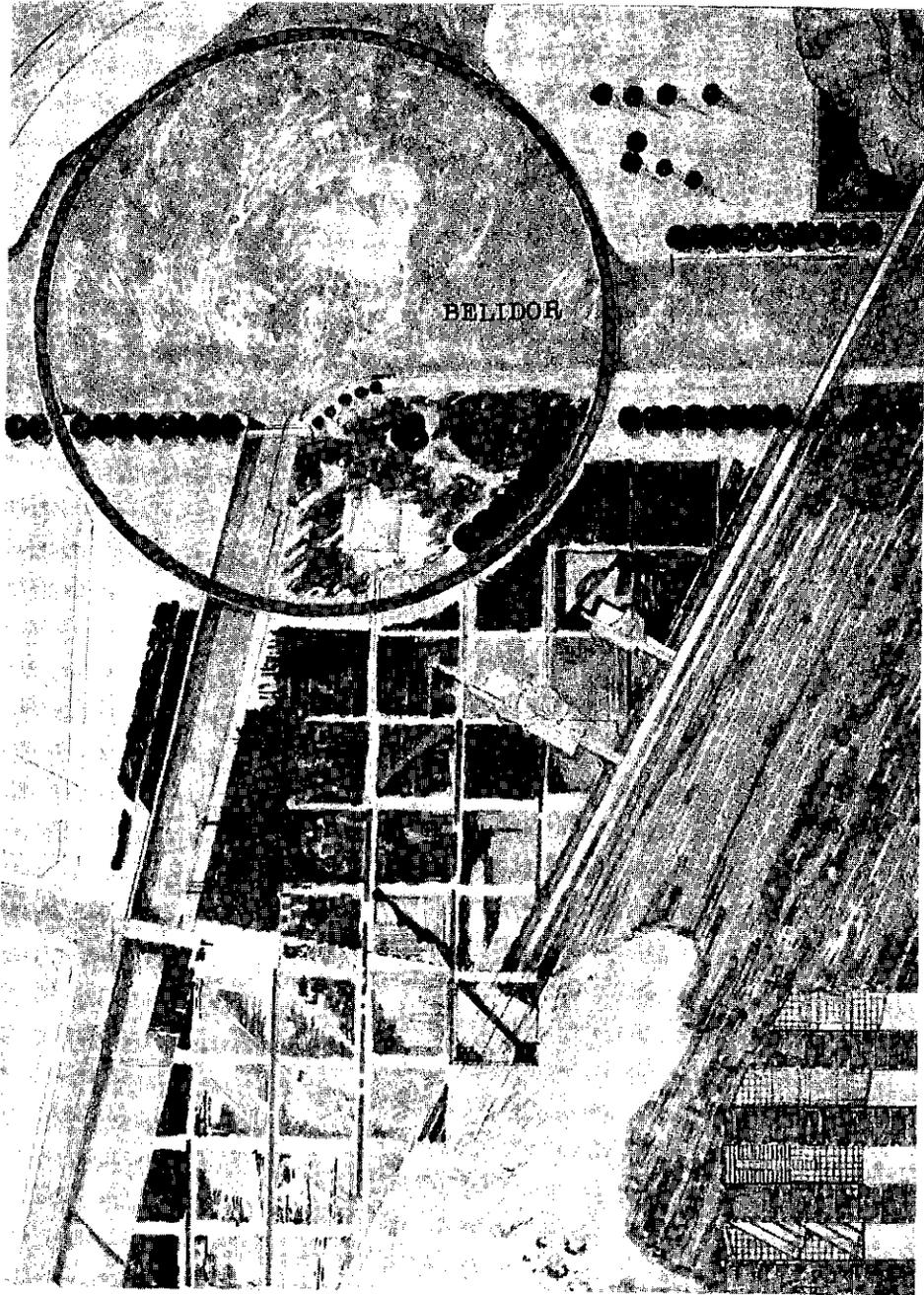
Strictly speaking, stylistic purity and stylistic perfection are dull because they are predictable and academic. In a good design it is precisely the relativization of stylistic features by means of manipulating (through exception and transgression) the rules that determines the quality.<sup>148</sup> The landscape architect in particular is frequently forced to respond to situations. If the stylistic elements or themes are inventively adapted, then the style is vital. The reverse is the rigid and inflexible placing of familiar patterns over the foundations of a site and trying to force these patterns to conform to the site's boundaries.

The competition organizer considered contemporary and historical park forms to be inadequate as solutions to the brief for La Villette. An entirely new park form has been demanded. To what extent is the designer still able to use existing themes and form tools; which potentials have been found in order to give the park of the twenty-first century a correspondingly innovative form?

Pure styles are both out of fashion and emphatically rejected by the EPPV. Mixed styles have been much tried in the solutions submitted, partly because of the requested pluralism and polysemy. The choice and combination of styles is a long-standing problem in landscape architecture. 'The theory and practice of the Picturesque introduced the modern method of *critical choice* into architectural design, namely that of the montage and the fragment.'<sup>149</sup>

Most of the entries consist of mixed forms. In these pragmatic, eclectic and collage designs a limited number of terms from the above scheme constantly recur. These can be used to characterize the derived styles. The incomplete and unassimilated use of themes and devices gives rise to a pragmatic hybrid, as, for example, in the plan by Townsend. The use of themes from a number of styles also results in an eclectic plan. This can do justice to a variety of architectural sources and achievements from several movements and traditions. It does, however, require intelligent assimilation; not the exclusion, but the inclusion of differences and the creation of a new whole, as in the design by Corajoud [ill. 71].

A utilization of style fragments rich in contrast can create a collage, as in the plan by Louwse in which the landscape style determines the park in the narrow sense, and the modernism of the buildings and the



71 Corajoud, Rond-point des canaux

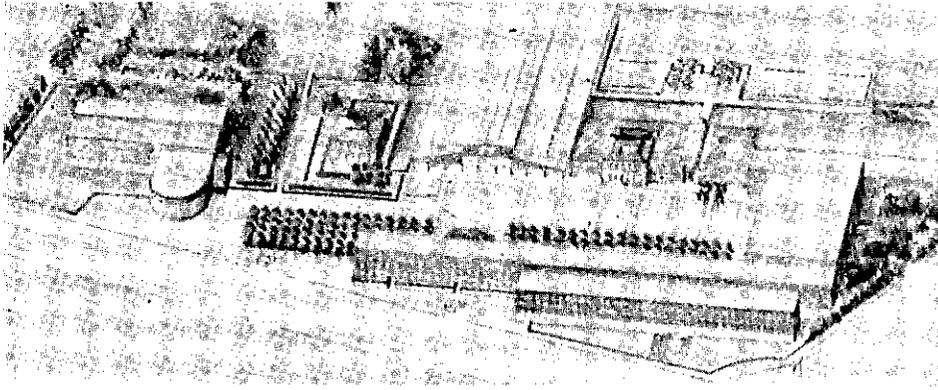
squares, and the functional arrangement of the gardens, provides a link with the city [ill. 72].

Mixing gives rise to a compositional medley, based on the pursuit of multiformity, and resulting in complex combinations that have something to offer for everyone. In this way, designing approaches marketing. Here, style is a commercial component: 'a lubricant in order to be able to satisfy more flexibly the expectations of clients and the public at large'.<sup>150</sup>

In quoting historical styles, the quality of the original example is seldom achieved. The La Villette site has insufficient space for this, and the designers insufficient knowledge and skill. If clear-cut stylistic rules no longer apply, however, neither can they be violated or broken in a meaningful way. Because the pieces are insufficiently distinct, there are few real collages of style fragments.

Stylistically pure designs use trees lucidly related—few types and large numbers, arranged according to geometry or concealed geometry—and in which the ornamental plantings, either accentuating or contrastive, have been added to the main form. The pragmatic plans can be identified by the muddled way in which the plants are related: multifarious, less spatial, and more of a decorative addition, something to full up space, as a consequence of which the main form is considerably weakened or even absent.

The reaction to modernism, usually referred to as post-modernism (a facile term, because it defines what it is not, but not what it is), uses the application of absurd quotations, expressly juxtaposes images that hitherto had not been juxtaposed, endeavours to be humorous or surrealistic, and is graphically oriented. Ideas and forms from post-modern architectural trends have found their way—by and large in a weakened fashion—into landscape architecture: 'The mania for forms is taking control of landscape architecture.'<sup>151</sup> They are characterized by a play with forms, usually small: triangles, squares or rectangles, circles or segments of large circles, meanders or serpentine, with a whole range of alignments and with patterns, usually fragments of grids. This often results in obtrusive 'statements' by the designer that are not easy to ignore. It is a manipulation of attention similar to the picturesque landscape style. The organization of such plans with axes and large geometrical forms is not the same as in classicism. They do not construct an infinite and abstract space, but present a graphic pattern that is, as it were, added to the plan and that loosely connects the elements of the plan by touching them. At best, this is an experiment with forms from which innovation can emerge.<sup>152</sup>



72 Louwse, isometry of the south entrance

The recognition of the importance of tradition is fundamental to this scheme of decomposition. In addition to being the creator of the future, a designer is, indeed, a culmination of the past (and possibly now more the latter than the former). The great historical examples teach lessons; they provide not only sources of inspiration and commentary,<sup>153</sup> but also material for analysis that can demonstrate what works and how, and what does not.<sup>154</sup> The tradition of garden design is still relevant because of the material with which gardens and parks are constructed; the possibilities offered by plantings, earth, water have scarcely been changed, unlike building techniques. It was the influx of new sorts of plants during the nineteenth century that led to emphatic attention being paid to the individual plant, as a consequence of which the landscape style became the gardenesque.

Ecology in landscape architecture can be compared with the role of construction in architecture. Knowledge with respect to ecological processes has greatly increased in recent years. As a result, ecology occupies a more prominent position in the design process.<sup>155</sup>

Milchert classifies styles according to three main concepts: *Traditionalismus*, *Funktionalismus* and *Naturalismus*.

The decisive criterion for the categorization was the motive I suspected behind the contemporary landscape architecture and its aesthetic.

Traditionalism: Beautiful is what beautiful was. Beautiful is what seems to be familiar. Beautiful is the original.

Functionalism: Beautiful is what is easy to maintain. Beautiful is what is economical. Beautiful is the functional. Beautiful is the self-made. Beautiful is what serves the human need for nature.

	Classicism
1 spatial structure	axiality and central perspective
<i>expressed in</i>	symmetry hierarchy intersection and terminus geometrical construction  unity building and garden
2 spatial experience	sharp boundaries abstract, volumetric form tangible space calculated static balance axiality decorative promenading, strolling separate experiences absolute and collective complex, compound order
<i>movement</i>	
3 reference	eminence ostentation, parade theatrical intellectual (rationality) self-assured rational mythological rational/artificial nature future: innovation or renaissance
<i>with respect to time (at the moment the pure/original style was current)</i>	
4 design tools	avenue and <i>bosquet</i>
<i>plant patterns</i>	hedge, row of trees as wall canal, mirror fountain, cascade <i>tapis vert</i> sight axis terrace, steps parterre plant as form tool structure and added ornament geometry horticulture
<i>technology</i>	

NOTE *The lists are intended to be read in their entirety and in both directions*

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Landscape Style	Modernism
continuity by means of sight lines and scenes	zoning by means of articulation and connection
asymmetry	disordered symmetry
sequence	conjunction
pause and focus	node and hinge
pictorial composition	<i>ad hoc</i> composition of lines and surfaces, loose geometry
contrast building and park	juxtaposition between building and surroundings
<hr/>	
vague boundaries	all sorts simultaneously
sculptural, plastic form	object-linked form
flowing space	penetration/linkage of spaces
picturesque	both as counterpoint
dynamic balance	Gesamtkunstwerk
continuity	zoning
graceful	practical
roaming	walking, going
successive experiences	simultaneous experiences
individual and subjective	collective and relative
intricate order	clear order
<hr/>	
harmony	pragmatism
delight in nature	efficiency
dramatic	unemotional, succinct
instinctive (emotionalism)	efficiency (functionality)
melancholic	with <i>élan</i>
pictorial	functional
literary	programme of facilities
uncultivated nature	(agriculturally) exploited nature
past: then and elsewhere	today: here and now
<hr/>	
group of trees (clump) and avenue as autonomous element	avenue, loose grouping of trees and shrubbery bed
ha-ha, boscage	hedge, row of trees as line
river, brook	watercourse (line and surface)
waterfall, rapids	play pond, sprinkler reservoir
stream valley	playing field and sun terrace
scene	sight lines for access system
hill, slope	incline (embankment, talus)
meadow with deer	flower garden
plant by itself, individual or group form	plant as dividing device
organic/naturalistic	structure and construction as ornament
loose	geometry and invisible geometry
botany	forestry and agricultural engineering

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Naturalism: Beautiful is the re-natured landscape. Beautiful is what grows spontaneously: the nature-garden aesthetic. Beautiful is what gladdens the eye and the palate.<sup>156</sup>

The most striking difference between this and the scheme employed in the fourth stage of our analysis (in addition to the failure to distinguish between the traditional classical and Romantic styles) is the ecologically determined *Leitbild* (idealized image). In a more detailed elaboration of Milchert's categories, ecology appears in various places too, for example in the *Oeko-Funktionalismus*. Partly related to this is the *Asthetik von Unten*, the interest in the participation and involvement of users, the appropriation, arrangement and management of sites and the 're-natured' urban landscape. 'A new concept of environmental aesthetics in which ecology becomes the matrix for all environmental design and quality is judged by ecological «fitness»'.<sup>157</sup> The competition provided little pretext for ecology, however, and ecology is possibly no longer of central interest to designers, for the entries show no predominantly ecological strategies.

The question arises as to whether ecology can be said to be a separate archetype of style. It fails to fulfil the necessary conditions however. The emphatic attention to ecology in designing has not resulted in a style, because ecology is one of the functional aspects of designing.<sup>158</sup> In this sense, an emphatically designed park is comparable to a 'high-tech' building. Parks that are designed solely on an ecological basis bear a close resemblance to many nineteenth-century promenade parks; there is a staging of 'beautiful' and 'autonomous' nature and nothing more than that. Both natures are imitation and surrogate.

Another important source of inspiration is the agrarian landscape,<sup>159</sup> on account of the beauty of the simple geometry of the cultivated fields, orchards, avenues and canals. The devices admired here largely belong to the classical tradition, whereas the practical is always an important reference in the modern. Strangely enough, there are no clear examples of the influence of agrarian landscape in the competition. A more Romantic effect is also possible, however, as in the design by Team Grün-Plan. The agrarian reference does not result in a purely geometrical plan. The dimension of time is inherent here, as a consequence of which it has something about it of a developed medieval street pattern, or a gradually transformed pattern of land-use development.

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## 7 Evaluation of the method of analysis

Competitions in landscape architecture are a fascinating phenomenon. They are an instrument with which to search for quality and innovation. Ideally, a new perception of old problems is requested, or answers to new questions. Because they are responses to the same programme and the same location, competition entries can be compared; only the design philosophies differ. By means of a comparative design analysis, these can be ascertained and discussed.

Design is a form of research. The product is too much an artistic object to be able to characterize it as scientific.<sup>160</sup> Participation in competitions is, thus, not a scientific activity, but it can provide a good basis for subsequent analysis.<sup>161</sup>

What has been achieved with respect to the main objective of the present study: a contribution to the development of theories of landscape design? By means of decomposing the design strategies and analysing the designs in terms of the concepts outlined in chapters three to six, our analysis has succeeded in providing an understanding of general design philosophies and traditions. At the same time, some of the basics and principles that underlie the design of parks have been outlined and described. Further, our analysis corresponds as closely as possible to the way in which a plan is created, as a result of which the design process in landscape architecture has been elucidated.

Because of its size, complexity and ambition, the Parc de la Villette competition has been a challenge for many designers. Because of this, our analysis enables us to provide considerable insight into contemporary design philosophies. Part three discusses this further, and examines and reflects on prevailing ideas in contemporary landscape design and the attempts to renew the concept of the urban park.

A method of comparative design analysis has been developed and applied on the basis of a survey of the literature, experimentation, and rationalization. Through the technique of decomposition and ordering, an understanding has thereby been obtained of a considerable number of plans (and, hence, the competition as a whole). This has not, however, completely solved all our difficulties.

Inherent in the systematics of the analysis is the problem that designers constantly shift to and fro in their line of thought, from one level in the analysis to the other. As a consequence, the boundaries cannot always be sharply drawn. For this reason the analysis is not organized in a linear fashion, but cyclically; thus certain subjects and aspects are dealt with more than once, but then viewed each time in a different light.

The design strategies and the styling of the design are described with the aid of a typology; an example is presented that displays all the features of one type. The characteristics, with their qualities and consistencies, are thereby clarified. The design operations and choices become penetrable. In reality, however, a design is usually composite, the considerations are less precisely determined and the consistency is limited. The design strategies, which describe a general mode of working, are derived from specific designs in a specific situation. By following a line of reasoning through and by abstracting, a sufficiently complete image is nevertheless produced.

The categories and concepts used in the analysis are instruments for testing, not direct recipes. They can be employed during the design process in order to try to control its progress; not only for the designer, but also—in the designer's contacts with the outside—in order to allow others to participate.

The method of analysis presented here can be deployed for a number of cases, particularly in complex situations. Its step-by-step structure is directly and universally utilizable. The concepts will need adapting or expanding in some cases though; they have, after all, been chosen and defined on the basis of what was encountered in the plans considered in this study, namely principally those for La Villette.

In our analysis of the Parc de la Villette a number of aspects of the designer's craftsmanship have received little attention. The character of the competition, the level of scale, and the detailing requested provide insufficient opportunity to do so. Thus, with regard to plantings, the choice made by designers and the utilization of these choices have not received adequate attention. As a rule, the plans contain insuffi-

cient information about this. Little can be said here about such ideas as the introduction of more indigenous vegetation (for ecological reasons), or the use of exotic plants (as a symbol of the hope that nature will triumph over human frailties, or simply on account of the spectacle and the luxury they emanate). Experiments in this field are of major importance for the future of the urban park and of green spaces in general.

The method devised by Meeus<sup>162</sup> for the plans produced for the design seminar 'Land van Hoboken' forms the basis of the present analysis: it served as the starting-point for the development of stages two and three. Ultimately, considerable differences have emerged between the two methods. Our analysis includes, for example, an investigation of the graphic composition (stage one), and the names and the content of the concepts used in stage two have been altered because they have been grouped together (components of coherence). Further, the design strategies in stage three have been ordered differently and the definitions have been modified. In stage four the concept of style has been organized and elaborated differently, and a differentiated styling scheme has been developed. The concept of style has been relativized and placed within the tradition of the profession. The result of these alterations, or developments, is a more consistent use and a sharper definition of the concepts used in the analysis.

There are also a number of examples of specific alterations made to Meeus' method of analysis.<sup>163</sup> The concept 'design strategy', for example, differs from Meeus' term 'composition principle' used in the corresponding stage in his analysis of the Land van Hoboken. The concept 'principle' denotes a fixed inner conviction or precept, however, and is thus not entirely appropriate. What is involved here is the search for a mode of working that is adapted to the circumstances, and the placing of a particular emphasis, in order to achieve a certain aim. There are also objections to the use of the word 'composition'.

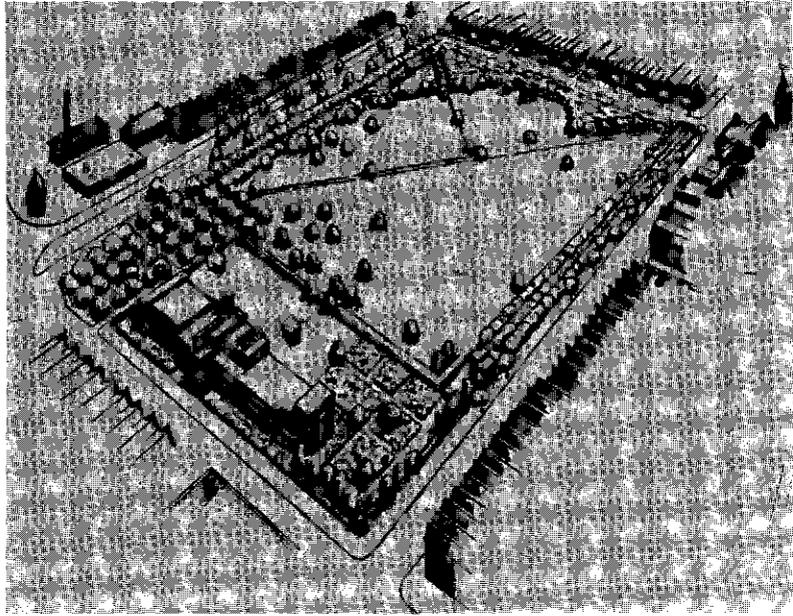
In the Hoboken analysis the notion 'concept' is presented in the final stage and defined:

[...] a preconceived structured (albeit sketchy) image of the final design, that encompasses functional relationships, meanings and references, and a choice of a set of form rules or design style [...] A design style is connected with the consistent use of categories of form, described using terms like hierarchy, symmetry and curvilinearity. These categories in turn have meanings attached to them, like pomp and ceremony, distinction or Romanticism.<sup>164</sup>

Is 'Romantic' a meaning that is attached to curved lines, or is that an eclectic, cliché'd debasement of the original idea? Whatever the case, in this way the level of abstraction required in this stage is not attained. The definition and use of the notion 'concept' in the Hoboken analysis is exclusively limited to style (choice). This is too limited for an analysis of the artistic features of a design, the objective of the present study.

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**Part three** *La Villette: an instructive lesson?*

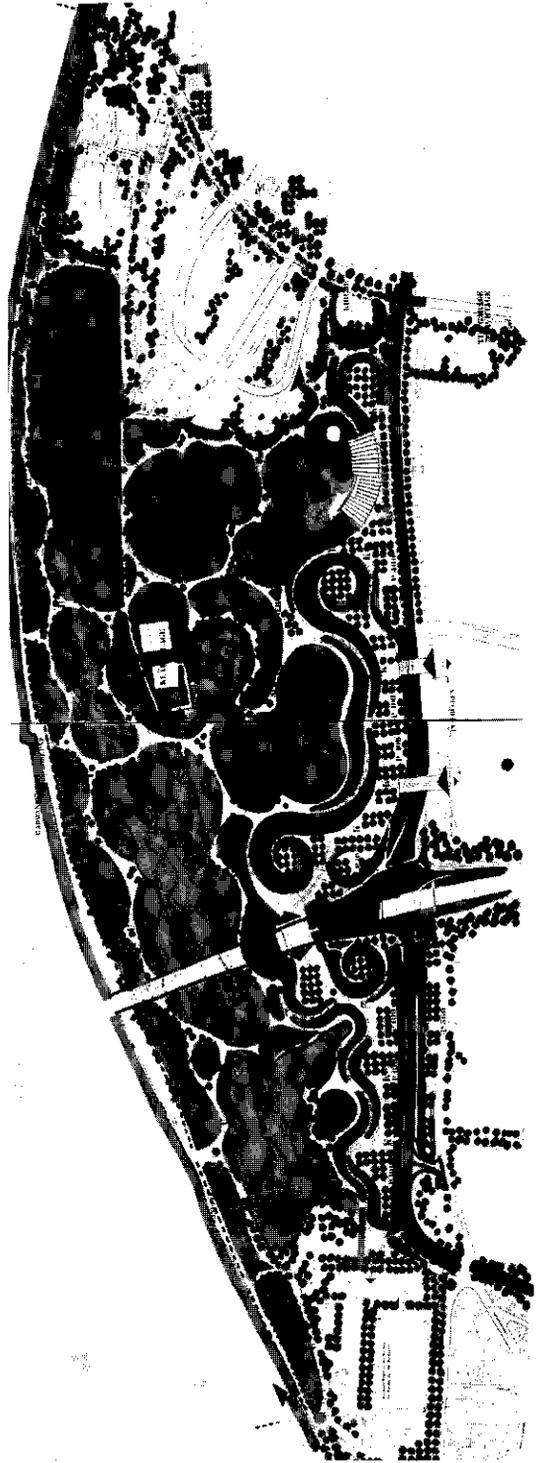


74 Warnau, bird's-eye view, competition entry, Afrikaanderplein, 1947

substance, resulting in a cold environment. By way of compensation, there is a frequent perfunctory revival of nineteenth-century park forms [ill. 75]. The superficiality of meaning in many plans arises as a result of designing without considering meaning.

Signs are a means of communicating with the public. If landscape architecture is to be successful in this (as 'applied-art-in-the-open-air'<sup>173</sup>), then the signs must be of an elementary form (simple and succinct in relation to the profusion of forms in the surrounding city), autonomous (introverted and freestanding in a much larger space), and offer the opportunity for interpretation and reinterpretation (thus equivocal, with possibilities for humour and the relativization implicit in this).<sup>174</sup>

Interest in the aspect of meaning in designs is gradually increasing. It is especially prominent in the debate surrounding post-modern architecture,<sup>175</sup> though the subject has never completely been neglected. Jellicoe became interested in the early 1960s in 'the subconscious' in landscape architecture. He said of his design for the Kennedy Memorial (1964): 'It gave me my first serious opportunity of seeing whether it was possible to put a subconscious idea into a work, so that it is more important and more lasting than the purely visual impression the eye receives'.<sup>176</sup>



The designer can make a spectator a participant by revealing the way in which the literary value is achieved: this is the foreword, this is the story and that is the epilogue. Through the prologue the designer provides something of a key. In examining plans, it is necessary to scrutinize viewpoints in the site in relation to each other and, at the same time, to ascertain how and where the observer is capable of intervening in the designer's game through what he or she sees (observers are quite prepared to be playthings, as long as they have some idea of the rules of the game, of the rhythm and construction of the story<sup>177</sup>).

In the following sections, references have been divided into two groups: references to nature, and those to the specific themes of pluralism and innovation presented by the programme.

### Symbolizing nature

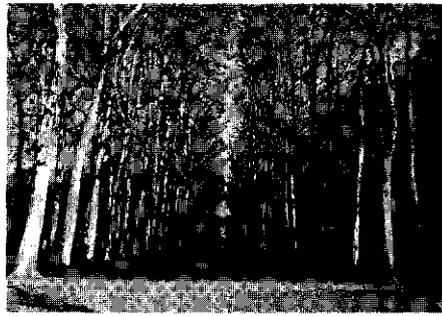
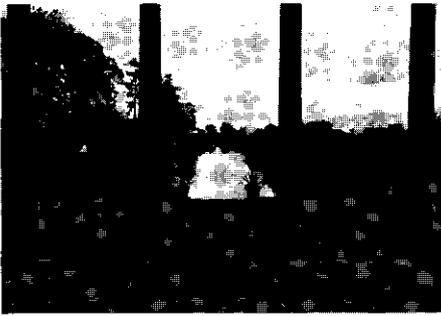
In landscape architecture the most important symbolic representation is that of nature. In the park a relationship is constructed between man and nature. According to Olmsted,<sup>178</sup>

A mere imitation of nature, however successful, is not art, and the purpose to imitate nature, or to produce an effect which shall seem to be natural and interesting, is not sufficient for the duty before us.

A scene in nature is made up of various parts; each part has its individual character and its possible ideal.

Nature is the magical factor in the background, a source of inspiration, as well as an example and a building material. In the plan by Bakker and Bleeker nature—in the form of trees, earth and water—is a distinct building material. Within certain formal frameworks nature is referred to on a detailed level through abundant planting. In the geological garden, for example, the two meanings have a dualistic relationship: the artificial main form, which, through its dimensions, material and design, also gives expression to a primal force (as if the enormous stones had been pushed up out of the earth). In addition, the plant cover is naturalistic.

The history of garden and park design can be described as an alternation between the symbolic manifestation of a view of nature in rational and abstract forms as opposed to a view of nature in Romantic and organic forms.



76a-b, 77 The straight in park design



Study of the history of gardening shows that the garden's contents, its design and embellishment through the ages, retain elements that throw light on its breeding-ground of nature myth. This can be seen especially clearly in Greek and Roman gardening. The Renaissance carried on the tradition unbroken, and even the Baroque garden was permeated with strongly numinous elements. But the anthropomorphic conceptions of the gods, so manifest at the beginning, developed towards stylisation and abstraction, indeed an outlook on life, that permit Man to put himself in the place of the gods. This development culminates in the French 17th-century classical art of gardening, called by the French author Corpechot 'les jardins de l'intelligence', with its extensive parterres distinctly patterned with arabesques, sweeping avenue vistas and optical effects [...] A pantheistic feeling for nature, intensified during the Romantic period, pervaded the minds of men and induced them to create gardens and parks that expressed their longing for both the idyllic and the sublime.<sup>179</sup>

Although it is immediately clear which park forms are being referred to, it is impossible to explain within this study what exactly the difference is. An orderly and exhaustive account of the way in which the various images of nature have been evoked in the course of time, and the devices used to do so, requires too detailed a discussion. A number of quotations follow, however, in order to provide a comparison between the two movements, the two movements that can generally be labelled 'straight' or 'curved'. On straight [ill. 76 and 77]:

As part of its ability to play with the human senses, the Renaissance garden is an intriguing conceptual system. The code for interpreting it is complex and highly ambiguous. The garden is a place of pleasure; it is a refuge for private meditation; it is a place for feasts, entertainment of friends, a place according to Boccaccio, of sexual and intellectual freedom, a setting for philosophical discussions, and a restorative for both the body and the soul. It is a measured and well-ordered model of the universe, a never-ending apparition of spring. It assumes the function of a sculpture gallery, a pinacotheca, a horticultural encyclopedia in vivo, a center of botanic and medical research, and a theater for fantastic imitation, competing with nature on nature's own terms and conditions. Finally, it is a perceptual source of moral instruction.<sup>180</sup>

The boschetti and the rustic elements present in gardens should be seen [...] not only as a generalized imitation of the literary topoi, the grove, the wild wood, etc., and as an evocation of mood, nostalgia, luxury or fear, but also as a constant reminder of an intellectual and philosophical concern; the role of man in the world of nature, and the creation of order from chaos.<sup>181</sup>

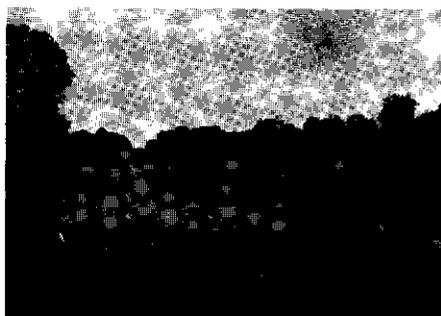
The French classical garden with vistas reaching to the infinity of the horizon reflects the scientific achievements of the time: infinitesimal calculus.<sup>182</sup>

There is a formal/agrarian view of making landscapes that is utilitarian and beautiful. This view proudly admits that landscapes, like buildings, are made by men [...] Order includes variety; reason leads to fantasy. In an ordered landscape bewilderment subsides.<sup>183</sup>

In each view, a discrete pattern or rhythm is discernible flowing from the arrangement, spacing and structure of trees, expressing the particular site [...] Trees are related to their surroundings sometimes by bold geometry and sometimes by subtle rhythms. In each case, there is a consistency between tree pattern and the surrounding order [...] The great diversity and intricacy of individual trees is subordinated to an established repetitive composition that acts as a counterpoint in unifying the individual parts into a single whole. There is a homogeneity of texture, pattern, light and shade, resulting from the use of a single species that makes the collective impact more important than the individual trees [...] The ground surface, whether flat or undulating, is visually unobstructed to permit a clear expression of trees rising out of the ground. This clarity is amplified when there is a crisp, smooth ground surface.<sup>184</sup>

There are also numerous references in the literature to the importance of the curve in landscape design [ill. 78 and 79].

He felt the delicious contrast of hill and valley changing imperceptibly into each other, tasted the beauty of the gentle swell, or concave scoop, and remarked how loose groves crowned an easy eminence with happy ornament and while they called in the distant view between their graceful stems, removed and extended the perspective by delusive comparison [...] The gentle stream was taught to serpen-



78a-b, 79 The curve in park design

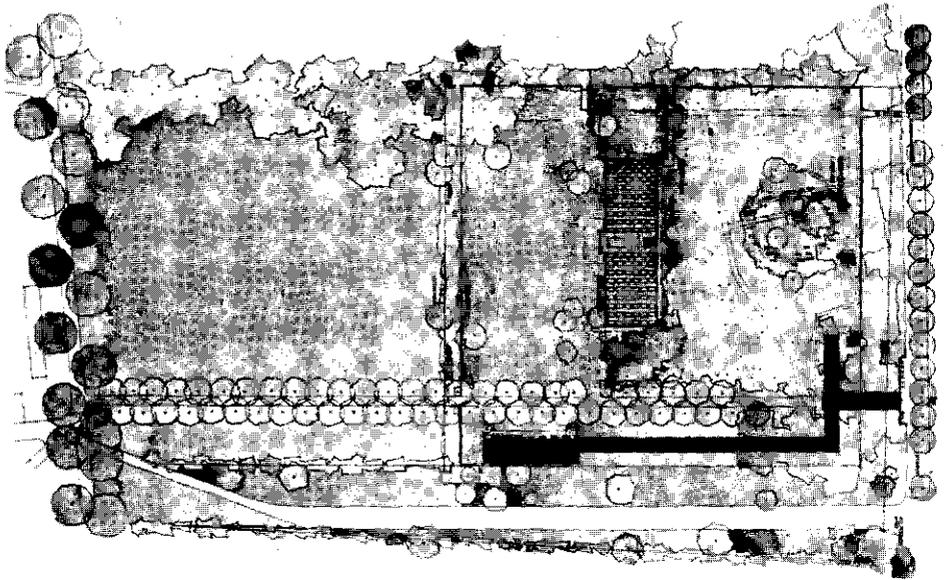


tine seemingly at its pleasure [...] The living landscape was chastened or polished, not transformed.<sup>185</sup>

When I descend the hill, my imagination is stirred by the pastoral atmosphere [...] The slope on which I walk is rolling, and the paths meander somewhat. They do not lead with mathematical precision to the place where I wish to go, but neither are they so winding that they lengthen my journey. Is this not the best thing one can wish for? Nothing corresponds more closely with our thoughts than the tracks these paths leave in the vast landscape. They are seldom straight. Doubt is truly more pleasant than certainty and more natural than precision. But, walking along my winding, sloping path, I have discovered even more pleasant things, which I have subsequently lost sight of in order to find them again a little later with even more pleasure.<sup>186</sup>

Enlightenment ideas centred around the concept of the simplicity and uniformity in Nature, and as a corollary of this one agreed that the laws in Nature are eternally valid and universally intelligible. The ancients had sublimated the essence of Nature in their art and poetry. By imitating them, one imitated the 'natural', objective standards of beauty [...] Informal gardens had existed before, in two widely separate civilizations which, according to early 18th century interpreters, were both governed by wise, just and temperate rulers for the benefit of the common people, namely republican Rome and China.<sup>187</sup>

[...] the English had invented a new environment which was sensible, not only of



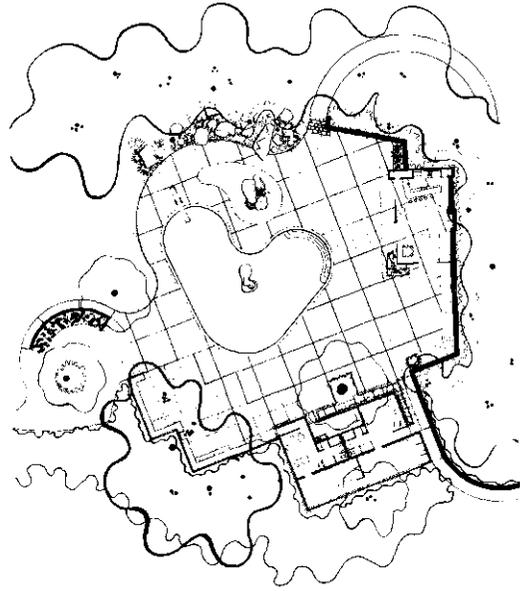
80 Andersen, cemetery, Ryvang, 1950

visual values, but also of the reactions of such an environment on all states of the mind in general. The irregular informal landscape tolerated and encouraged incongruity, the grotesque, surprise and variety, not from mere whimsy but because that was the way of nature and of liberty. It was the enemy of the monumental, of geometry, of regularity and the formal because that was artifice and autocracy.<sup>188</sup>

The poet-painter gardeners had worked out the main principles of design. The topography of the ground was first studied to see what possibilities there were, what was the inherent pattern of the landscape. The painter's eye was to be used in grouping trees and plants, so that a picture could be composed emphasizing this natural pattern. Then the poet followed, placing his evocative symbols, the temple, the serpentine stream and lake, the ruin, the seats and urns, and connecting them all, the winding path.<sup>189</sup>

It is not by the breadth or length of the walk, that greatness of character in garden scenery can ever be supported; it is rather by its diversity, and the succession of interesting objects. In this part of a great place we may venture to extract pleasure from *variety*, from *contrast*, and even from *novelty*, without endangering the character of *greatness*.<sup>190</sup>

Ideas and concepts that play a role in the landscape garden can be combined to form three categories: nature, past and imagination. Under 'nature' can be classed: the idea of the *Genius Loci*, of the Arcadian landscape or the idyllic, of the picturesque and the rustic. Under 'past': the idea of transience, the interest in classical antiquity, the Gothic Middle Ages, in the original and primitive condition of mankind and in folklore. The 'imagination', finally, is that mental capacity



necessary in order to make oneself familiar with both previous categories, in which nature and past come together in experiencing the subject. The imagination needs a mirror that provides variation. It can be inspired by configurations in the landscape and ambiances one sees and experiences during a walk and a journey, but it can also be stimulated by the evocative power that emanates from architecture, monuments, ruins or inscriptions. Being alone with such experiences, like the hermit in his hut, seems to be wellnigh a prerequisite for reflection, concentration and imagination.<sup>191</sup>

All too often the curve, the meander, or the loose is considered to be the best way of shaping nature, and the straight line or the rigid as the best way to order human activities. This view, which sees the one form as natural and the other as cultural, ignores the principle that the one can contrast with and relativize the other. Modernist designs show how the loose form can interact with the rigid [ill. 80 and 81]. In a rigid, rectilinear environment a meander or loose group of trees is wayward or whimsical; it emphasizes the geometry and, at the same time, relieves it to some extent. It renders the formed spaces affective. In addition to the two abstracted representations of nature (the geometrical and the Romantic forms), there is the nature experienced—particularly in the 1970s—as ‘true’, of thicket and overgrowth, rich in varieties and not designed (a contradiction, for if it is not a completely artificial nature, then it is nevertheless a nature strongly influenced by men’s hands). There remains a challenge here: how should this nature be represented and formed?

The above quotations reveal an abundance of images and a multiplicity of conceptions within the two groups. Essentially, there are two main currents in the representation of nature in Western park culture.<sup>192</sup> Firstly, that which regards nature as the 'eternal order of the universe', determined by the rules of harmony in classical architecture; cultivation through subjugating the wilderness and interpreting nature in terms of the universal laws of geometry ('Nature subjected to the house'<sup>193</sup>). And secondly, 'simple' and 'beautiful' nature, as if it were untouched by man; nature as the extreme opposite of the artificial. The architecture (building) and nature (park) are a system of opposites, usually elaborated in a dichotomy of the classical design of the house in irregular surroundings: the landscape style; cultivation through imitating the wilderness and through revealing nature's beauty ('the house subjected to Nature'<sup>194</sup>).

In both views, nature guarantees order,<sup>195</sup> even if nature—or at least, the natural landscape—first has to be improved in order to give expression to its underlying perfection.<sup>196</sup> It is not a question of whether or not the nature represented is 'real' or 'not real', but of the function it fulfils, namely the reference to Nature. This can be uncultivated, pastoral, agrarian, civilized, or artificial nature.

How is nature symbolically elevated or utilized in La Villette? What types of natural aesthetics have been found? The representation or promise of nature is varied. It may be completely different from the city, or appear in an idealized relationship with the city as a complement, or it may be reduced to a limited decorative utilization. How much space is there for nature in the park of the twenty-first century, both from an ecological and an aesthetic-symbolic viewpoint?

The programme makes it clear that the Parc de la Villette has not been conceived as a green oasis of tranquillity within the city, is not a tribute to the beauty of threatened nature, and is not a reflection of the pastoral countryside, or at least neither exclusively nor principally. At the same time, however, neither is it merely a fragment of the city refurbished with green, for it has to be worthy of the name 'park'.

The impression of nature in the park in relation to the other facilities cannot be judged from the proportion of the park's surface area given over to, on the one hand, vegetation and water and, on the other, to buildings and hard surfaces. It is a question of the atmosphere evoked by one thing and another. Examples of extremes are the plans by Vexlard and Künnapu and Padrik. The more relevant question is, what kind of city manifests itself in the park: a rural unassuming

garden city, or an obtrusive metropolis? This question concerns, thus, two interpretations; the character of 'the city' in the park: ranging from metropolitan to rural; and the character of 'nature' in the park: ranging from wild to garden-like. Olmsted recognized this in his *Report to the Commissioners for Laying Out a Park in Brooklyn, New York* (1866):

We find two circumstances, common to all parks in distinction from other places in towns, namely, scenery offering the most agreeable contrast to that of the rest of the town; and opportunity for people to come together for the single purpose of enjoyment, unembarrassed by the limitations with which they are surrounded at home, or in the pursuit of their daily avocations, or of such amusements as are elsewhere offered.

It may be observed, that these two purposes are not quite compatible one with the other; for that scenery which would afford the most marked contrast with the streets of a town, would be of a kind characterized in nature by the absence, or at least, the marked subordination of human influences. Yet, in a park, the largest provision is required for the human presence. Men must come together, and must be seen coming together, in carriages, on horseback and on foot, and the concourse of animated life which will thus be formed, must in itself be made, if possible, an attractive and diverting spectacle.

How can these opposing requirements be harmonized?<sup>197</sup>

#### *The character of 'the city' in the park*

The nineteenth-century Romantic promenade park has been the most powerful example of an urban park. Because it is still regularly chosen<sup>198</sup> as an ideal, it seems as if no other types existed prior to this. Indeed, there has been a succession of parks with a markedly different character: parks with more animation and attractions. Because of its objectives, the Parc de la Villette is in keeping with the tradition of these parks, with an urban atmosphere more oriented towards life in the city.

The pleasure-garden and public walk are the oldest types of urban park. They were intended as places in which to meet others and in which to be seen, and they were oriented towards providing amusements, such as music and dancing, the celebration of exceptional events with fireworks, balloon flights and concerts. The model was London's New Spring Gardens, Vauxhall, which existed between 1661 and 1859. It comprised 'pavilions, shady groves, cascades and delightful walks, illuminated by thousands of lamps'.<sup>199</sup> The organization was simple, with a regular pattern of wide gravel paths and many temporary structures built of lattice work and plaster. The idea of an

urban meeting place also played a role in the realization of the Crystal Palace by Paxton (1850) as the focal point of the park. The tradition of this type of park was continued in the world exhibitions regularly organized around the turn of the century. The Tivoli in Copenhagen is a relatively unique case, because this Vauxhall-like park still exists after one and a half centuries.

The attraction parks, such as Disney World, are extremely animated. They are completely isolated from the city, and expressly intended as a separate world. 'Crowd management' and 'stage-setting design' are prominent in such frequently visited parks. The importance of the system of paths in the design of the park predominates, as the uninterrupted convex and concave paths do in nineteenth-century parks (see, for example, the plans by Alphand), in order to achieve a maximum degree of circulation. The pattern formed by the layout of the park has the function of channelling the flow of the crowd's movement: forming an unbroken figure, it achieves the degree of circularity of movement needed for fully exploiting the park. The attraction parks are governed by technology or culture. Plantings, water and earth are no longer the main ingredients. Ponds, flowers and hills are ornamental edgings. Nevertheless, these theme parks do give—although in a completely different way than landscape-style parks—an illusion of an entirely different world, enabling the momentary banishment of workaday life.

There are participants who consider the programme too extensive, too agitated and too obtrusive and develop their idea of the urban park in spite of opposition. On the other hand, there are designers who greet the programme in all its exuberance and complexity with open arms. This usually results in a sort of amusement park, but, occasionally, something of a different approach becomes perceptible; this could signify a renewal of the concept of the urban park.

#### *The character of 'nature' in the park*

In the urban park nature is adapted, cultivated and thus made productive for the city. It is designed nature, and can therefore no longer be nature (in the sense of not being influenced by people).<sup>200</sup> The city repeatedly makes different demands on the park; correspondingly, nature is domesticated each time in a different way. Nature remains, however, the magical factor in the background: both as a source of inspiration and as building material. The undercurrents in landscape architecture referred to earlier as 'straight' and 'curved' give rise to

notions that range from nature as the Romantic confrontation with the artefact, architecture, to nature as a universal system of order.<sup>201</sup>

What kind of role does nature play in the Parc de la Villette: building material for the décor, or the central subject of the production? What kind of nature is admitted into the park: wild and rough, pastoral or agrarian and cultivated like a garden, exuberant or restrained and practical? The form of the spatial layout in the plans for La Villette echoes the designer's relationship with nature. Nature in the park is, after all, not an imitation of what grows in the wild; it is a cultural phenomenon.

It is not so much a question of an antithesis between culture and nature, but of an interplay of forces between man and nature. The expression of this in the form of gardens, parks and landscapes is culture, that is to say, culture carries in it the communion of man with nature. As a sequence in the history of garden design, it can be briefly summarized as follows.<sup>202</sup> In classicism (Renaissance and baroque) the garden refers (by designing in harmonious perfection an abstract and supernal nature) to a reconciliation with nature in which the (images of) gods mediate between man and nature. In the landscape style (Romantic classicism) the garden refers (through the stylized design (based on an Arcadian landscape) of an earthly nature) to a duality between human force and the force of nature in which a powerful and poignant nature is manipulated by man. In modernism (New Objectivity/Nieuwe Zakelijkheid and Functionalism) the garden refers (without the use of conscious signs, but indirectly through the material used and the open space) to a pragmatic and matter-of-fact contrast between green and buildings in which nature is formed into a functional décor for leisure activities and recreation (in the literal meaning of re-creation for the purpose of the production process).

The essence of landscape architecture is that, through arrangement and design, an illusion of something else is created: a metaphor. Since the nineteenth century, however, many parks have been created that lack this quality, mostly on account of the spread of forms associated with the landscape style. Some designers are now seeking a park design that puts paid to these timeworn and unsuccessful illusions of nature. They create compositions with earth, water and plantings that do not suggest nature, and that are more a pure work of art. A good idea of what this can mean can be found in Bosch's description of a poplar wood.

With poplars it is strange. At first you think a field of poplars can be easily 'read': all the same trees all at the same distance from each other. You look through the rows of tree trunks and think: there isn't much to see here [...] Wandering across the 'plantation' reveals, however, that a field of trees is more than just a series of trees in a row. The rows of poplars take on different forms, they evoke different associations. The trees look at first like the skeletal supports of a now empty factory, and then as a mass of posts. And then, once again, the trunks of the trees stand motionless, while the leaves chatter and the tops of the trees sway [...] Why do poplar woods speak to the imagination? Perhaps it is precisely the emptiness and dismalness that characterize the fields that is the cause of what is experienced in the 'plantation'<sup>203</sup> [ill. 82].

This again leads to an illusion of nature, but a new one and extremely unemotional. The artificial (not the affected) in nature in the urban park can be represented in various ways.

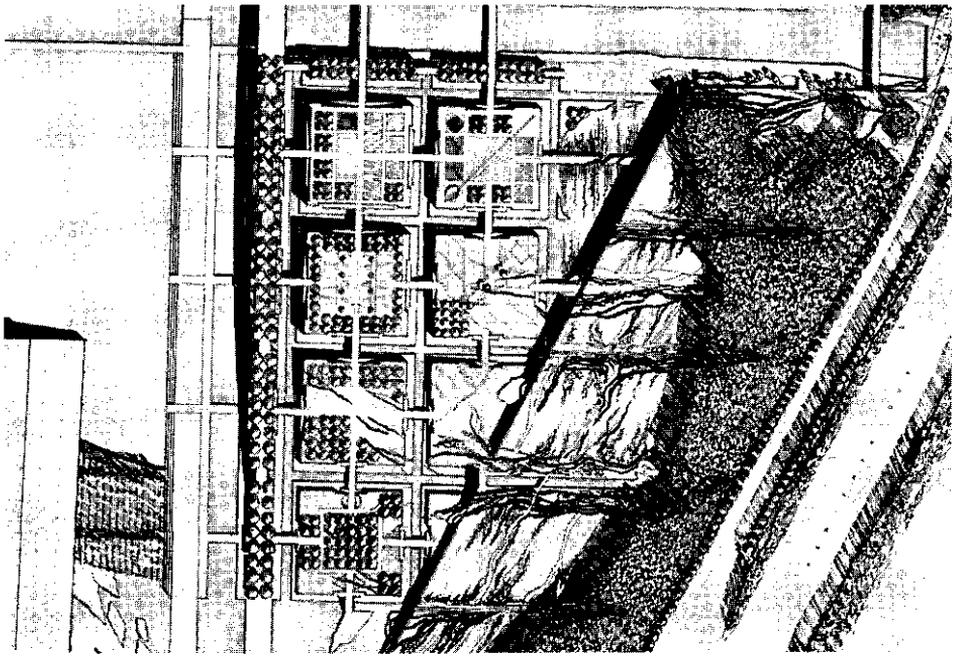
The geometries frequent in designs have a variety of sources (classical, agrarian, grid) and meanings. The so-called natural forms (derived from eighteenth- and nineteenth-century landscape styles) violate the urban character of the site. Thus a geometrical design for the landscaping of garden and park is possible in order to prepare the observer for the city, for geometrical lines in plantings and earth are much softer than those of buildings. This play of forms possibly gives man confidence again to appreciate the complex, sometimes chaotic, geometry of the big city. In addition to classical garden design, the tradition of agriculture is a source of inspiration; in the Mediterranean world this is a geometry beneath which the original landscape (geomorphology) is still visible.<sup>204</sup>

In a general sense, two important factors associated with nature are reflected in landscape architecture. Firstly, the question of fertility and the ground (because the material originates from the earth), and, secondly, the meaning of time (for material grows, changes with the seasons, and is transient).

The references to fertility and ground in the designs for La Villette reveal the following. Firstly, they reveal the geology and the excavation of the earth, so that original layers are revealed. In the plan by de Miller an excavated strip is like a geological outcrop. Secondly, erosion patterns and scars in the landscape can indicate both the degeneration of the earth's fertility and the primal force of nature (and the hope of the regeneration of nature). In the plan by L'Arbre en boulev an eroded strip across the canal links the north and south sections of the park. Further, they reveal the resurrection of the new from a ruinous foundation, whereby innovation (and the source of innovation, the Mu-



82 Bosch, series of paintings, poplars



83 Juglar, eastern boundary

seum of Science, Technology and Industry) is accentuated (the sublimity of a construction contrasted with an untidiness of forms too small in comparison with the building is a late-eighteenth- and early-nineteenth-century notion that arose with the Romantic-picturesque-décor of Brown's landscape style). In the design by Chemetoff the Museum is situated like a flawless object in a threadbare setting.

The references to fertility and ground also reveal archaeology: 'Il y a une chose plus belle que une chose belle; c'est la ruine d'une belle chose.' This ruinous corrosion is apparent, for example, in the plan by Juglar [ill. 83]. The utilization of geometrical patterns by analogy with the geometry of agrarian methods of cultivation and land division (thereby suggesting a reference to old cultures and the traces of patterns of cultivation and reclamation they have left in the earth) is also revealed, in the plan by Team Grün-Plan for example. Finally, they also reveal devastation, by means of the beauty of relics and the desolation of deserts (see the area along the canals in the plan by Baudry); regeneration, through the overgrowing and recultivation (reworking) of what exists (nature can overrun and overgrow all man's handwork) (see the jungle-like plantings near the metro station in the plan by



84 Chemetoff, cross-section of south entrance and metro station

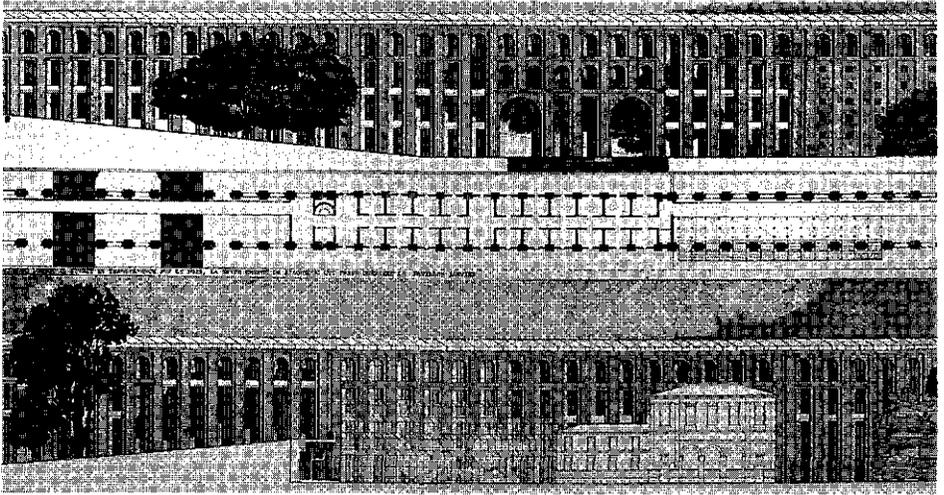
Chemetoff [ill. 84]); and fertility and fertilization, as symbolized by the penetration of forms in the plan by Desmoulin.

The function of ecology in the urban park is inherent in building with the aid of biological processes. It can be matter-of-factly expressed in the construction, or subjectively and emotionally in explicitly designed signs. In Romanticism a strong sense arose of the fact that the earth and nature are the source of raw materials and energy. Through condensing meanings in a sign, Romanticism, but also the ecological movement and the current trend in some French designs, gives expression to a charged symbolic contrast between man and nature. In addition, man is seen as hostile towards nature. City, industry and transport exhaust and pollute the earth by plundering its natural raw materials and discharging waste materials and poison. A feeling currently prevalent is the uncertainty concerning nature's power of recovery in the face of man's activities.

In the La Villette programme the attention paid to ecology is limited to the requirement that the plantings used should be able to withstand the rigorous conditions of the city. In selecting plantings, form, colour, smell, seasonal factors and associations are of major importance. In order to grow well, so that all aspects of the planting can fully develop, the plant needs to have an ecologically correct location.

In some countries the discussion about parks in the 1970s and '80s has become permeated with ecological arguments; in Germany, in particular, there is a strong predilection for *Spontanvegetation* and *Feuchtbiootope*. This development is moving in the same direction as, and is an expression of, anarchic, anti-technological and anti-urban tendencies: the *Aesthetiek von Unten*. Indigenous varieties and rough growth must express the absence of any design.<sup>205</sup>

An urban park cannot be designed exclusively on an ecological basis however. Overrating ecology in the park can lead to excrescences if one proceeds from the assumption that people are incapable of immersing themselves more abstractly, subtly or detachedly in nature.

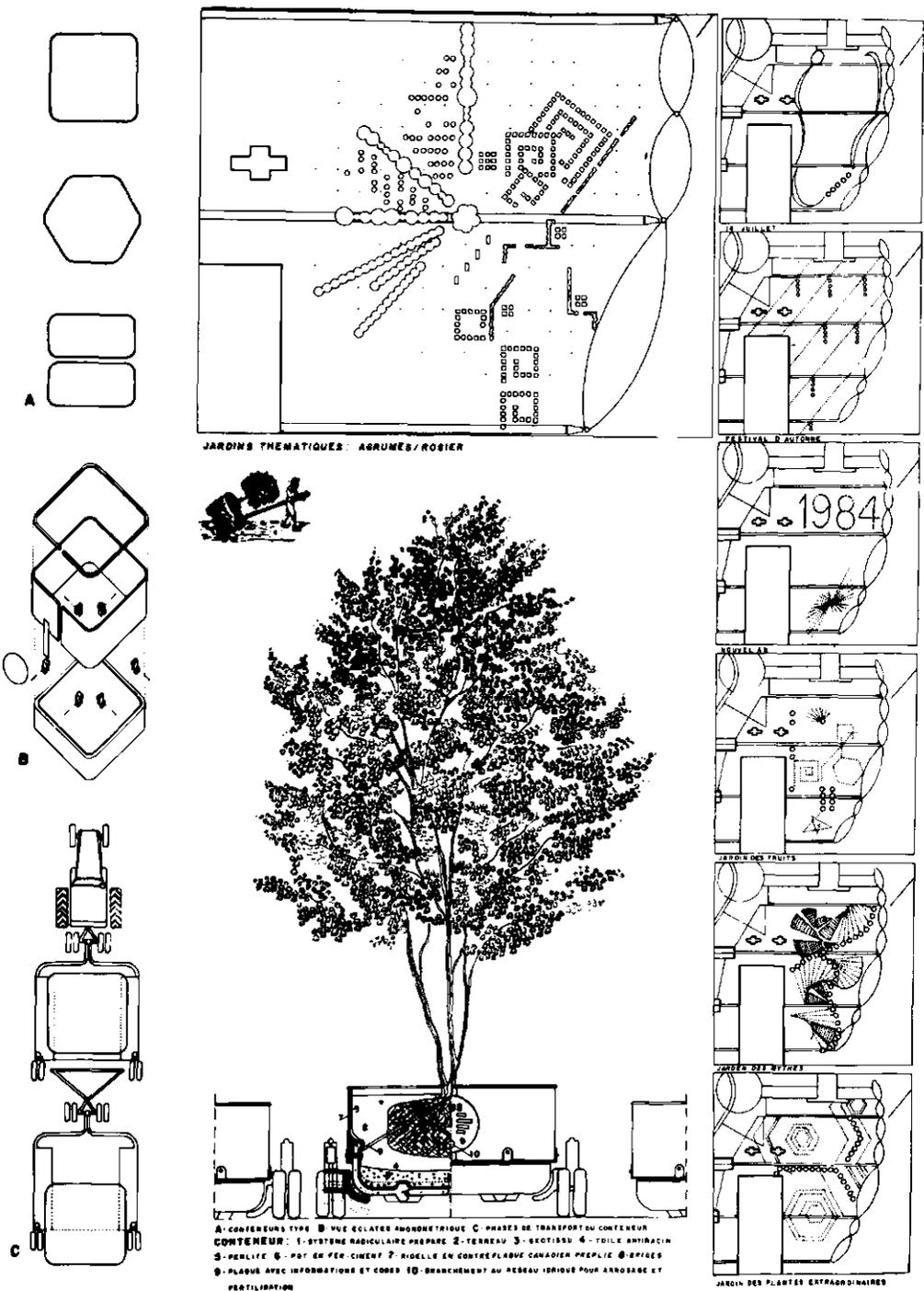


85 Aymonino, viaduct-type building

The references to ecology are dependent on the dimensions of the object. At the level of the urban park there is, firstly, the functional aspect of the construction (layout and management). In addition, there is the 'wilderness' garden for the purpose of nature study, with indigenous plants and types of vegetation and, where possible, the small animals that belong with this. Often, considerable maintenance is necessary for their upkeep as a result of their small surface areas.

Landscape architecture is an art that manages time, or, at least, time governs the landscape and landscape architecture endeavours to direct time, or to defy it. Time is the other important factor in park design.<sup>206</sup> In the designs for La Villette various aspects of this can be observed: the departure from the industrial ruin and the near desolation of the site for example; the city's outskirts and the less intensive use of the site (as can be seen in the plan by Aymonino, which essentially consists of woods and meadow with a building in the form of a viaduct and which leaves the site essentially intact [ill. 85]). Time can also be seen in the changing of the seasons, and the growth and development of the plantings.<sup>207</sup> The planting of mature trees appears to be inconsistent with the notion of time in landscape architecture, but it is often extremely pleasing aesthetically. Growth is a specific and essential characteristic aspect of the profession, however, and this must not be lost sight of.

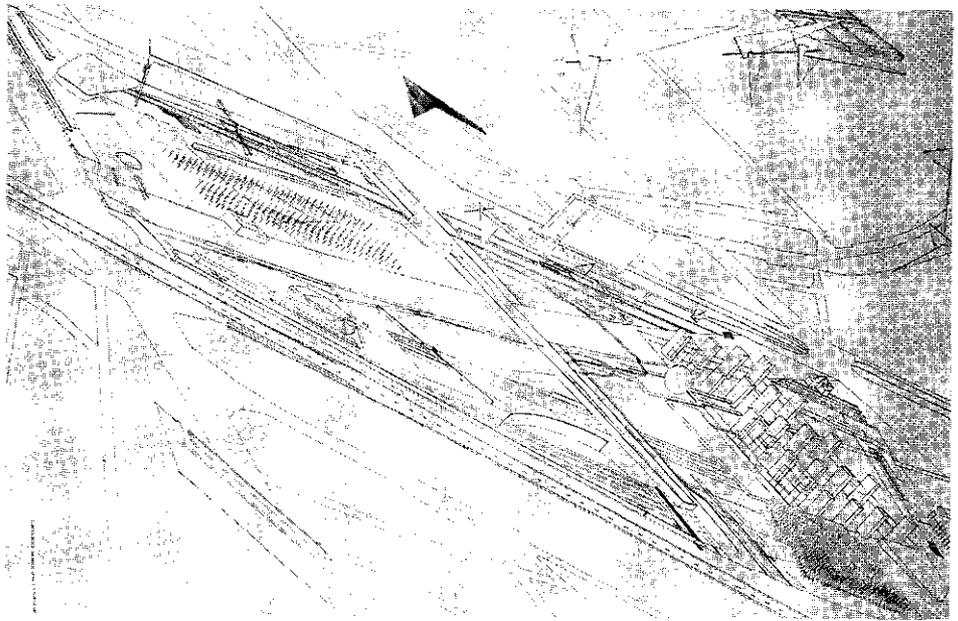
Change and adaptation are only to be regarded as an indication of time if they have been expressly taken into account (the plan by Zagari



JARDINS THEMATIQUES: AGRUMES/ROSIER

A: CONTENEURS TYPE B: VUE ECLATERE ANOMOMETRIQUE C: PHASES DE TRANSPORT DU CONTENEUR  
 CONTENEUR: 1-SYSTEME RADICULAIRE PREPARE 2-TERRREAU 3-BOCROSS 4-TOLLE ANTI-RACIN  
 5-PERLITE 6-POT EN FER-CIMENT 7-RIGELLE EN CONTREPLAQUE CANADIEN PREPLIE 8-BRACES  
 9-PLAQUE AVEC INFORMATIONS ET CODES 10-BRANCHEMENT AU RESEAU IRRIGUE POUR ARROBAGE ET  
 FERTILISATION

86 Zagari, 'transportable' trees in the open field



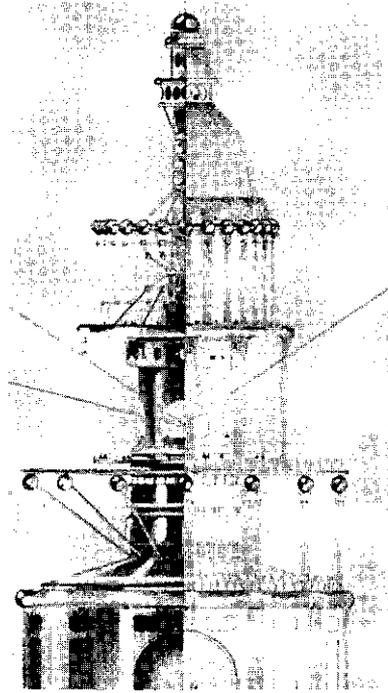
87 Hadid, bird's-eye view

is, pragmatically and literally, adaptability in the short term on account of the 'transportable' trees [ill. 86]). Historical styles indicate time, as does the representation of the sequence of time (in which the new permeates the old) and stratification (as a symbolic expression of geology and archaeology: the superimposing); Corajoud's plan can be regarded as such a palimpsest. The movement of the walker similarly provides an indication of time; Hadid's plan directly exploits the phenomenon of orientation and disorientation in space and time through the (graphic) suggestion of floating and speed [ill. 87]. Finally, references to the past (relics, decay, antiquity) and the future (technology, horticulture) are also references to time. The plan by Thomas literally shows the bloody history of the site. The water-tower in Moore's plan can be regarded as both an image of the past at night and of the future during the day [ill. 88].

### Symbolizing pluralism and innovation

The competition programme challenges the designer to symbolically represent two important objectives.<sup>208</sup> Firstly, cultural pluralism: La

88 Moore, Palais des Eaux, views by day (left) and night (right)

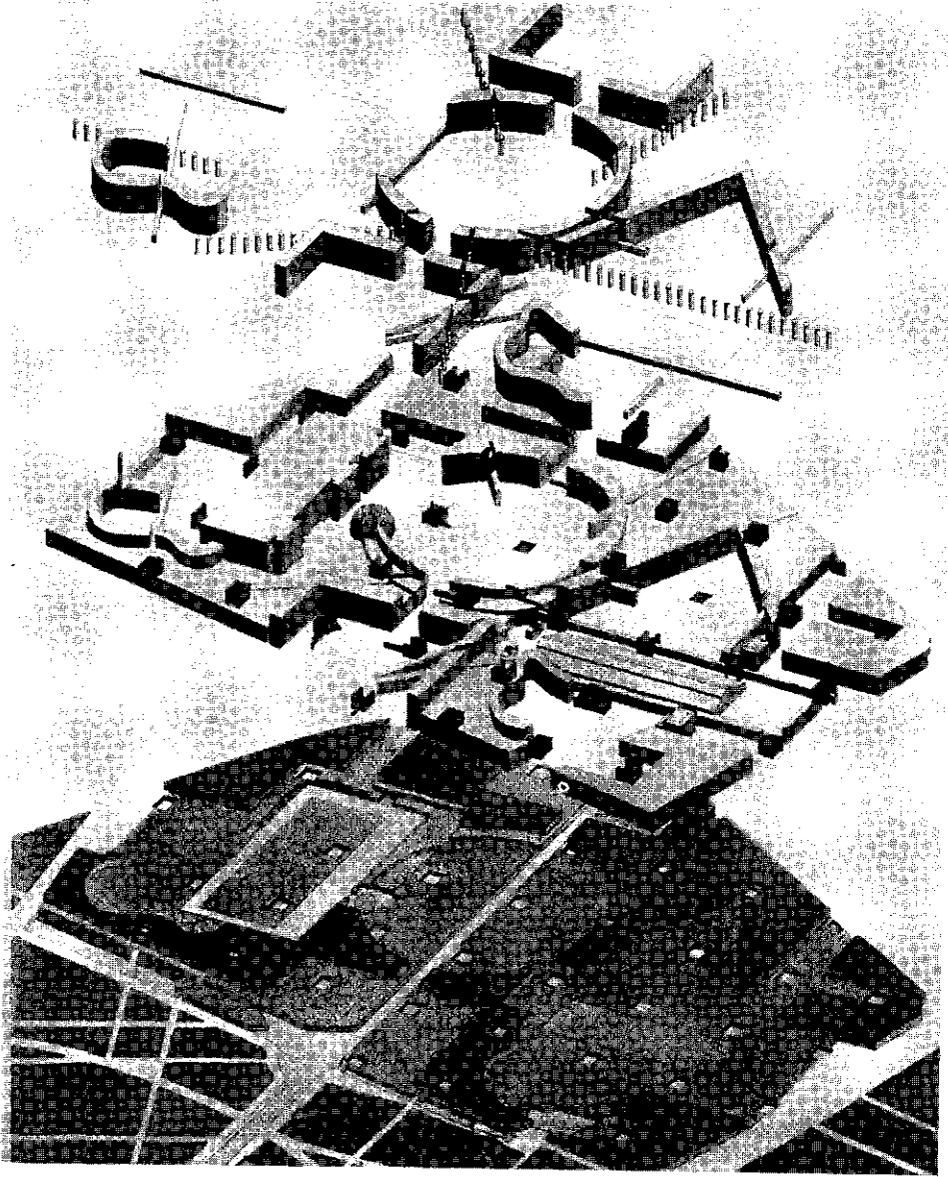


Villette is the park for the meeting and uniting of cultures. And secondly, innovation in park design: La Villette is to be the park of the twenty-first century.

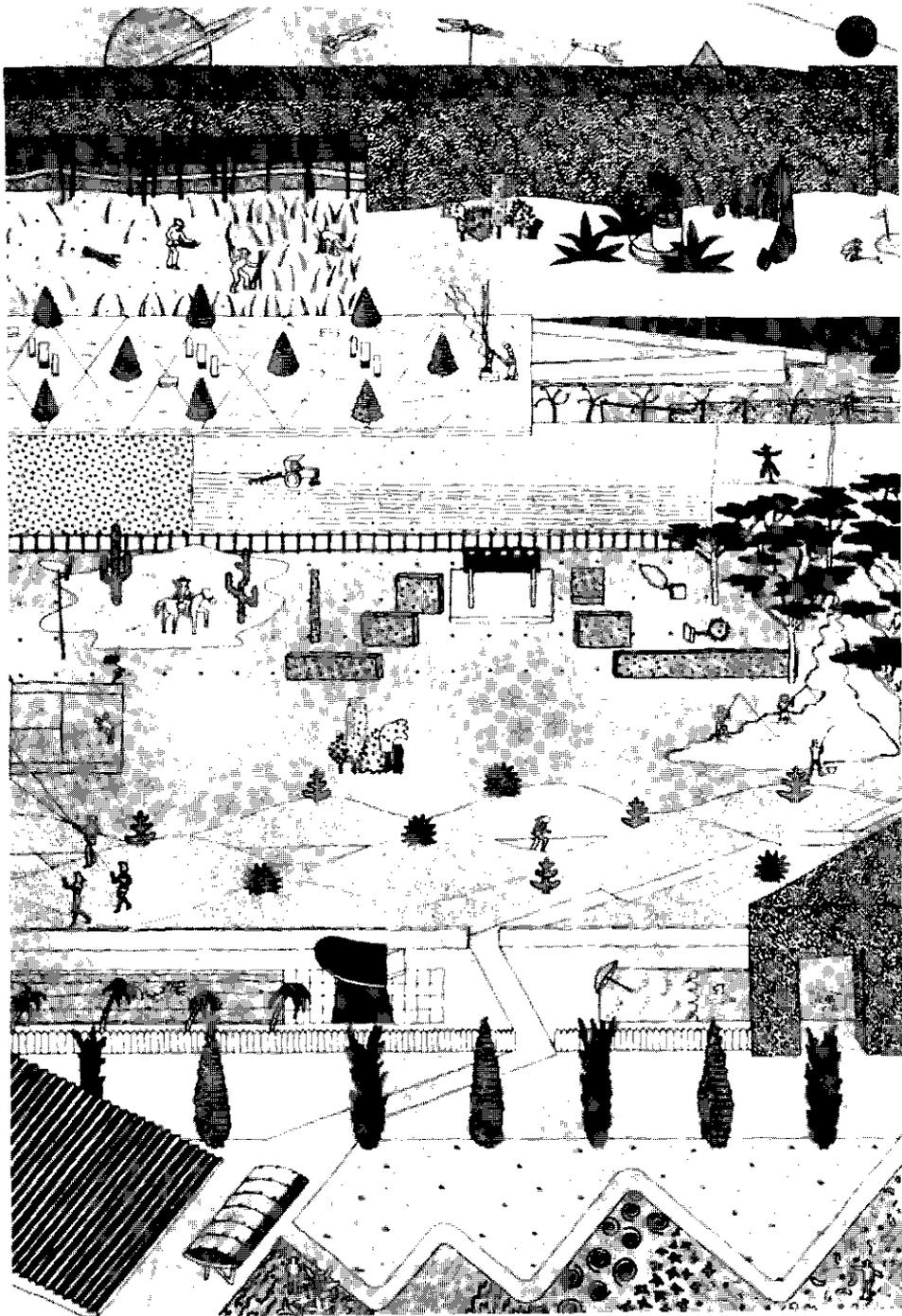
*Cultural pluralism*

Cultural pluralism arises in the Parc de la Villette from the confrontation between art and science, music and technology, body and mind, nature and city, and between nationalities, etc. In Tschumi's plan pluralism is expressed through the disjunction and dissociation of the programme. The fragments created in this way are transformed into new autonomous patterns. By placing these systems on top of each other after fusing them in a new configuration, unpredictable combinations of facilities are created [ill. 89]. In this way the plan generates new activities and habits of use, as a result of the unexpected encounter of, for example, music, sport and technology.

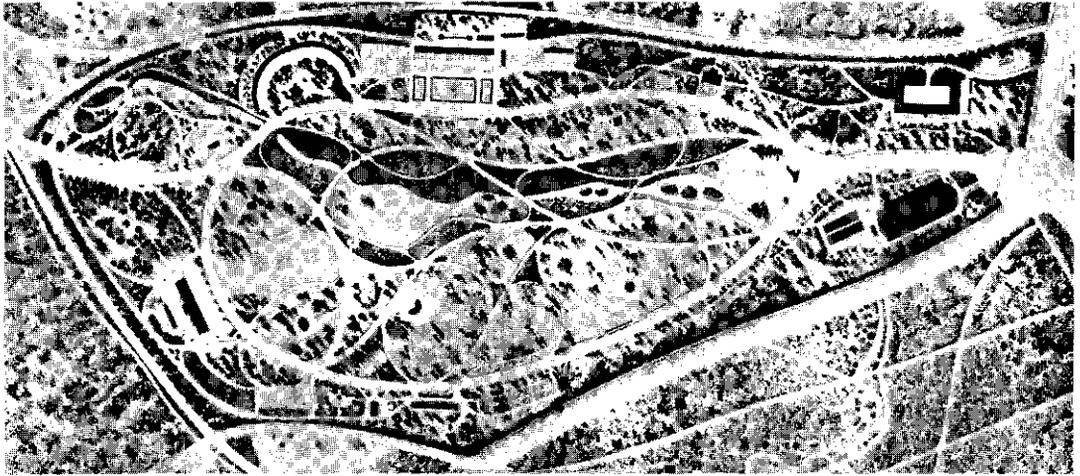
With a maximum of facilities and a minimum of natural elements, the plan by OMA seeks a multifaceted confrontation through the rapid succession of highly varied activities [ill. 90]. Many other plans show connections in a scheme that contains various cultural worlds, which



89 Tschumi, outline of different patterns presented in the form of layers



90 OMA, parcelling of land into strips



91 Alphand, Jardin d'acclimatation, Paris, 1860

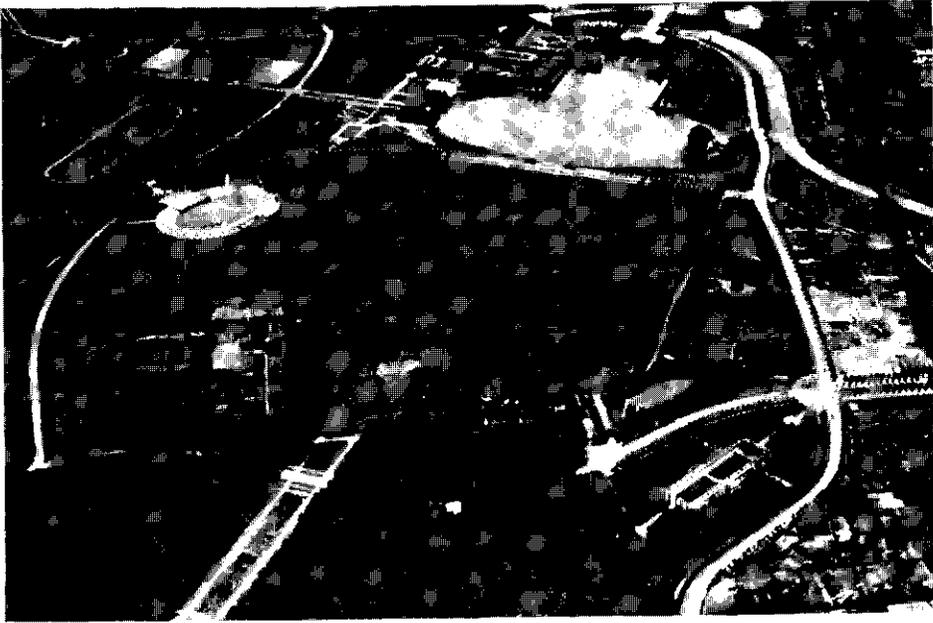
are either not elaborated in the design, however, or the symbolic connections are too literally made using sculpture or buildings.

#### *Innovation in park design*

Tradition, style and innovation are connected.<sup>209</sup> The programme not only demands innovation, but also provides occasion for this on account of its content and character. The question that has now to be asked concerns the extent to which and the way in which the designs submitted contribute to the development of the profession.

Tradition is understood to mean the total set of examples of the assimilation of ecological, technological and artistic knowledge that have arisen in landscape architecture in response to the design issues of the past. Tradition belongs to designers and supports their activities.<sup>210</sup> Innovation in landscape architecture is not achieved through a radical rejection of the past, as if the absolutely new could arise from a *tabula rasa*. Hadid's plan, for instance, seeks radically different park forms with the aid of graphic images derived from the constructivist architecture of the 1920s, but the design fails to evoke any convincing spatial situation.

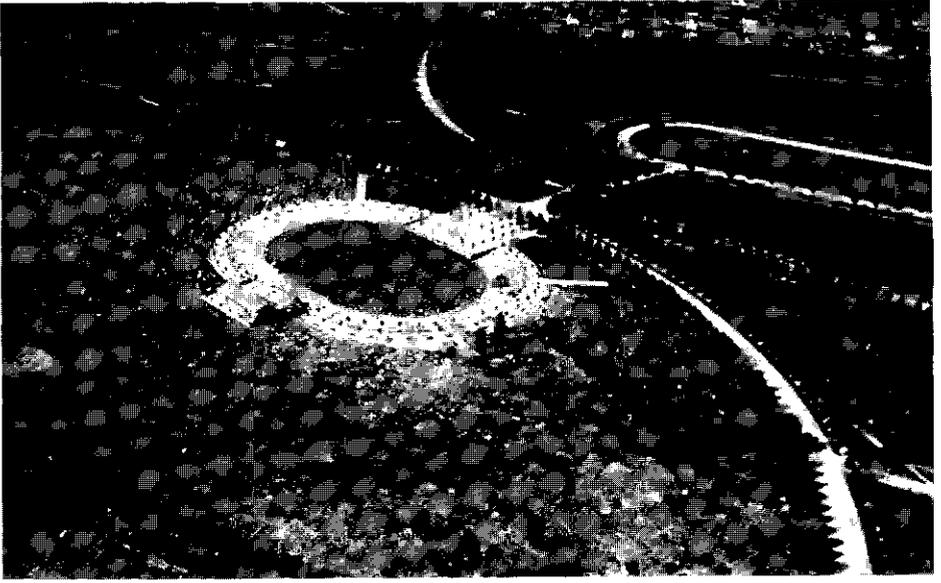
In the *Volkspark* designs of the early part of this century, and particularly in Germany, innovation unfolded slowly. An appeal was made to examples, sometimes from a distant past, which were then gradually transformed. They were subject to the limitations of history, subject to the limitation of slowly changing stylistic conventions.<sup>211</sup>



92 Schumacher, aerial photo, Stadtpark, Hamburg, 1930

The modernist period regarded the architect as the creator of the future (or, perhaps more soberly, of the here and now), not as the culmination of the past. The past was, on account of its tyrannical influence, a taboo. Landscape architecture must recognize its tradition however. A rational approach to tradition is necessary, for meaningfully creative activities are based on rules. The function of tradition in creating new designs is that it gives us something to work with, but also something that we can criticize and change.<sup>212</sup>

The following two examples clearly demonstrate the difference in the way in which, with the aid of historical park forms, innovation can occur.<sup>213</sup> Firstly, in the middle of the nineteenth century the picturesque landscape style of the country estate was transferred to the urban park. Elements from the landscape style were removed from their context and subordinated to the symmetrical and monumental positioning of buildings. They were combined with wide template-like roads, and, instead of the typography of the site and the sequence of the spatial images to be created constituting the basis of the design, it was the ornamentation of the graphic image of these roads in the ground-plan that determined this [ill. 91]. The landscape style is formalized into an ornament. The second example is drawn from the early part of

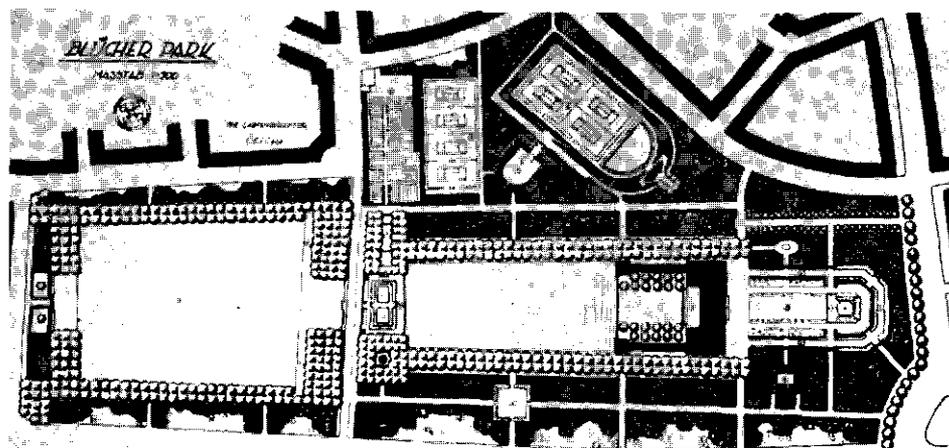
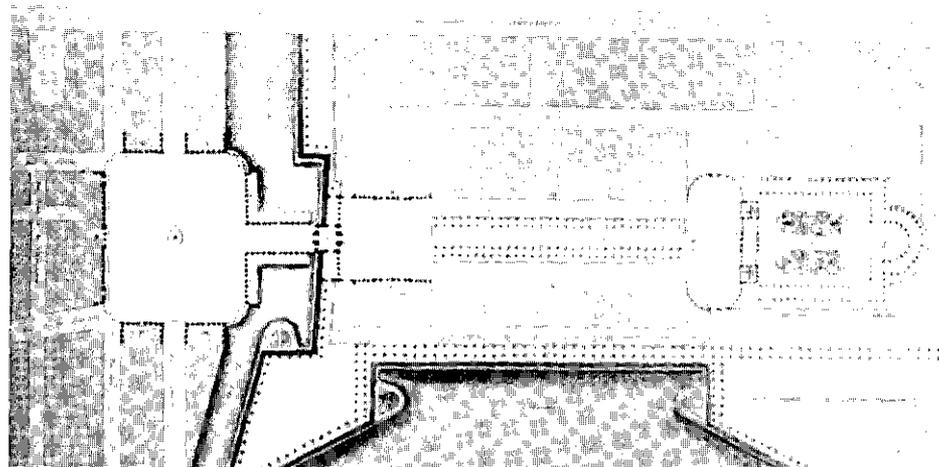


93 Play pond, Stadtpark, Hamburg, 1930

the twentieth century. Park designers were given a new brief: recreation in many forms for large groups of people. The designers, mostly urban planners and civil engineers, constructed ground-plans on the basis of classical patterns of access: a central main space with a balanced composition on either side.

The Stadtpark in Hamburg, in particular, shows a number of striking innovations within the traditional framework [ill. 92]. Straight and curved lines have been placed close to each other. As a result, a simple, direct connection between the elements of the park is created. In construction one speaks of connections 'butting' against each other. On account of this efficient arrangement, there are no residual spaces or left-over corners. All the fragments have a certain equilibrium, as a consequence of which both form and counterform have an autonomous value. This design is also evident in *Jugendstil* architecture [ill. 93].

On account of the adaptation of classical park forms, the new programme could be shaped. The baroque garden—in the form in which it presented itself and as it was interpreted at that time—did not serve as an example of content, but as inspiration for the organization and the spatial development of the park and for the forming of clearly defined spaces with corresponding functions. A comparison between the series



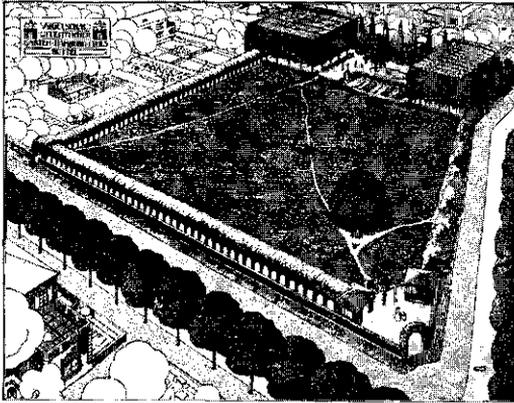
94 De Corny, Place Royal, Nancy, 1750

95 Encke, Blücherpark, Cologne, 1911

of squares in Nancy [ill. 94] and the Blücherpark in Cologne [ill. 95] by Encke illustrates this well.

The classical theme of symmetry can also be disordered by means of a simple manipulation, so that a new spatial image is created. In the design by Migge the ground-plan is, as a consequence of the street layout, not a perfect rectangle. This irregularity is not corrected; it is, on the contrary, supported by the unobtrusive paths that guilelessly traverse the space. The two symmetrical groups of trees consist of completely different types of tree: red-leaved maple and birch [ill. 96].

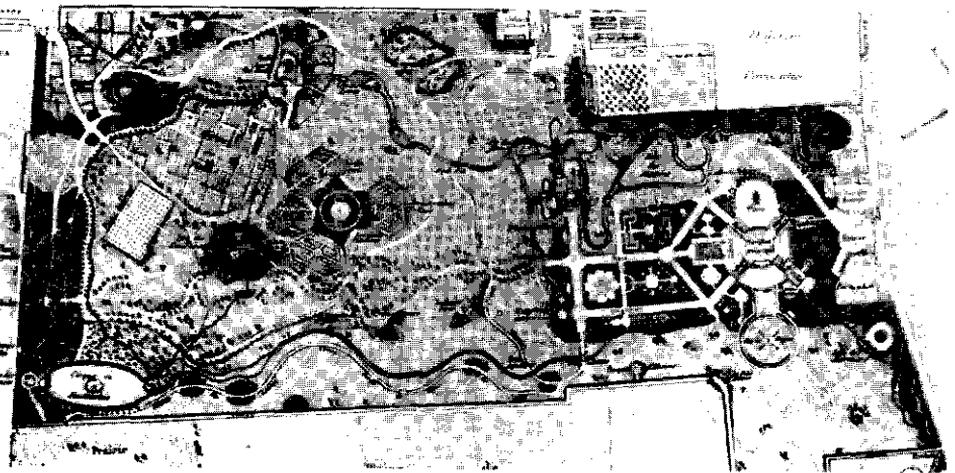
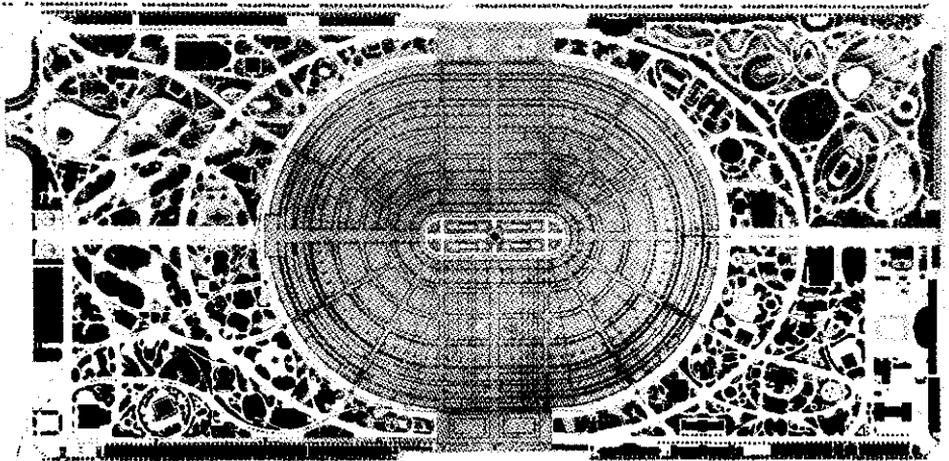
Both changes in style form, at a time when the old forms had lost

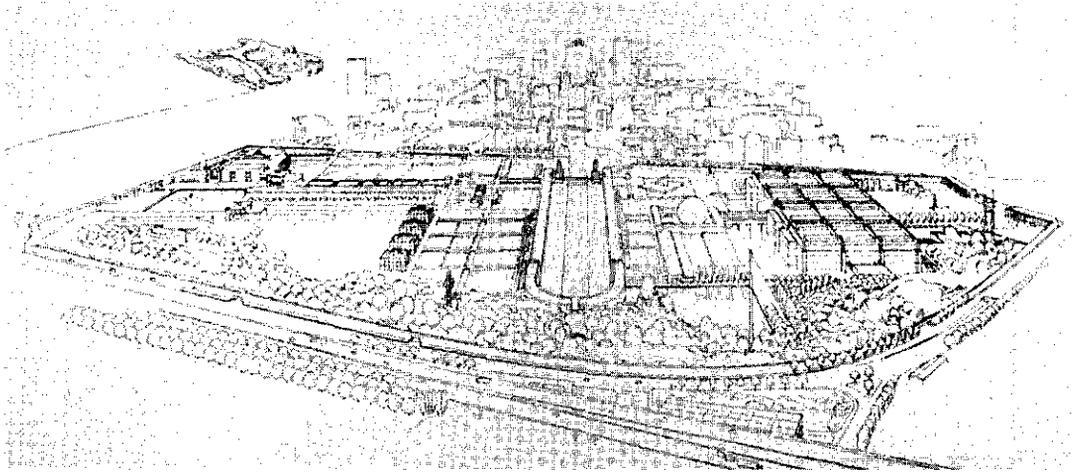


96 Migge, bird's-eye view, park,  
Hamburg, 1910

97 Paris Exhibition, 1867

98 Parc Monceau, Paris, 1783



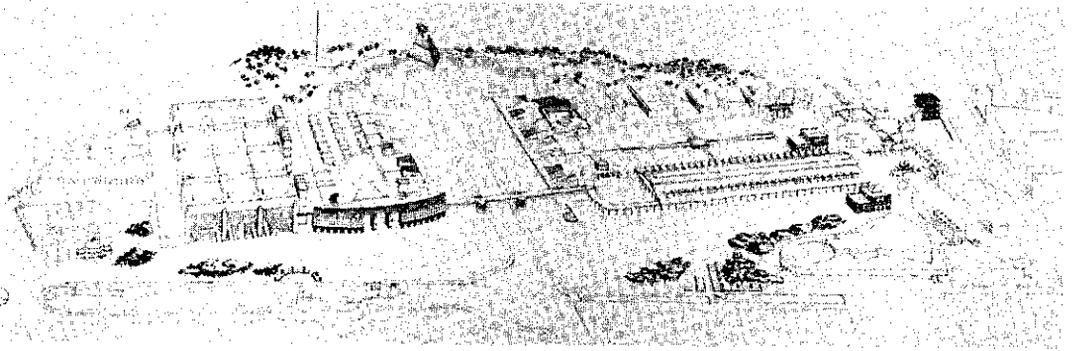


99 Noebel, bird's-eye view

their meaning, arose on account of the influence of a new use. The first (the promenade park) led to the disintegration and enervation of the original form. The second (the *Volkspark*) led to the reinterpretation and renewal of the original form.

What contribution has the La Villette competition made to the renewal of park design? The results of the competition create the impression that the majority of the designs present little that is new. 'Le plus que ça change, de plus ça reste la même chose.' In many of the 471 designs submitted the site is treated as a cross between a world exhibition [ill. 97] and the Parc Monceau [ill. 98], as in the plan by Team Zoo, which consists of seven small towns linked by various types of path.

A few designs provide promising exceptions however. In that by Tschumi a combination of familiar elements reveals something new in the way in which they are utilized. By superimposing a number of simple patterns (three formal systems of points, lines and surfaces), a stimulating, multifaceted complexity of unexpected combinations is created. The grid of striking red constructions, the *folies*, provides anchor points in the park, both for spatial coherence and orientation, and for the functional distribution of facilities and activities. The result is a manneristic plan. It is characterized by unrest, movement, passion and a tendency towards elegance. It aims to evoke a fantastically ordered chaos with an ingenious mental game; it is admirably suited to a cultural amusement park.



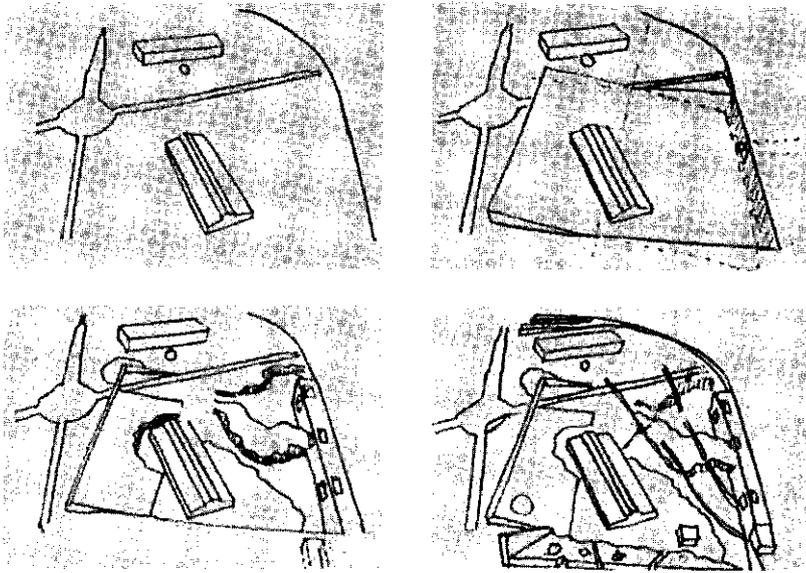
100 Baudry, bird's-eye view

The difference between Tschumi's plan and that by OMA with which it is often compared, is that OMA seeks an accumulation of activities, whereas Tschumi seeks unexpected, daring combinations. The OMA plan is a strategy consisting of a series of enumerable functional schemes. Repetitive activities like toilets, bars and picnic places are distributed with a certain frequency over the terrain. A too confined *coulisse* landscape has been chosen as the architectural form.

Pesce's design refashions the gardenesque idiom in order to create a park consisting almost entirely of fragments and pieces of garden. Baudry and Noebel keep the city at a distance in their designs, but they nevertheless create facilities for the programme. The building around Noebel's canal is a rounding-off of the city; the wooded hill crosses the canal, which seems to disappear into a cave: the start of the landscape [ill. 99]. Baudry creates a no man's land along the canals. Greenhouses and a crystalline pyramid terminate the canal like an echo of the *Rotonde de Ledoux* [ill. 100].

Corajoud creates new contrasts through the strong abstraction and personal assimilation of French and English gardens [ill. 101]. In several schematic sketches he shows how these are treated. The plan contains typical dream qualities. The green of the field is of a complexity that appears succulent and lush. The dry, eroded rock masses contrast with this. By way of straight, horizontal paths that are independent of the relief, visitors are propelled through a variety of atmospheres. Moreover, they do not become submerged in this; they do not participate. This creates a detachment similar to that which occurs in dreams.

Using various alignments for relief, paths and edges of woods, Vexlard creates a system of complex geometrical forms and textural differ-



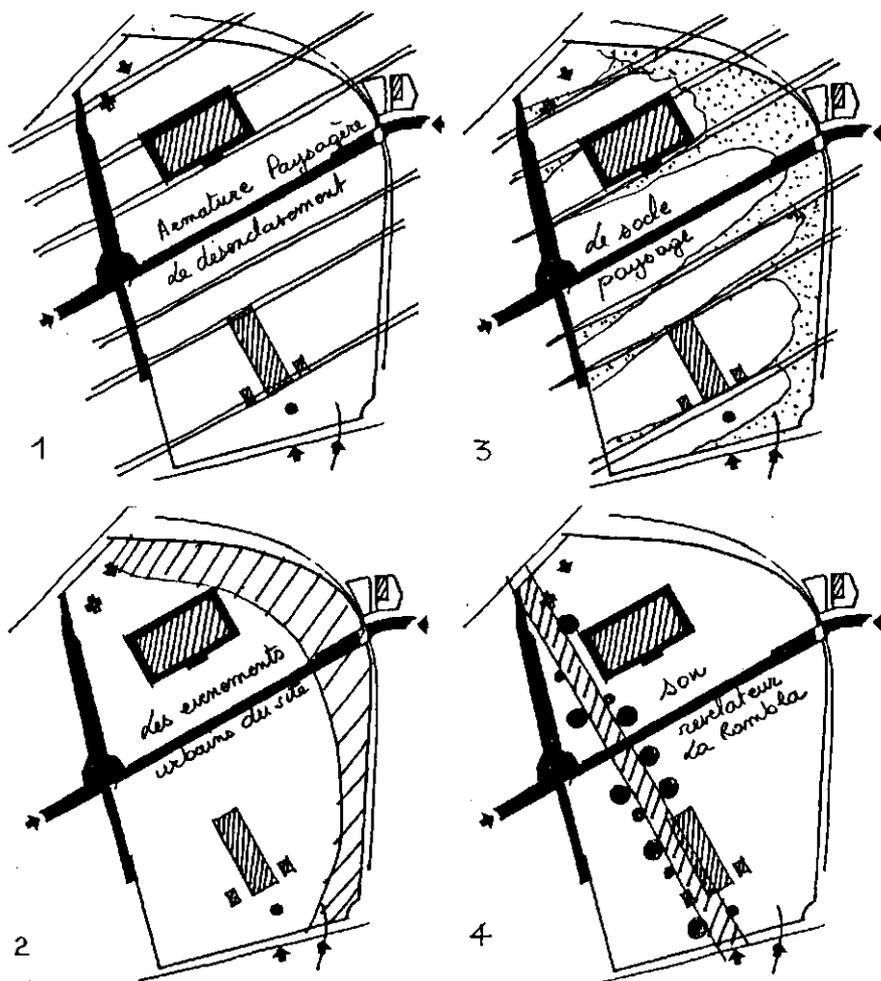
101 Corajoud, development of the design

ences [ill. 102]. The exceptional spatial form that must result cannot, however, be realized in such a small area.

Chemetoff's plan gives the impression of a development in time, with no other aim than to play with time. There appears to be an original base, of which the rectangle is a logically developed element, and this base is organized around the Boulevard Périphérique. The Grande Halle, the Museum and even the canal violate this. The plan has not been solved in the corners. There should have been a certain quality achieved here by superimposing the autonomous forms and patterns.

Meier makes fun of everything we know in landscape architecture. Spaces are constructed like rooms in a building, usually with extremely thin walls. The co-ordinate areas are linked to each other by means of a point-grid of buildings. Ultimately, the plan gives more an idea of the ideal, individual living 'outdoors', than a concrete solution for the collective urban park [ill. 103].

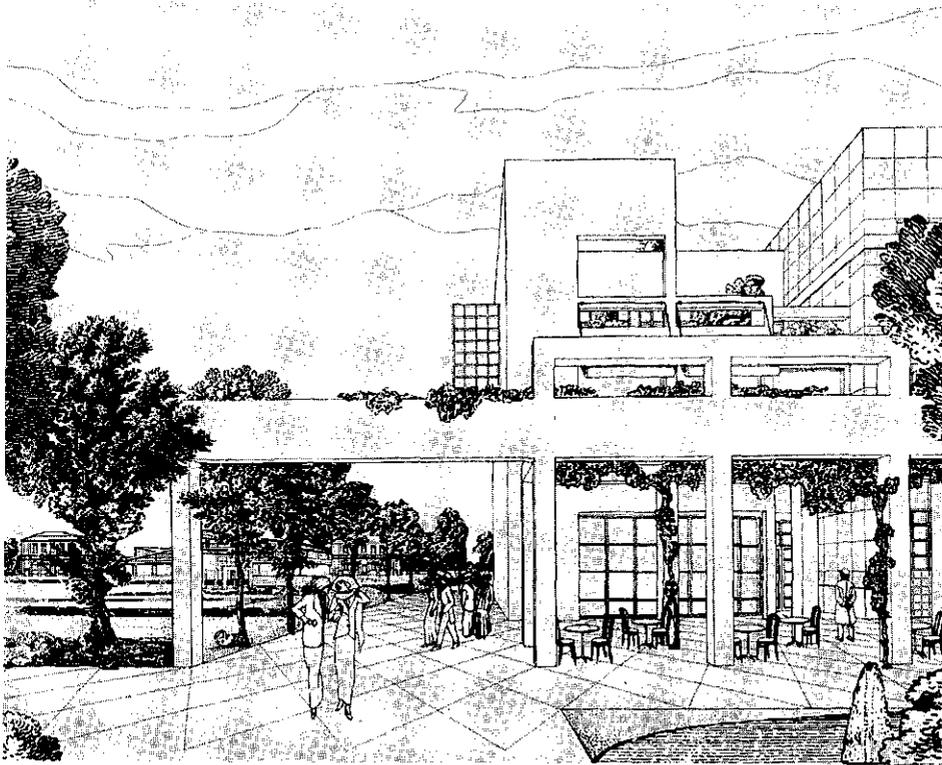
Aymonino, in a straightforward piece of graphic art, effectively does away with the park. The woods are simply woods; there are no foot-paths or open areas. The field is grass and nothing more. There are no incentives to enter the woods or field. Where are the secret paths to be created? The plan has no compartments, no subtle sequence of atmo-



102 Vexlard, development of the design

spheres and scenes. The park as a place of illusions has ceased to exist.

The complete and unadulterated borrowing of a style from previous periods is not possible, because too many meanings have been lost. The current meaning is in the analogy and, hence, in the adaptation, the transformation. At the moment, designers do not as a rule know what to express of the present or in which way. There is uncertainty as to where this age is leading, or where we want to go. This gives rise to the pursuit of compositeness and complexity. In addition to utilitarian interventions (for functional reasons), there is a formalization, dramatization or cultivation of relief, water, plantings and roads for expres-

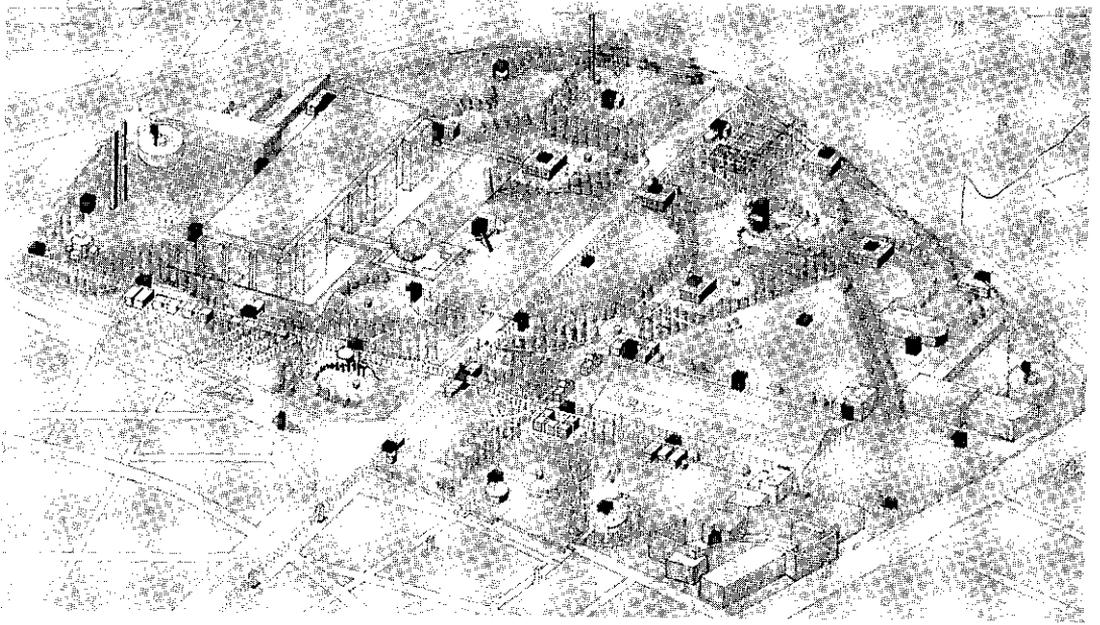


103 Meier, sketch of building in the park

sive reasons. Through an explicit use of distortions there is an aesthetic continuation of constructivism. A complex of layers refers to former cultures and the patterns of reclamation and cultivation they have left in the earth. And finally, there is the pursuit of the disorientation of space and time.

Innovations in craftsmanship within the profession are, unfortunately, scarcely discernible in the entries. The brief is too broad for this, and the detailing demanded unsuitable.

In the fourth stage of the analysis style is dealt with as a timeless concept, namely, the spatial form. In addition, there is the time and place linked aspect of style: the meaning. The style concept is, thus, closely interwoven with the meaning. Style develops through a gradual process of renewal and obsolescence. Images with major innovative value can anticipate meanings associated with present culture. Conversely, tradition can, through wear and tear, degenerate into a cliché, because of the use of images based on outworn cultural codes.



104 Tschumi, plan (1983)

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## 9 Urban parks and their design problems

As a result of decomposing the plans in the four stages of our analysis, an understanding of these plans and the underlying design philosophies has been obtained. By way of conclusion, we review what the competition reveals of the ideas current in contemporary park architecture and of the attempts at innovation in designing the urban park.

### A sequence in the design process

On the basis of their intentions with regard to landscape architecture, designers formulate a series of objectives for each project. These objectives express the designer's standpoint with regard to intervention in the existing, and the facilities to be realized. In part they have a personal significance, but, through explicit statements, they can be somewhat objectified. The objectives must be in harmony with each other and with the situation. To this end the designer develops a concept, and this is subsequently elaborated into a plan. This is a subtle process, and one fuelled by criticism and curiosity.

An exceptional characteristic of designing is that, for an objective or intention, the correct dimension or relationship in a given situation can only be found by means of a number of relativizing considerations. This can be seen in the following list of objectives compiled by Warnau:<sup>214</sup>

- protection, but also the tangibility of sun, wind and rain
- safety, but also the challenge one experiences in exploring these limits (to a degree), and in sometimes going beyond these

- privacy, but also intimacy (with the possibility of avoiding this)
- calculability, but also something that remains unpredictable
- the experiencing of contrasts, and also the repeated recognition of something of the preceding in what follows
- orientation and the feeling of belonging, and also roaming and finding a way: exploration
- unity, but also the recognizability of separate parts
- unity, but also the presence of the *Fremdkörper*, that which at first glance does not belong in a place and which provides a moment of wonderment
- readability of meaning, but also places with an elementary minimum of meaning, where all previously acquired associations fall away
- continuity and relationships in the spatial sense, but also distance and that which is difficult to bridge.

In view of this characteristic, the question arises as to how many of the ideas that form the background to or the basis of the final plan can be retrieved by means of analysing the design.

The concepts behind individual designs are sometimes difficult to ascertain and to name in unequivocal terms. It is frequently impossible to verify whether the concept that is read in the final plan has also actually directed the design process. For this, it is necessary to have at one's disposal the designer's sketches and preliminary studies; these are unavailable however. This absence is a complicating factor in the analysis, and necessitates some restraint when making observations.

What, then, can be described? Firstly, the concepts are clarified and an understanding provided of the role of a concept in designing. The concept is the organizing idea that lies at the basis of the design; it generates a synthesis of, on the one hand, the designer's views and, on the other hand, the brief. Developing a lucid concept under difficult conditions provides the greatest challenge to the designer's creativity and can lead to solutions of the highest quality.<sup>215</sup>

In a concept the designer simultaneously endeavours to establish both the individual character of the future park, and its relationship with the surroundings. The concept is the designer's intention and expectation, as devised and expressed in the design. This is, however, only part of the total intention; a committed designer is therefore never entirely satisfied with a design.

Sometimes, the concept is so broadly described that it could be just about any design idea. This broad definition of a concept—possibly

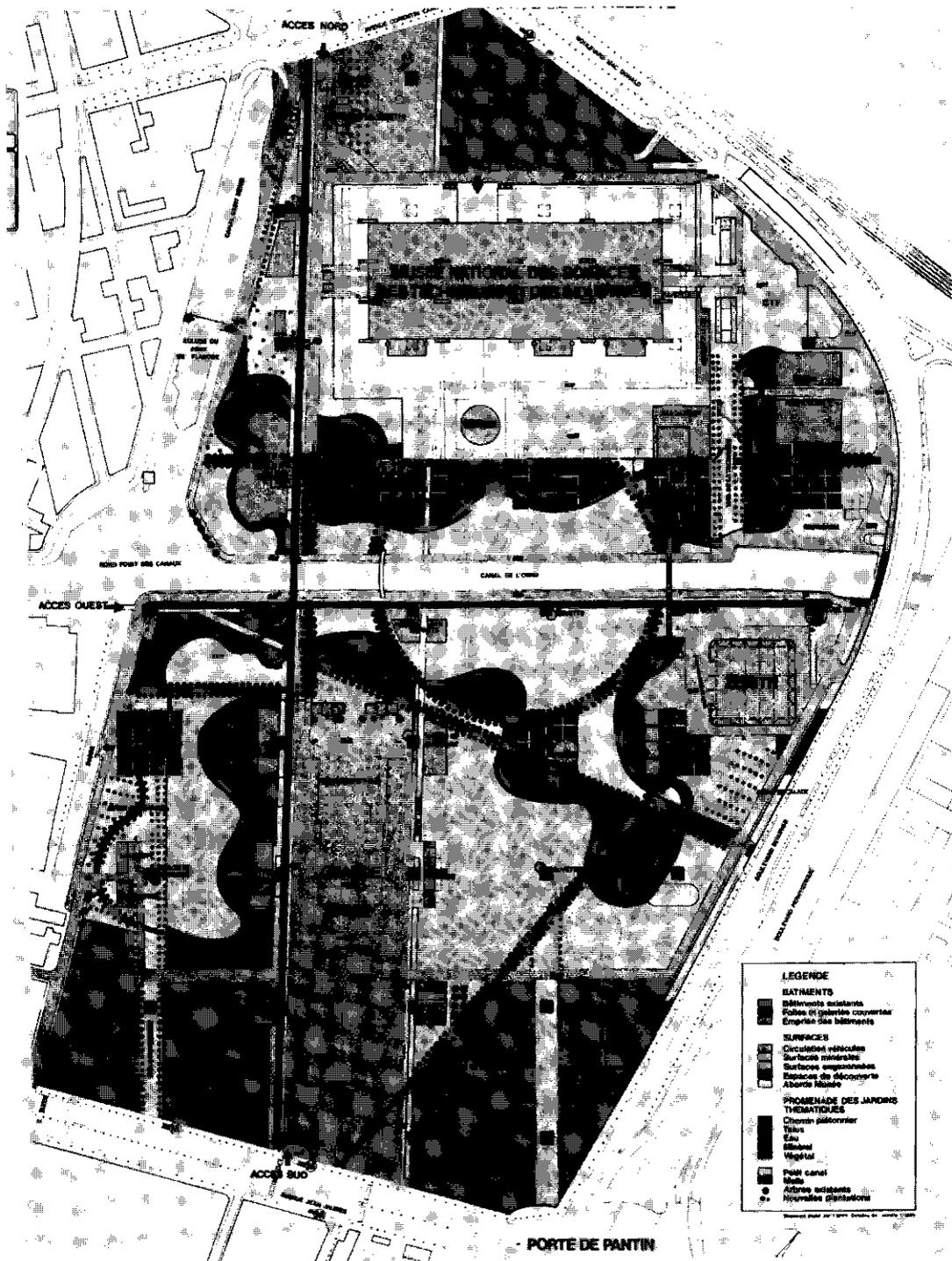
prompted by daily practice—is concealing. ‘Concept’ here means the design’s generating and organizing idea; how does one keep control of the style of the plan while designing so that it becomes the expression of what one is aiming at? This is also the test by which to determine when the design is finished.

Four different types of concept may be identified. The first, contextual, refers to forms and patterns that are linked to situational features. The canal and arterial roads provide an example. The assimilation of the situation and/or programme is set down in a form concept that constitutes the framework for the design brief: ‘Assembled characteristics concerning the context are reduced to a manageable, coherent form concept on a level of scale higher than that of the design brief, and this gives the wider context within which the design takes place.’<sup>216</sup> This can be envisaged as a contextual form concept. It is a derivative and an interpretation of the context; it has arisen because of the ordering of contextual characteristics and it sets down the specific historical-spatial situation and/or the programmatic conditions and requirements.

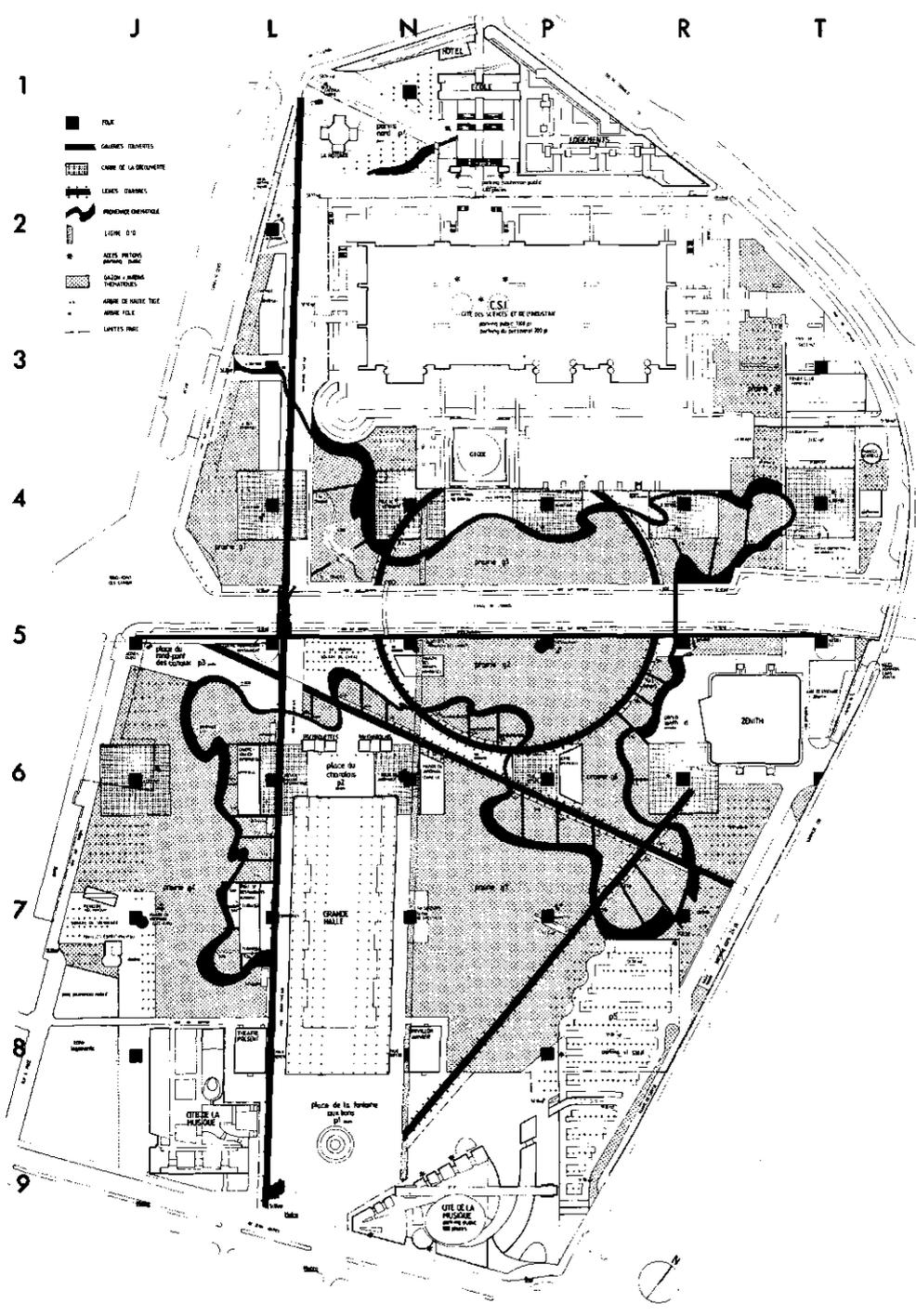
The second type of concept is style, and the application of a style. The third is autonomous, a spatial or intellectual idea that can lend the surroundings a recognizable coherence and can characterize places with simple forms. Finally, there is planning; the plan is a strategy consisting of a series of enumerable functional schemes. The concept is devised in the form of a scenario or scheme as a prelude to designing in order both to effect the overall design, and to direct the further course of its planning. The design is a direct derivative of the planning concept.

An effective concept is characterized by its ability to solve major design problems. A concept is not only important for directing the design, but also in bringing the participants in the planning process (client, user, administrator, government, etc.) to a consensus and ensuring that all parties remain loyal to the design’s intentions and objectives. In this way a strong concept can sustain the body of ideas associated with a design during the planning process.

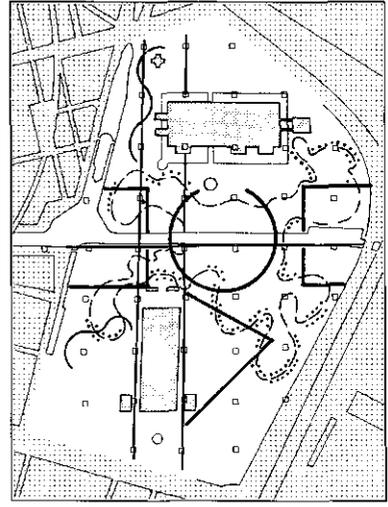
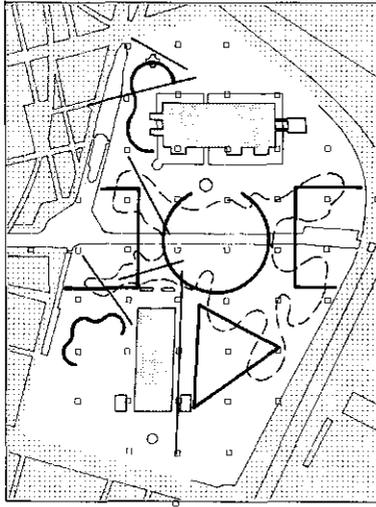
By comparing the designs for the first round (1982), second round (1983), the developed plan (1986), and the version executed (1991), Tschumi’s plan can serve as an example here. The objective of the initial (1982) plan was to abolish the (traditional) spatial hierarchy; this is undone through the introduction in the second round of a cross of galleries over the terrain [ill. 104]. In a later phase the triangle-shaped



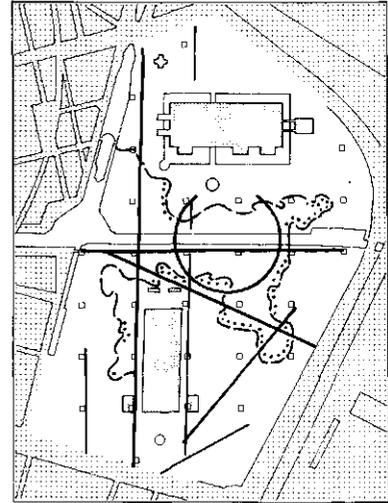
105 Tschumi, plan (1986)



106 Tschumi, plan (1991)

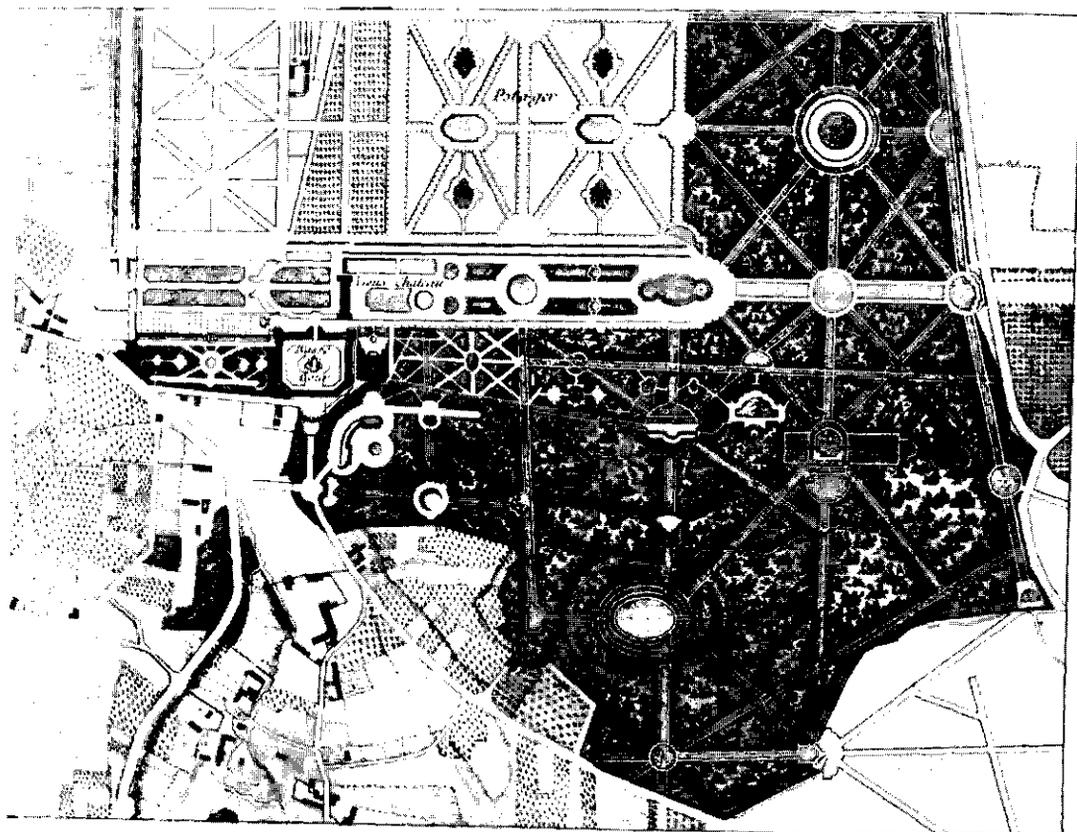


107 Development of Tschumi's plan



surface was reformed. The sides of the plane (space) became paths connecting important points of activity [ill. 105]. Up to now (1991) only the *folies* along the axes have been architecturally fully developed. The axes have thus gained additional importance. More and more, the composition becomes tight, well-knitted and harmonious (although Tschumi avoids the word) [ill. 106]. Perhaps this growing unity is part of Tschumi's original scheme, in which, after deconstructing the programme and forming autonomous systems, the plan gradually grows to a certain synthesis [ill. 107].

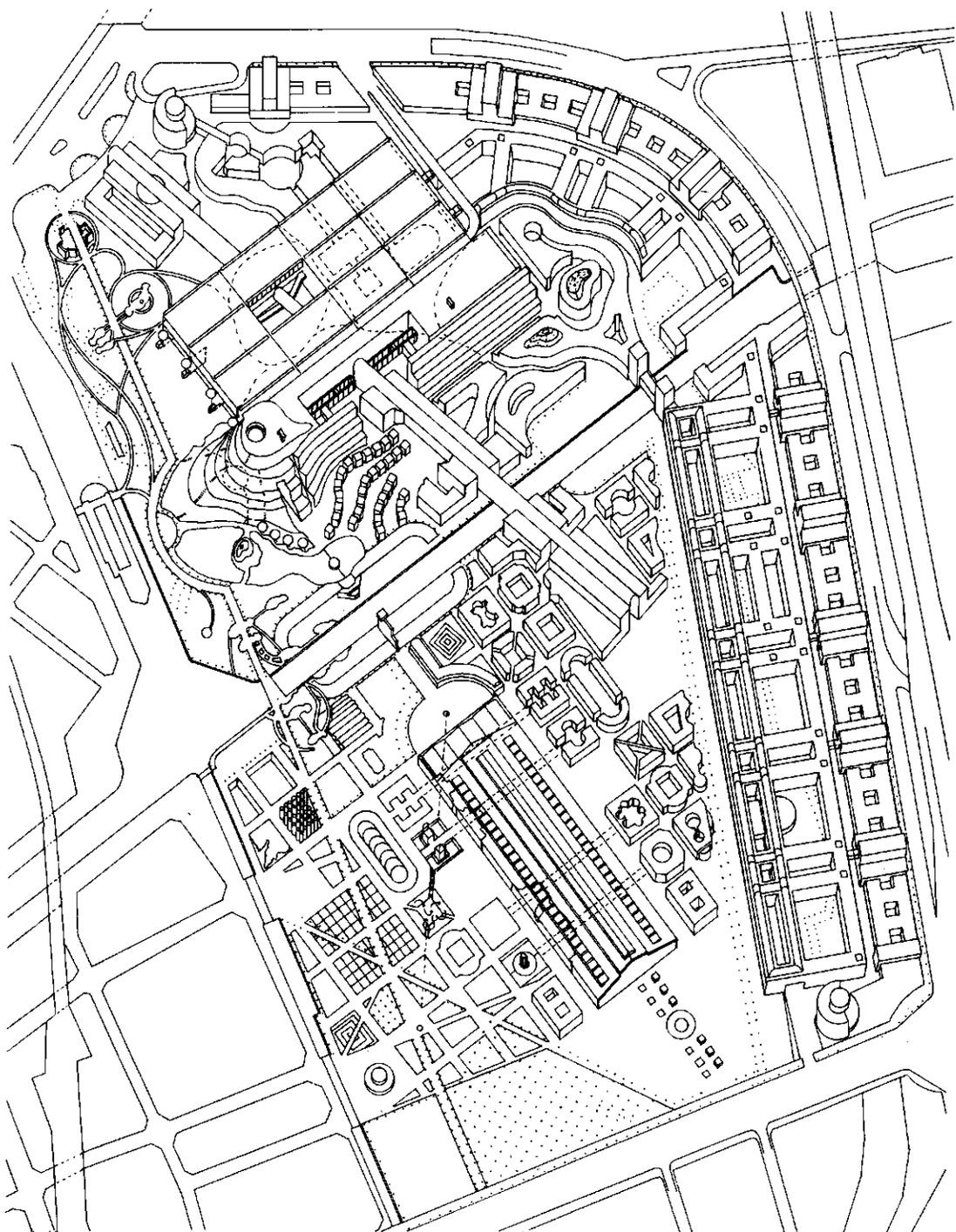
The system of lines evident in the first round was subsequently



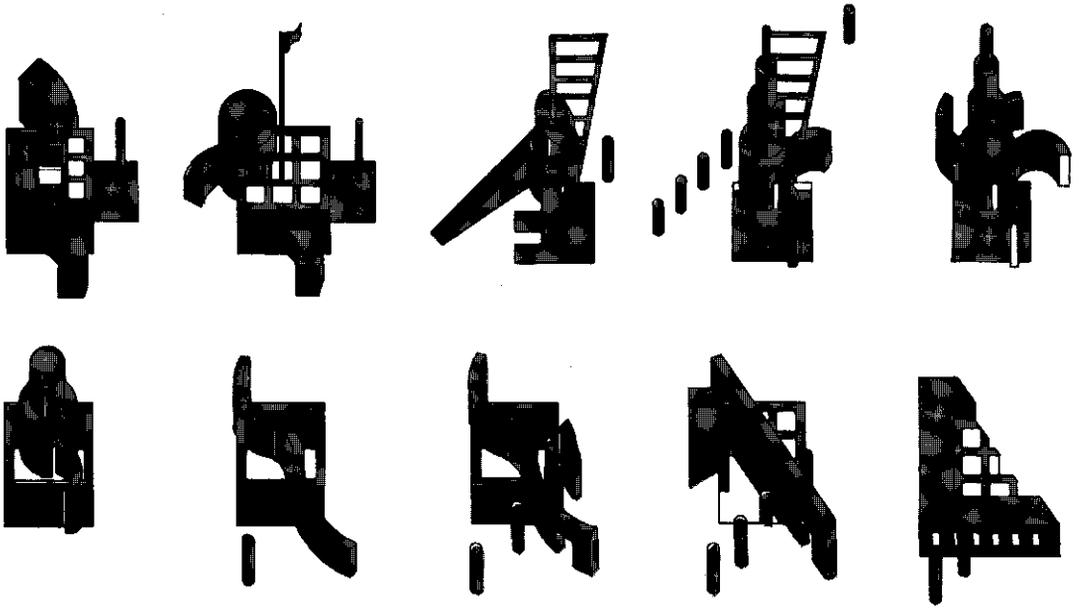
108 Regency park, Bizy, 1750

changed considerably. In the first round the meandering path was a subordinate feature. In the following round the position of the path was shifted and small incidental gardens were added along the meanders, forming the Promenade des Jardins Thématique. The independent short lines that were distributed over the plan disappeared and were replaced by a co-ordinate system, a series of covered paths that linked north and south and east and west in the park. Later some of the edges of the geometric surfaces were transformed into paths linking particular attractions.

Because Tschumi's plan increasingly reverts to the use of classical axes as unifying elements, the resemblance to the rococo/Regency garden of the mid eighteenth century is stronger. Particularly in France, this type of garden was a pluralistic conglomeration of diverse set pieces from familiar garden concepts, held together by axes from



109 Tschumi, isometry, competition entry, 1976

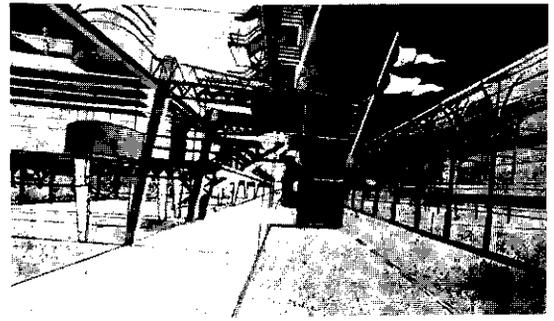
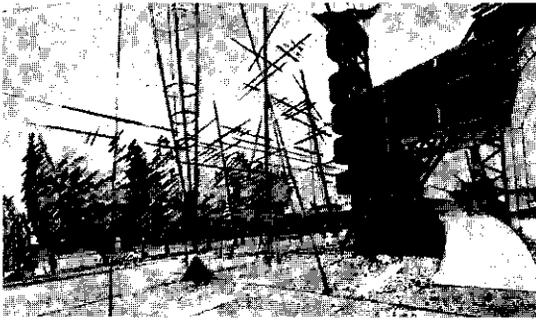


110 Tschumi, various *folies*, competition entry, 1982

the regular classical garden and full of *cabinets* and salons with ever varying forms, decoration and function [ill. 108]. The Regency device of the diagonal axes,<sup>217</sup> which were placed over the orthogonal system, is comparable to the 'unfolding' of the triangular plane in Tschumi's 1986 plan.<sup>218</sup>

The symmetrical square in front of the Grande Halle is distorted by Portzamparc's Music Centre. The eastern building protrudes far into the square, as a result of which the Grande Halle, with the neo-classical pavilions on both sides, seems less static and monumental. The square is secluded from the busy avenue and is visually more directly linked with the grassy field behind.

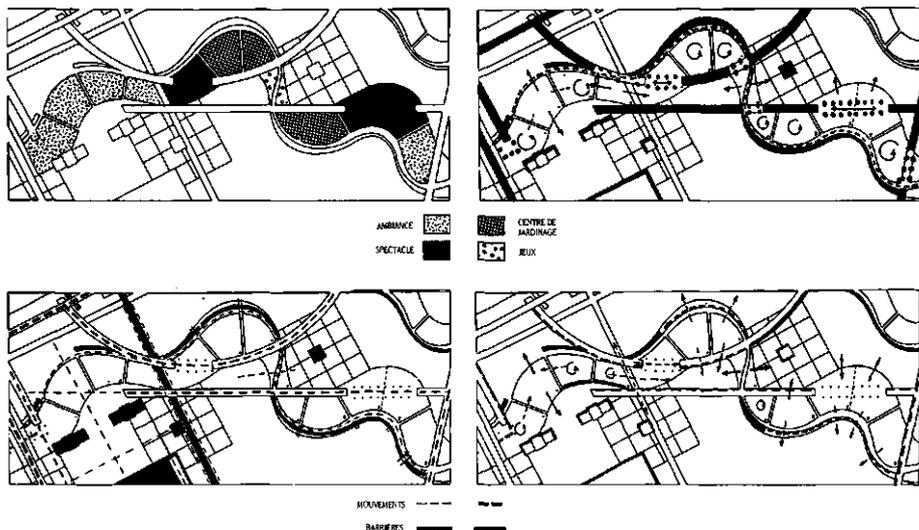
The superimposing of systems (sketched as a series of patterns laid one above the other) goes against our experience of structure (in the sense of a traditional ordered context). The patterns seem to be insufficiently independent. In the second round Tschumi made the grid of *folies* coincide with the most important lines of the plan, creating a system of covered paths. Almost all the geometric surfaces disappeared from the composition, as a result of which one of the patterns evident in the earlier plan also disappeared. If the systems want to be independent, and thereby become estranged or disorientated, then both the recognizability of and the contrast between the patterns themselves must be stronger.



III Tschumi, design for *folies*, 1984

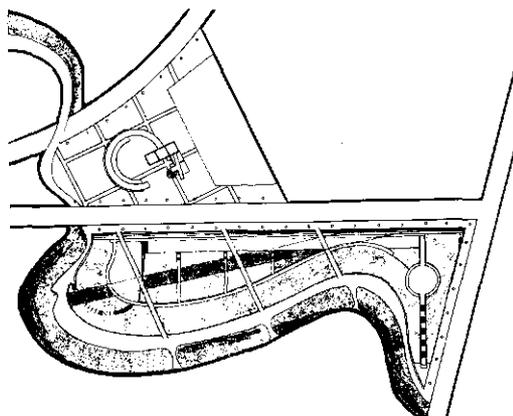
In any case, Tschumi's design goes much further in transforming familiar schemes than his entry for the 1976 competition for La Villette, which got bogged down in an unsolved confrontation in the form of a collage of historical style fragments from urban planning and landscape architecture [ill. 109]. The sketches Tschumi made after the competition also reveal a pursuit of vehemence, instability and unexpected compositional effects. This is evident, for example, in a comparison between the simple geometrical volumes of the *folies* in the earlier plans and the *folies* as presented in the later plans [ill. 110 and 111].

After the second round the meandering path was further developed; the gardens now form a continuous strip along the path, which has been renamed the Promenade Cinématique. The path has been shortened and is no longer a circular route: it has a beginning and an end, linking the Grande Halle to the lock. This spoils the idea of the never-ending meandering, the roaming movement characteristic of the earlier versions of the plan. The objective of developing a sequence of gardens as a cinematic event has not been achieved however. Because of the nature of the material, an individual garden requires a greater surface area than was provided in the original plan in order to create its own atmosphere and character. As a result, only a third of the intended number of gardens can be realized. The film is no longer running; it regularly comes to a standstill so that the image can unfold in its entirety before the spectator. His design is exceptionally suited to involving various designers (artists, architects, garden designers, industrial designers) in realizing the plan.<sup>219</sup> The deployment of many different artists and architects is possibly a true characteristic of the park of the twenty-first century [ill. 112 and 113].



112 Tschumi, plan for composition of part of the Promenade Cinématique, 1984

113 Chemetoff, execution of one of the gardens; the bamboo garden, 1986



Tschumi's theoretical position is not yet evident in what has so far been built of the park. In practice, an architecture has been created that is a reformulation of an intellectual concept. That transformation has largely been successful precisely because Tschumi treats utilitarian, technical and managerial opposing forces as a fascinating paradox. He assumes that life is not harmonious, not consistent, and that a synthesis is impossible. The resulting conflicts are not negative though. For the time being the park remains largely conceptual in character, and it has not become the territory of the sensual pleasure hoped for by Tschumi. Perhaps it literally has to grow to become so.

Consistency in the design is an important criterion for quality, perhaps the most important. If it emerges during the examination of a plan that the more it is decomposed the greater the coherence, then the body

of ideas underlying a plan will have a large degree of consistency. If arbitrary forms are avoided, and the forms on a number of levels of scale and/or abstraction are appropriate, then a unity is created that evokes a character of almost natural self-evidence. Taking the designer's personality into consideration, one could even speak of inevitability.

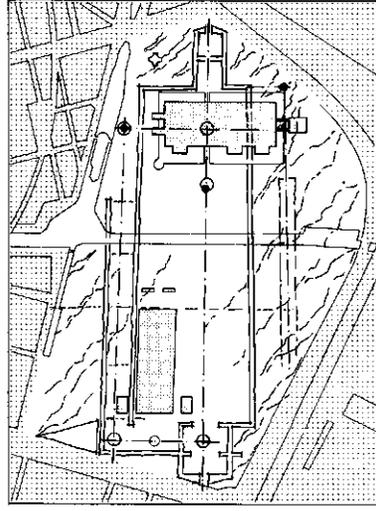
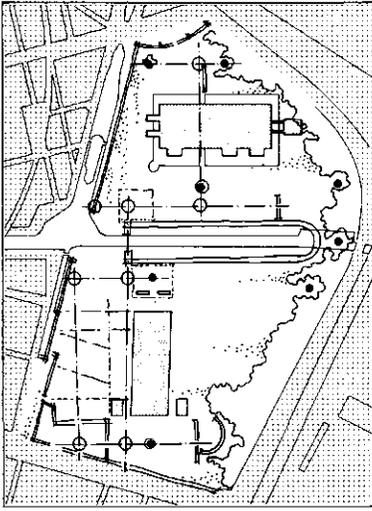
The 1980s have been characterized as offering a culture of choice. 'All is Possible', cries Jencks, the spiritual father of post-modernism. 'Post-Modernism produces a quasi-freedom, in which all restrictions have been relinquished. It should follow from this that every architectural design is qualitatively 'equal' to every other.'<sup>220</sup> An architectural product gives expression, however, to location, circumstances and the design brief.

By examining the consistency of design considerations, gratuitous choices can be identified. The plans are therefore examined using a method in which alterations to parts of the plan are sketched on to the original, as a result of which the possibilities for elaborating more strongly the concepts read in the design are examined. This activity is not without risks. If the concept is not correctly read from the plan, then the alterations are not a strengthening, for the designer had a different aim, and thus a different concept.

As an example of this method, a number of results are described below. We have used the more schematic ground-plan (scale 1:5000) of the park and the surrounding area submitted by the designers as our basis. This is often clearer in its main layout than the more detailed plan (scale 1:1000), since in the latter the designers sometimes appear to be disloyal to their concept as outlined in the more schematic plan, or to lose their grip on the actual plan by focusing too much on a programmatic aspect.

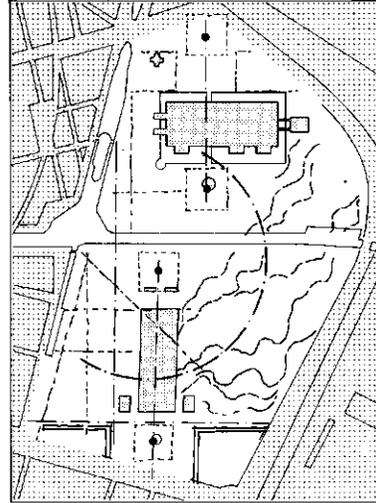
The design by Noebel can be strengthened by removing the perfunctory gardens, improving the links between the buildings, and by enlarging the void on the east side [ill. 114]. By narrowing the walled strip in the plan by Magerand and Mortamais, a more markedly distinctive character is created between inside and outside and, as a consequence, more possibilities are offered for the creation of different atmospheres and activities [ill. 115]. Two small strips lie outside the walled section. To the west is a garden area that is to be intensively cultivated and that is lodged between narrow strips of buildings. The east is peaceful and there is a gradual transition into the surroundings.

In Safarti's plan garden rooms and park spaces can be regrouped in



114 Concept, Noebel

115 Concept, Magerand and  
Mortamais



116 Concept, Sarfati

order to create larger units, so that dimensions are created that are more in keeping with the character of the areas [ill. 116]. It becomes, then, a convincing eclectic collage of historical styles. In view of the illustrations presented in the commentary, this is also what the plan seems to be aiming at; all the illustrations are of familiar garden or park scenes. The curved path at the heart of the plan is lengthened and widened as a way of providing a link between the different characteristics of the park.

A simple concept can be complex in its spatial elaboration. Thus Tschumi's strategy consists of unambiguous, autonomous patterns

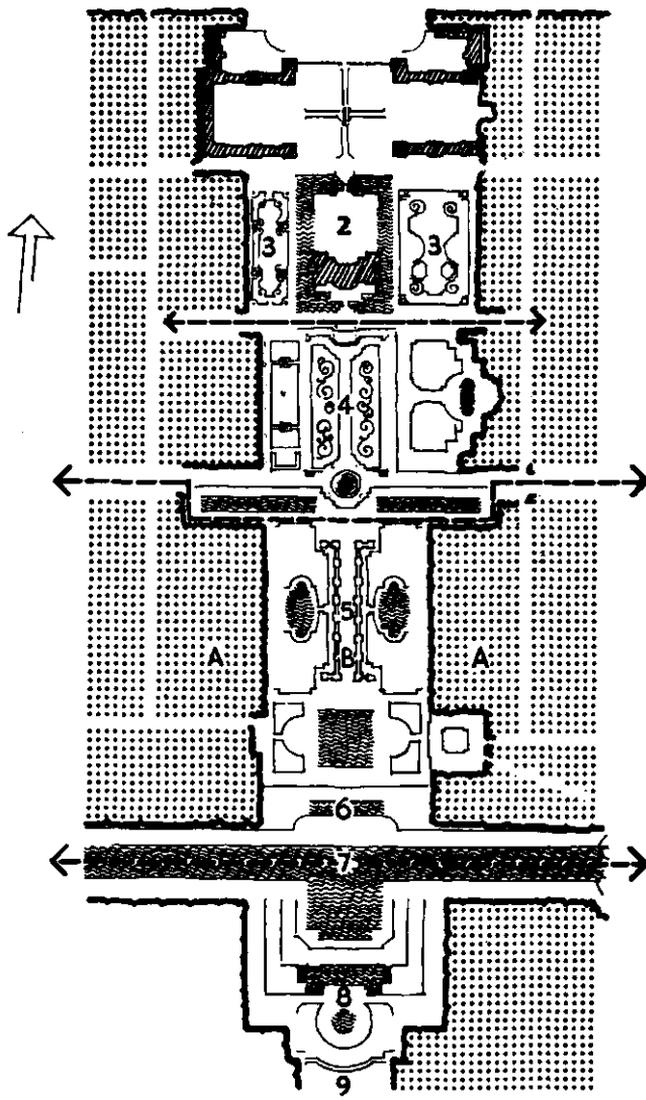


Fig. 5. Plan of Vaux-le-Vicomte. United by strong axes. The space division is a clear-cut distinction between dark massed woodland and light open space, in contrast to the Italian pattern of light piercing through dark, and the English tradition of misty tracery. The design progresses by increasing richness of detail near the house and depth of cross-axes away from it.

A. Dark enclosing mass of woodland. B. Open central space.

- |                    |                    |                                   |
|--------------------|--------------------|-----------------------------------|
| 1. Avant cour.     | 4. First terrace.  | 7. Great canal.                   |
| 2. Cour d'honneur. | 5. Second terrace. | 8. Grotto.                        |
| 3. Parterre.       | 6. Cascades.       | 9. View to hill and Farnese Bull. |

117 Crowe, schematic plan of Vaux-le-Vicomte

and forms, but complexity is created by superimposing these: contrasts are not solved; there are collisions in form and function. The plan by Vexlard is simple in its main layout, in order to illustrate the contrast between nature and the city, and is complex in the spatial form of plantings and in its use of differences in height.

### Aspects of composition in landscape architecture

Designers often speak of tension in the design. This can arise from the interplay between the components of coherence. In this section we describe the interplay—in so far as it is present in the designs for La Villette—in more detail. In this we have made particular use of the analytical drawings made in stages one and two of our analysis, and they reveal much about the designer's virtuosity and command of the tools of park design.

Our discussion is based on an analysis of six aspects of composition in landscape architecture: spatial illusion, order, unity, line patterns, literary figures and musical compositional figures. These aspects have been chosen on the basis of the phenomena found in the designs.

#### *Spatial illusion*

The interplay between the components of coherence is often related to the creation of a certain spatial illusion. A park space is more extensive and of a looser form than an environment determined by buildings. As a result, distance, height and gradient are more difficult to estimate. For this reason the spatial experiencing of a park can, to a considerable extent, be determined by spatial illusion and the suggestion of continuity. The illusion is established with the aid of perspective and sequence.

The manipulation of perspective in the composition of views is effected by means of a geometrical play (Le Nostre) [ill. 117] or through a pictorial arrangement (Brown) [ill. 118]. The result is frequently an expanse that is difficult to estimate, as a result of which the dimensions of the site become manifest by using increasingly longer right angles and eventually by tilting the ground in the distance towards the observer (Le Nostre) [ill. 119], or the area appears to be larger than it in fact is as a result of partially obscuring boundaries by the use of clumps of trees (Brown).

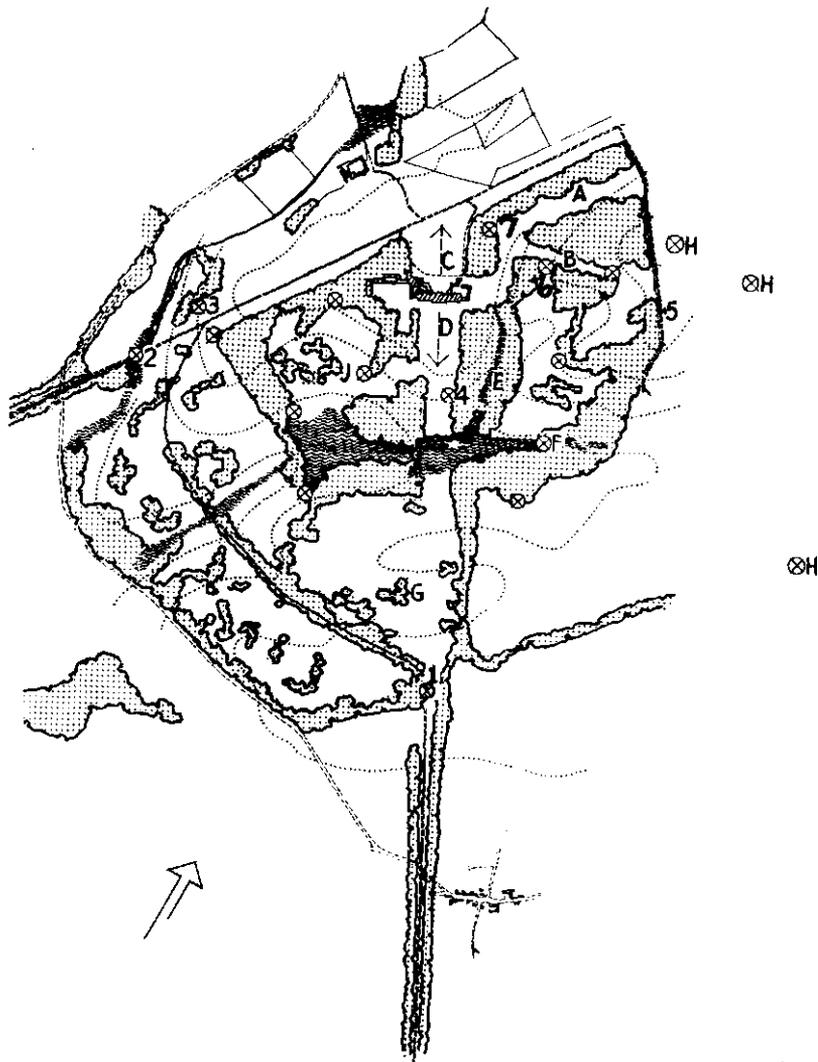
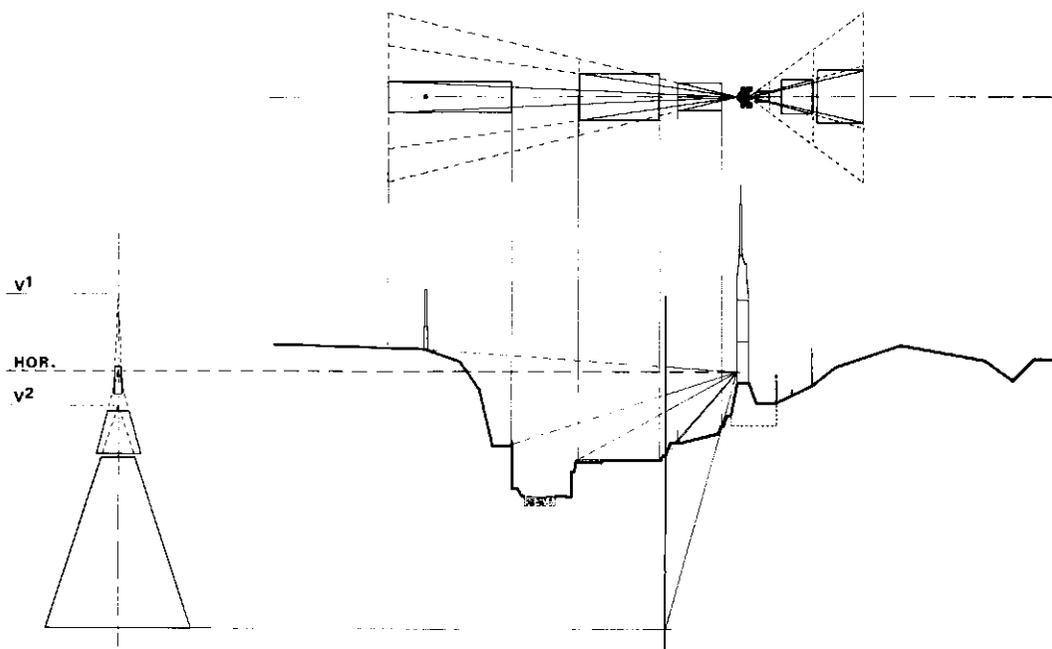


Fig. 7. Plan of Stowe Park.

- A. Grecian valley (Progressive view, spear point).
- B. Cleft view.
- C. View over humanised country (wide open window).
- D. View over idealized country (out-looking central vista).
- E. Elysian fields (closed composition).
- F. Palladian bridge (view disappearing into woods).

- G. Tree groups (framing view from Corinthian arch).
- H. Monuments bringing countryside into garden.
- J. Rondo. Static view.
- 1. Corinthian arch.
- 2. Classic bridge (Oxford bridge).
- 3. Boycott pavilions.
- 4. Arch of Amelia.
- 5. Ha-ha.
- 6. Queen's house.
- 7. Temple of Concord.

118 Crowe, schematic plan of Stowe



119 Steenbergen, schematic plan of Vaux-le-Vicomte

Theatre-décor-like solutions can make small spaces seem large by strengthening perspectival lines and the use of *trompe-l'oeil*. Further, if spaces really do have great depth, this can be made evident: by placing distant objects (curved colonnades, rising ground, for example) in the sight line; by terminating a vista with an object at the point where the landscape merges into the sky; by leading the eye into the depth by using trees and clumps of trees that guide the eye and lead to a more distant clump, building or view (that is to say, in addition to the correctly constructed perspective, perspective must also be emphasized in the right way<sup>221</sup>); by providing the observer with a somewhat elevated position by allowing the footpath to run halfway up the incline; through a picturesque embellishment of the view, a counterpoint in the scene, or the positioning of a *repoussoir* in the foreground. With the aid of *coulisses* the eye can be directed; they can be used, for example, to break up the panorama into separate views, to enlarge interesting objects by concealing the extremities, which creates the suggestion that they continue further than the point at which they disappear from view,<sup>222</sup> and the observer can be screened off from undesirable objects (particularly the massiveness of the Museum).

In La Villette use is often made of differences in level;<sup>223</sup> designs often incorporate the elevated Boulevard MacDonald/Sérurier and the

bridges over the St-Denis canal, the level of the water after the lock and the water around the Museum, and the subway under the Avenue Jean Jaurès which leads to the 'green route' to the Parc des Buttes-Chaumont.

A park can never be viewed in its entirety, only in its parts and articulations. The spatial sequence is the consequence of the spatial form seen as the succession of images. It is dependent on the characteristics of the route traversed and, at the same time, gives the plan a narrative aspect. If the succession of comparable spatial articulations or of uniform elements conveys the impression that they continue, or recur, the idea of infinity is created. The notion is closely linked to the routing in the design.

It is not by the breadth or the length of the walk, that greatness of character in garden scenery can ever be supported; it is rather by its diversity, and the succession of interesting objects. In this part of a great place we may venture to extract pleasure from variety, from contrast, and even from novelty, without endangering the character of greatness.<sup>224</sup>

Both the spatial structure and form and the experiencing of a park design can best be elucidated by describing a walk.<sup>225</sup>

### *Order*

With the aid of spatial illusion, the designer has the freedom to deceive the observer. With this, however, the designer also has a responsibility to create an orderly and coherent whole. Orderly means that there must be a regular arrangement, or, more comprehensively, that the structure is perceptible and comprehensible. Coherence is the interrelationship between the components of a plan and is related to the clarity with which the parts form a logical whole; the distinguishability of main and side issues; the solidity with which the parts are affixed to each other.

If we proceed from Mies van der Rohe's view that 'Designing is nothing more than the creation of order in the chaos in which every remaining experience subsides in an inevitable poverty', then the question arises as to what kind of order must be sought in designing. There are different forms (or levels) of order: from elementary to complicated, and from simple to complex. And, in a recent discussion of architectural quality, Dijkstra articulated a number of important aspects of order.

Next to clarity and in a dialectical relationship to it is the concept complexity. Complexity arises when, within a composition, a number of themes [similar to the components of coherence defined in our analysis, LB] are simultaneously dealt with and interrelated [...] The extent to which and the way in which the designer wants to and is capable of combining clarity and complexity within a single conception depends on his attitude as well as his sensibility and talent [...] If a composition, in addition to being structurally clear, is also intriguing and complex, if it does not immediately divulge its coherence, then the observer will be prompted to participate actively in order to discover and clarify this coherence and, furthermore, will repeatedly encounter new surprises. The image of the composition only becomes clear and comprehensible through an appeal to the observer's own creativity and must, because it cannot be comprehended and remembered in one go, be reconstructed repeatedly. Complexity is thus conceived not as the antithesis of clarity, but as a complementary concept which the designer can employ in order to involve the observer more consciously in experiencing the existent structural coherence.<sup>226</sup>

Complexity thus conceived involves an interplay between main and side issues, between framework and infilling, between main form and ornamentation. In this way, the concept can be usable. Mostly, however, complexity is seen exclusively as the opposite of simplicity.<sup>227</sup>

If in a plan an excess of coherence arises, it becomes inevitable and open to only one interpretation; in short, it is dull. The architecture in the plan by Petit is, moreover, so austere that it evokes connotations of a graveyard. It appears to be a negative selection from classicism and functionalism.

In order to prevent a situation becoming too obvious, being surveyable in one go and immediately divulging all its secrets, the designer can pursue a certain degree of complex compositeness and ambiguity. The excess of coherence is tempered. This more complex, higher form of order stimulates the imagination, invites discovery, provides surprise and lends a richer meaning. The interplay can, thus, be directed towards not allowing the coherence to be immediately divulged, so that the observer is repeatedly prompted to discover the coherence himself, to place the object in its context.<sup>228</sup> The coherence in a park will thus gradually unfold.<sup>229</sup> Mysteriousness, 'intricacy' in the English landscape style, for example, arouses curiosity by means of a partial and indefinable mystery. It gives the promise of further information.

If, in addition to being transparent and clear, a composition is also intriguing, if it does not immediately divulge its meanings, then walkers will be inclined to check their pace and withdraw into contemplativeness. In this way an appeal is made to one's own creativity. It is the

compositeness of the meanings and their values that appeals to us in a place. The designer can thus involve the visitor in the meaning of a place.

By giving a design a certain measure of redundancy (overabundance of information) and ambiguity (equivocality), the observer is offered more starting-points for an individual interpretation. The tranquillity and restraint of a well-created 'void' in the design can achieve the same. Coherent order is possible at every level of complexity. In the case of increasing complexity, however, more is demanded of the designer's, and the observer's, inventiveness in order to keep the order perceptible.

The designer thus creates possibilities for evoking meaningful experiences. The concepts 'simplicity' and 'complexity' denote the ordering of the impressions (orientation, association, identification); publicness and intimacy indicate the experiencing of the atmosphere; continuity and contrast determine the rhythm of the experiences, their sequence and the depth of the impressions.

### *Unity*

Unity is a special form of coherence: a tightly-knit coherent whole of harmonious parts, harmonious because of the absence of unsolved conflicts and contrasts. In the design, concordance dominates in style and character. There is a recognizable relation between part and whole and between outline and particularization.

From the total of isolated images and impressions, unity can be experienced by the repeated recognition of something of the preceding in the following. This image is determined by the nature of the coherence at a high level of abstraction, by the recognizability of the separate parts and the way in which they are interrelated. In the landscape the possibility of recognizing coherence is linked to use.<sup>230</sup> This is simply objectifiable. In the park, there is no such direct relationship.

The representation of nature can create unity. If a park is the expression of a shared image of nature in society, then a spatial unity usually arises, as in classical parks. Ambivalence as to how nature should be viewed first emerged in Romanticism: nature was an inexhaustible source and, at the same time, also vulnerable; 'physical' nature, which can be calculated by the intellect, and emotionally stirring 'sublime' nature become separated<sup>231</sup> (see, for example, the well-known pictures of Brown versus Knight). The expression of this ambi-

valence crept unnoticed into the work of the Romanticists. Today, this aspect is more consciously, and in some cases, provocatively or satirically, included in designs.

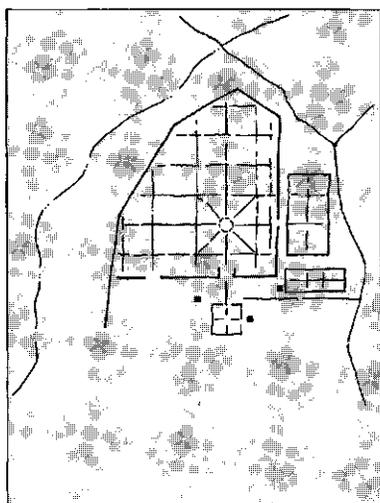
If we draw the unity as lines and forms, then the following pictures of spatial coherence are obtained [ill. 120]. There is the unity of the late medieval garden, achieved through repetition and co-ordination; the garden from which the outside world was excluded. The unity of the baroque estate was achieved using a hierarchical system of axes. Sight lines were also routes. It was the park of the promenade. In the Romantic estate sight lines and routes were distinct; the topography coheres in much the same way as a hunter becomes acquainted with his terrain. The viewpoints were chosen for pictorial reasons. Unity in the modern *Volkspark* was achieved through the use of a tightly-knit classical main layout and a commonsensical and practical elaboration of the facilities provided in the park. Unity within the public gardens designed in the New Objectivity (*Nieuwe Zakelijkheid*) style involves the use of a minimum of means to bring the elements of the composition to a standstill. The equilibrium is fragile, so that the additions are readable. Finally, unity in the (post-) modernist urban park is achieved through an axis superimposed on a collage. The coherence of the topography is replaced here by a painterly composition, in which the unity sometimes solely exists as a graphic composition.

In the plan by Bakker and Bleeker there are strong spatial contrasts (open-closed, large-small) and functional differences (tranquil-busy, move-stay), which are attuned to each other and support each other. The conflicts have been resolved, and the tension between the Apollonian and the Dionysian has been brought under control; a unity full of harmony and balance is the result.

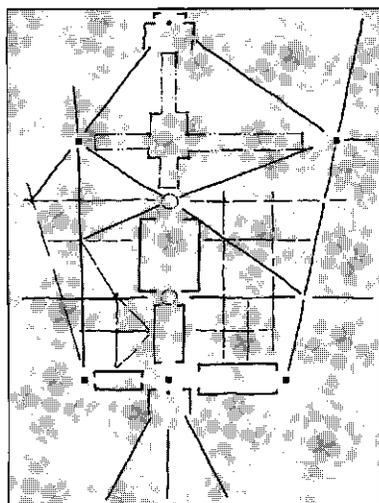
Tissier's design seeks unity by making a large spatial gesture. The inexorable or monumental in such an intervention has been subdued here by a garden-like elaboration in which in some places the large curve is also literally consumed by overgrowth and erosion [ill. 121].

### *Line patterns*

The interplay between components partly finds expression in the line patterns in the composition: in the lines, visible and not immediately perceptible, with which the design attains a certain order. An understanding of this compositional structure is chiefly obtained by examining the designs by means of sketches. One can use these sketches to



a



b

120 Outline of six unifying arrangements

a Middle Ages

b baroque

c Romantic



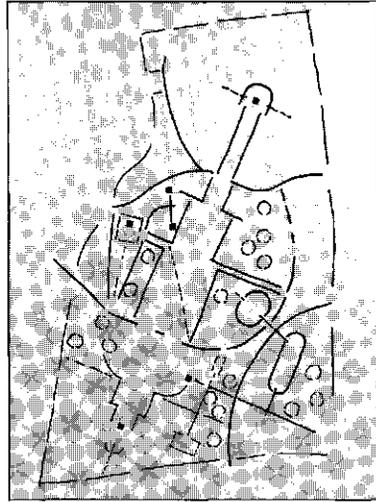
c

try and identify usable, significant or 'fixed' lines with which one can continue one's analysis further. In addition, different types of lines can be distinguished according to their position and direction, according to their function (construction line / regulating line / sight line / route), and according to how they are executed (vague and pictorial / sharp and graphic). Going through a composition, the lines provide direction, movement and continuity by guiding the eye and foot.

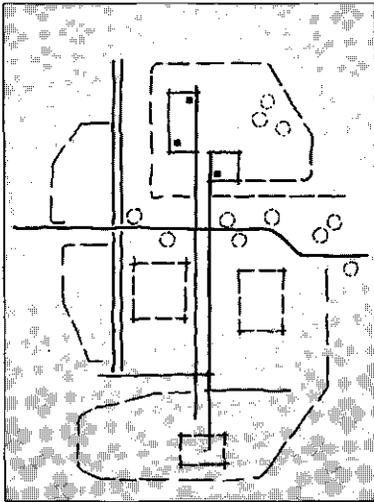
The interplay is first and foremost determined by the use of various alignments, i.e. the components have a considerably or slightly different direction or orientation. In this context, however, the La Villette

120 *continued*

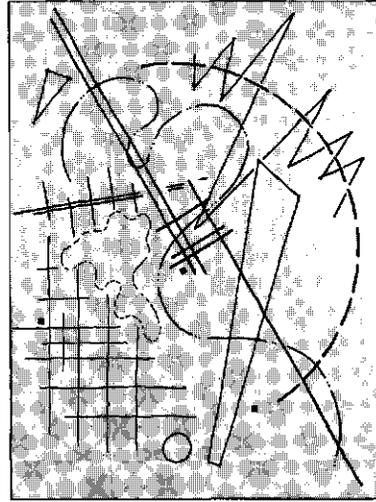
- d* Volkspark
- e* New Objectivity
- f* post-modern



*d*

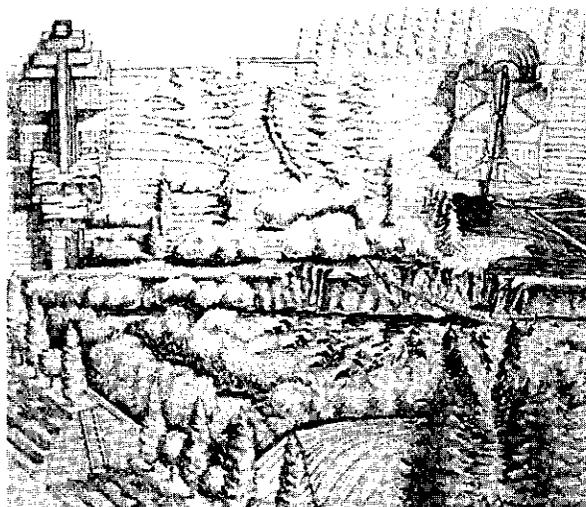


*e*



*f*

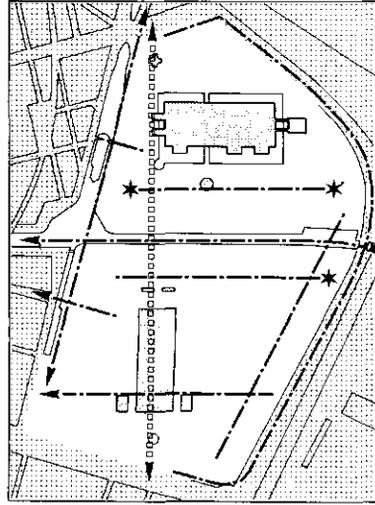
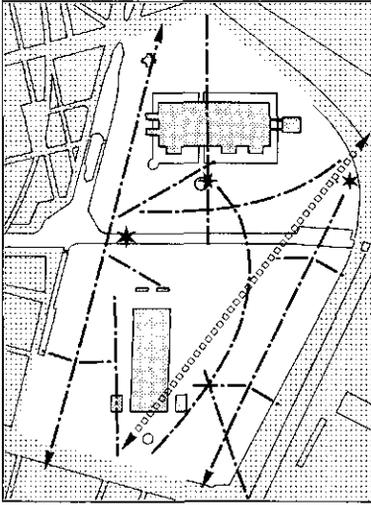
site seems almost empty, like an unwritten page on which lines can be drawn at one's discretion. Every line that provides direction in the design has its potentials and impossibilities though. The line creates space and/or problems for the plan. It is a guideline for movement through space: a connection, a choreographic device. The line can add a direction or conform to the existing. With regard to the existing alignments, the following can be distinguished: on the site, the geometry of the buildings and the canal; and, in the context of the park, the alignments of the boundaries and the canals and the connected fragments of urban tissue.



121 Tissier, erosion of the circular wall

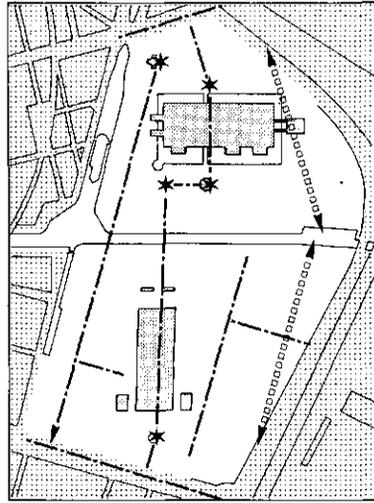
Why are the alignments so important? Firstly, because for the purpose of survey (orientation), connection (access) and the suggestion of space (openness), long lines have to be built in. In the plan by Zagari the principal direction of the park is not the same as that of the canal, the boundary of the park, nor of the buildings within the park, but of the longest diagonal. There are changes in direction in the transition along important boundaries [ill. 122]. Secondly, because only one alignment (that of the canal) corresponds to both the external and internal geometries. Thus, from outside to inside, or vice versa, the alignments have to be harmonized. This can be effected by leaving the conflict between the alignments where it arises, as in the plan by Bakker and Bleeker [ill. 123]; shifting the conflict inside and not resolving it, as in Hara's plan [ill. 124]; masking the conflict by making one line a dominant feature, as in the plan by Marguerit [ill. 125]; or by intensifying the conflict by allowing the alignments to collide, sometimes with the addition of even more, as in the plans by Gautier, Hadid [ill. 126] and Pesce.

The function of the line in the design can be limited to that of a construction line, or be more comprehensive by regulating the composition of the ground-plan. It can also be manifested spatially, either as a sight line or as an effectively traversable route. Thus Corajoud's plan is not only constructed with the aid of numerous lines, but also with various types of line. A line can have a different effect in detail, as for instance in situations where the route and sight line appear not to coincide. The line can take shape in various ways. The execution,



122 Alignments, Zagari

123 Alignments, Bakker and Bleeker

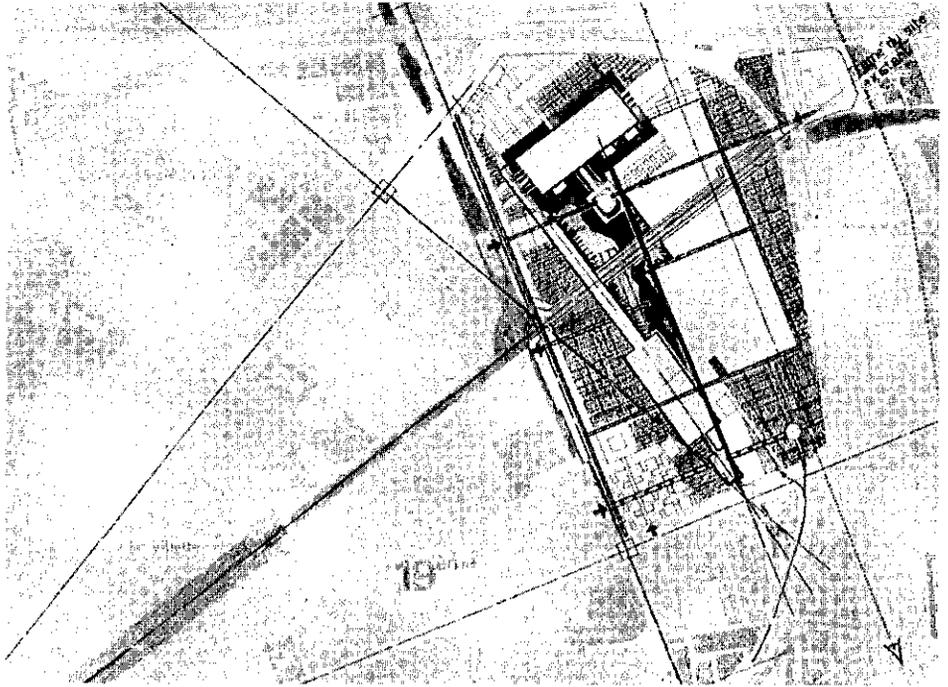


124 Alignments, Hara

which can be vague and pictorial, or sharp and graphic, has a considerable influence on the ambience of the park. The various effects are utilized particularly in creating spatial illusions.

### *Literary figures*

In the park the order of the interplay dominates; it is a game according to the rules of art, which are related to the unpredictability of the outcome. These are comparable to literary devices, such as ambiguity and humour.



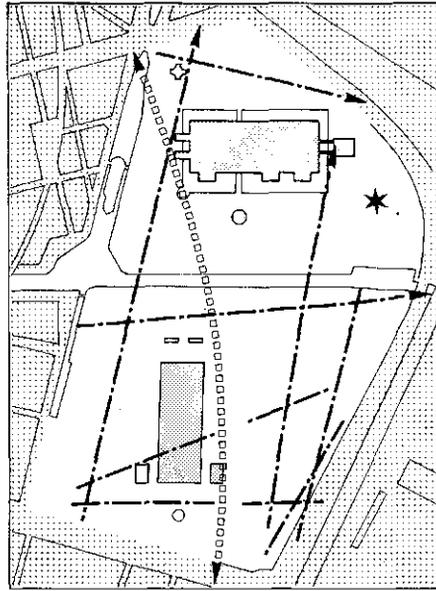
125 Marguerite, principal arrangement of park and surroundings

Which devices does the designer make use of in order to obtain a particular effect? Through what kind of special formulation or deviation from the usual is the effect produced? How can designers incorporate their commentary on the brief into the plan? We have identified five literary devices that designers have employed.

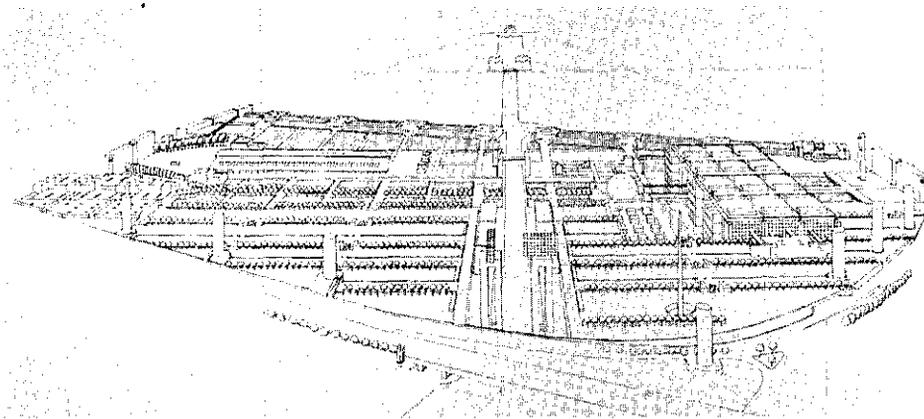
**Cynicism:** May architecture, in view of its permanent character, be cynical or ironic? Are these effects too temporary? Petit's plan is an example of a heartless and barren rationalism [ill. 127]. But it is impossible to live in an emotionally and culturally indifferent statement.

**Paradox:** Bakker and Bleeker cut the park off from its surroundings with a high wall, which renders the border impenetrable. Because the wall also provides a walk around the park, and thereby also permits a view across the park and the surroundings, a relationship is established between both areas. The park acquires identity by means of the well-defined boundary and is recognizable as a component in the larger whole of the city.

**Ambiguity:** The rural image of the tree-covered mounds bounding the open field (Andersson's plan) is much more rigid in the map, and artificially built up using geometrical forms (ovals).



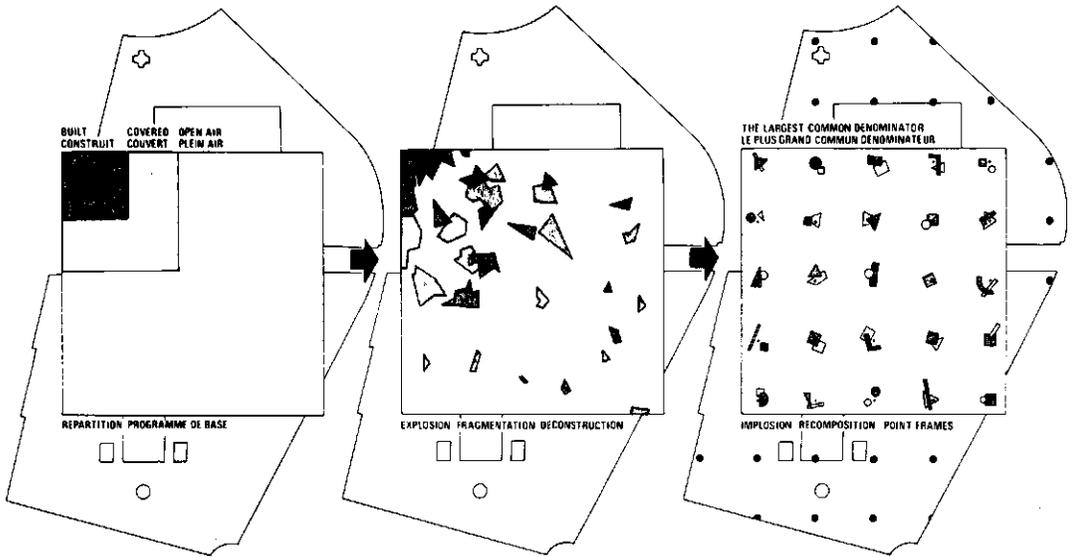
127 Petit, bird's-eye view



Humour: Tschumi's system of programmatic deconstruction and recombination encourages the combination of apparently incompatible activities; the running track passes through the piano bar inside the tropical greenhouse for instance [ill. 128].

Provocation can also be identified. Thomas, for example, provokes by the literal reference to La Villette's past function as an abattoir. Nor is the future of technology bright—as the Museum seeks to express—in view of the positioning of the Ariane rocket in a quagmire [ill. 129].

These qualities in the design are sometimes difficult to define. The result is frequently relativization; the opposite can also be pursued however: monumentality.



128 Tschumi, deconstruction of the programme

*Musical compositional devices*

Another way of conceiving the interplay between the components of coherence is to make a comparison with the theory of composition in music. The aim of the interplay is the creation of a 'certain' coherence. Coherence in a design corresponds to harmony in music: the successive and meaningfully interrelated soundings of simultaneous notes. The 'correct' measure of this relationship appears to have been variously interpreted over time, as has the measure of coherence in a plan. Every designer searches for the appropriate form of coherence, with a view to the place, time and assignment.

Concepts drawn from the theory of composition in music, such as repetition (and symmetry), variation, development and recapitulation, counterpoint, harmony, rhythm, tempo, accent and ornamentation, can, translated into landscape architecture,<sup>232</sup> be of use in describing the interplay between components of coherence. Repetition charms by providing a feeling of recognition. The regularity of a feature can act as a pattern or texture and contribute to the orderly construction of a composition. Repetition in, for instance, distances between plants, or in the sort of plants used, reveals the plant patterns. Through specific forms of repetition, symmetry, rhythms and variations can arise.

Variation is modified repetition. The grid and the meandering pat-

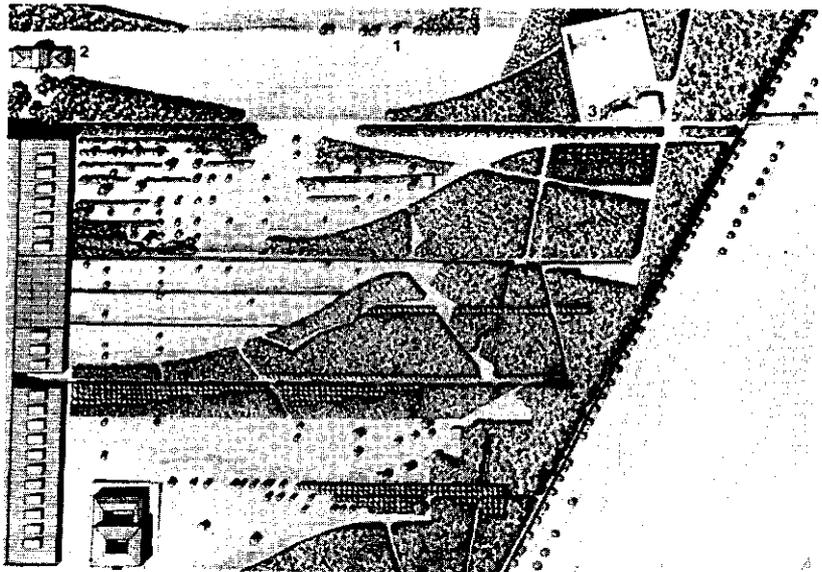
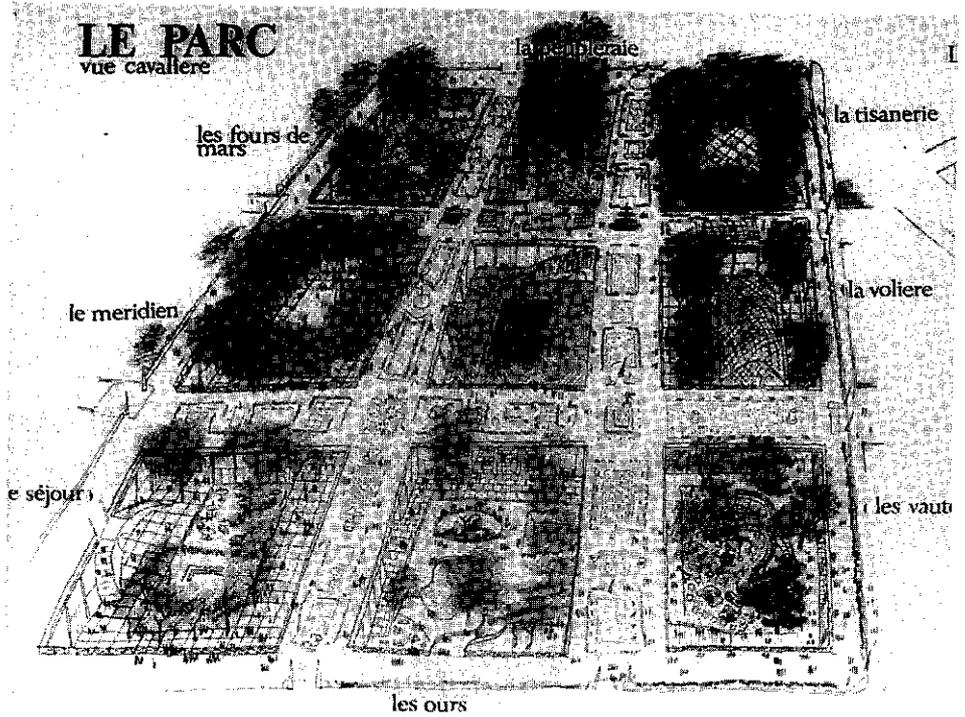


129 Thomas, sketch of the Ariane rocket

tern in the plan by Aillaud show that composition is the art of skilful variation [ill. 130]. Development and recapitulation involve the varying adaptation of a constantly recurring form (theme or motif), as a result of which a certain direction arises. Walking through the site, one gets a feeling of progress and distance. By ensuring places follow a logical succession, in which the next is inspired by the former, coherence arises. Tschumi's *folies* bind the richly varied forms in the plan by the regularity of their placing and the recognizable basis of each individual object: the red cube.

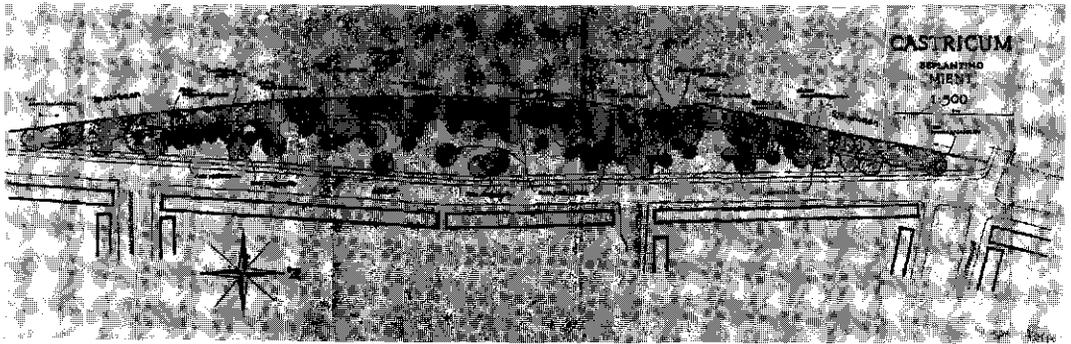
Rhythm is the harmonious repetition of elements (forms, lines, materials, objects) and the variation in the repetition. It is something that recurs almost regularly by coupling evenness and innovation. (See, for example, the following characterization of the alterations at Stowe between 1749 and 1779: 'They induced a «sostenuto» rhythm in harmony with the softer and more open landscape, rather than a «staccato» rhythm created by buildings which functioned visually as terminal points in more rigidly designed gardens.'<sup>233</sup>)

Accent and ornamentation are devices for elucidating, emphasizing



130 above Aillaud, bird's-eye view of the gardens

131 below Vexlard, middle of the park



132 Otto, planting scheme, de Mient, Castricum, 1960

and rendering more interesting the main form through the use of details. If the ornamentation is inconsistent with the concept, then it becomes isolated, impotent, hollow and kitsch. The wood-like planted sections in the plan of Vexlard are determined by a complex geometrical pattern. Like lines in a text, trees are planted on invisible lines parallel to the canal; these trees are related only loosely to each other and positioned more or less close together. The trees seem to have escaped from the boundary of the wooded sections. They decorate and illustrate these areas and at the same time accentuate the complex geometrical order by underlining it [ill. 131].

Counterpoint is the transposing (with other elements or materials) of the principal subject, often in the form of a contrast between rigid and loose. Depending on the way plantings are arranged, this counterpointing can be subtly played out. The submissions for La Villette show little in the way of counterpointing however. Otto's design for de Mient in Castricum provides an example though [ill. 132]. Here, a row of maple trees along the railway line provides a background in the form of a metre. Rhythmic accents are introduced by the addition of less formally placed trees. The counterpoint is varied by modifying the type of tree. The beginning, the middle and end are marked by maple trees that stand out from the background. In between, a game is played, casually, but extremely precisely, using larger and smaller trees: limes, ornamental apple trees (two varieties), hawthorn and Norway maples.

## The form and content of the urban park

There are landscapes on earth, landscapes in painting, landscapes in dreams and landscapes in one's breast. The beauty of landscapes on earth lies in depth and irregularity of outline; the beauty of landscapes in painting lies in the freedom and luxuriousness of the brush and ink; the beauty of landscapes in dreams lies in their strangely changing views; and the beauty of landscapes in one's breast lies in the fact that everything is in its place.<sup>234</sup>

In the following, I discuss my personal preference for certain qualities in the urban park. In this way it can become clear how the designs are valued in relation to the two extremes: the exhibition and theme park plan, in which the park consists of digestible chunks of experience that can be consumed while jogging, or the park that makes one linger and provides space for reflection and tranquillity. This discussion is prompted by the feeling that, despite all the splendid things the La Villette programme offers, a special quality—difficult to define because it is personal and transient—has been neglected. In view of La Villette's exemplary function, both with regard to the programme and the design, a measure of counterbalance is called for.

The EPPV decided that the site's function would be that of a park; but does the realization of the programme for the Parc de la Villette on that site ultimately produce a park? Was the programme for this site compatible with the concept of a park, or even with some of the essential qualities of the park, such as openness, freedom and tranquillity? Although some plans succeed in creating space or tranquillity and simplicity alongside the spectacular and the busy (Andersson, Bakker and Bleeker, Corajoud, and Vexlard among others), in many others the park fails because it attempts to include too many activities and facilities. In view of what the brief anticipated, one can reasonably conclude that the Parc de la Villette is more a new form of urban use of space than an urban park. The task was so exceptional that one cannot conclude that the results of the competition show us either the form or the function of the urban park of the future.

The results of the competition show that La Villette is nevertheless a park. In most plans it is dominated by park architecture, and the character of what is exhibited and of the other facilities is in keeping with the nature of a park. A great deal has been requested<sup>235</sup> on a limited site in an intense urban context however. The visitor has to combine exhibition images with 'ordinary' park impressions. Although, because of this, something is missing in the Parc de la Villette

that is fundamental to some highly valued parks, it appears that the plans can be analysed in terms of the urban park and that La Villette can be considered in the context of the development of park design.

What is the future role of the urban park then, and what is the form of the future urban park? This important issue has clearly been raised, though unsatisfactorily answered, in the competition, namely by means of a specific view set down in a detailed programme. The La Villette site is adversely situated for developing into (as Jacobs describes it)<sup>236</sup> the open-air ballet of city dwellers however; the park as an interruption in all activities connected with the purposiveness of everyday existence; the park as a moment of reflection and play. Vivid examples are the square-like parks in Barcelona: urban theatres, in which spaces are separated from the city by means of filters, such as pergolas and differences in height.

Most park designers work at the décor of what they consider to be the best representation of the contemporary park culture. The programme for La Villette aims at a certain type of park: the cultural theme park. Theme parks are becoming increasingly common. They offer a safe and comfortable way of passing the time, which seems superficial because both adventure and travel are regulated. Through television, people have become accustomed to a rapid succession of images whose story line has been fragmented or is even absent.

The viewer by necessity must stop analyzing the content and uncritically enjoy television's own version of non-linear time, experiencing the rhythm of images, color and sound. The experiential, non-analytical approach to time is clearly expressed in the theme park [...] The eye is always engaged [...]

The transportation systems within the theme parks are a response to another American predilection—the one for speed and movement. Their abundance and duplication go beyond simple necessity.<sup>237</sup>

This trend has also greatly influenced the plans for the Parc de la Villette. Spurred on by the overfull programme of requirements, many designs (particularly those from Japan and Great Britain) were submitted that more closely resemble an amusement or theme or exhibition park than an urban park. The world created in these parks is artificial. A further objection is that instead of offering a fantasy land or Magic Kingdom, they increasingly projected themselves as the real world.<sup>238</sup>

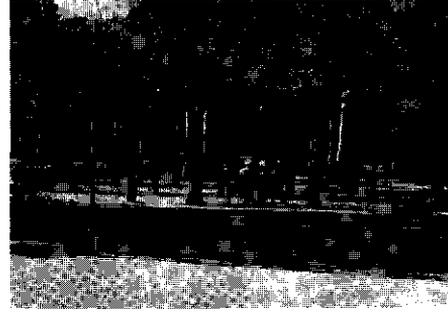
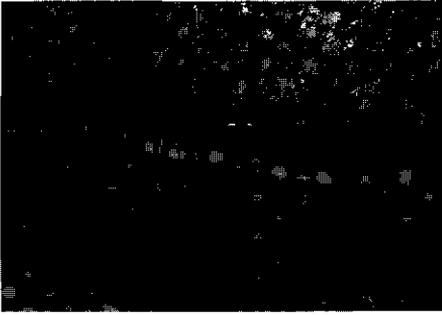
One of the aims of the present study has been to learn more about forms and programmes. La Villette intrigues because of its ambitious

programme and because of the fancifully and ingeniously drawn designs: it is a high point in the profusion of forms and programmatic complexity. Precisely at that highest point, however, when one has become almost overwhelmed by the show, the desire surfaces for a simple and restrained park in which, with a minimum of programmed stimuli, an inspiring environment is created; a situation that can be experienced casually and repeatedly instead of exceptionally and uniquely. Such a park presents a fiction of latent desires; the progress from image to image provokes thought or dreams.

How much more can one reveal of the world by concealing it. A park designer is an image-maker amidst a torrent of images. The superabundance of visual images produces in film and television a new aesthetic, which is expressed in a rapid succession of images, the indefiniteness of the representations, and the unconnectedness of the meanings. At present there is evidently a desire for more intense stimuli; stronger, in a more rapid tempo. Music at pop concerts, for example, has to be so loud that one not only hears it, but also physically feels it. The exhibiting of art in museums also increasingly occurs in an exceptionally spectacular way. With the aid of lighting and entourage, a drama is presented. With this, a certain way of thinking is imposed instead of a more neutral presentation in which the art object speaks more softly, but more for itself. This leaves the observer with the freedom to interpret.

In the ordinary park as much as possible has to be suggested precisely through abstracting or concealing it. It puts the walker in a position similar to the reader: the image is completed in one's own imagination. That is part of the artistic task of the park designer. 'Artistic means that we must also try to approach unspoken desires and dreams.'<sup>239</sup>

The openness of a grassy or scintillating space is the most important quality for the ordinary park: long sight lines to dream away in, the tranquillity of simple spaces in which to entertain one's thoughts, and the enchanting rhythms of the regularity and repetition of interconnected trees and hedges. Deserted and empty on a rainy morning (a park is, after all, a place for all kinds of weather) and animated and shining on a sunny day. This stirring aesthetic is not incompatible with a wide variety of uses and ecological considerations. The latter is met by renouncing unnecessary interventions in the landscape and by incorporating in the design the historical and spatial qualities of the site. The former arises through the search for multiple uses of open spaces and facilities.

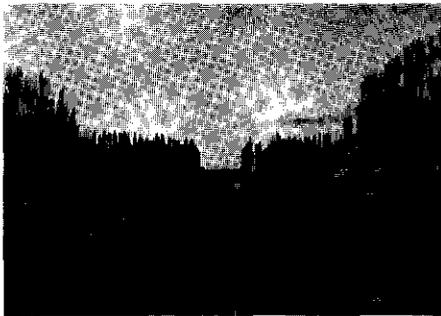


133-5 An everyday park

In the case of the ordinary park one does not pursue the complete correspondence of form and (specific) activity. As Lynch has noted: 'Fit is not a rigid link between action and place. Happily the latter does not determine the former, nor can the former mechanically be translated into specifications for the latter. Fit is loose; it has turning room; it is subject to creative surprises.'<sup>240</sup> There is an interaction between space and use, but, certainly in outdoor space, it is not causal. One can even imagine an empty place, with a small area of grass, with trees and sunlight (and sometimes wind and rain), and filled by the ballet of people coming and going, people playing and meeting each other.

The ordinary park can be compared with a cathedral: as a monument in the city it is an impressive symbol of its bustling centre, but it is also a place for tranquillity and contemplation. The park is a field of sensual experiences that are complementary to work and consumption; that is, the voluntary, primary and sensual, versus the controlled, organized and useful. This requires a relaxed, reserved and natural design, rather than one that is forced, insistent and affected.

The power of simplicity is often underestimated in contemporary



### 136 An everyday park

park design. The naturalness of a rectangular field is lost as soon as it ceases to be related to the free, playful, spontaneous and independent movement of people in that space. Meandering paths are preferred to lane and short cut as soon as they cease to be recognized as a form of compelling and ready-made spatial experience. Compact and surveyable junctions are rejected as soon as they cease to be exploited as points of exploration for the emancipated visitor, who wishes to determine his or her own way around the park. The open space in the middle of the park is filled with facilities as soon as emptiness ceases to be regarded as central to the park. The experience of the changing seasons weakens as soon as wind and rain are considered undesirable and excluded from the park. Elementary forms are rejected as soon as clarity ceases to be regarded as an expression of a transparent and unemotional arrangement. Effectiveness in design is replaced by the spectacular expression of a desire for form as soon as restraint ceases to be experienced as a space left to the imagination. The park as a complementary experience in the life of the city is lost as soon as its relaxed character is displaced by a consumptive form of recreation. The significance of the park for the city is limited as soon as good anchoring, both in terms of the paths along which visitors walk and the treatment of the edges of the park to form a well-composed margin, is replaced by an autonomous, aesthetic *tour de force*.

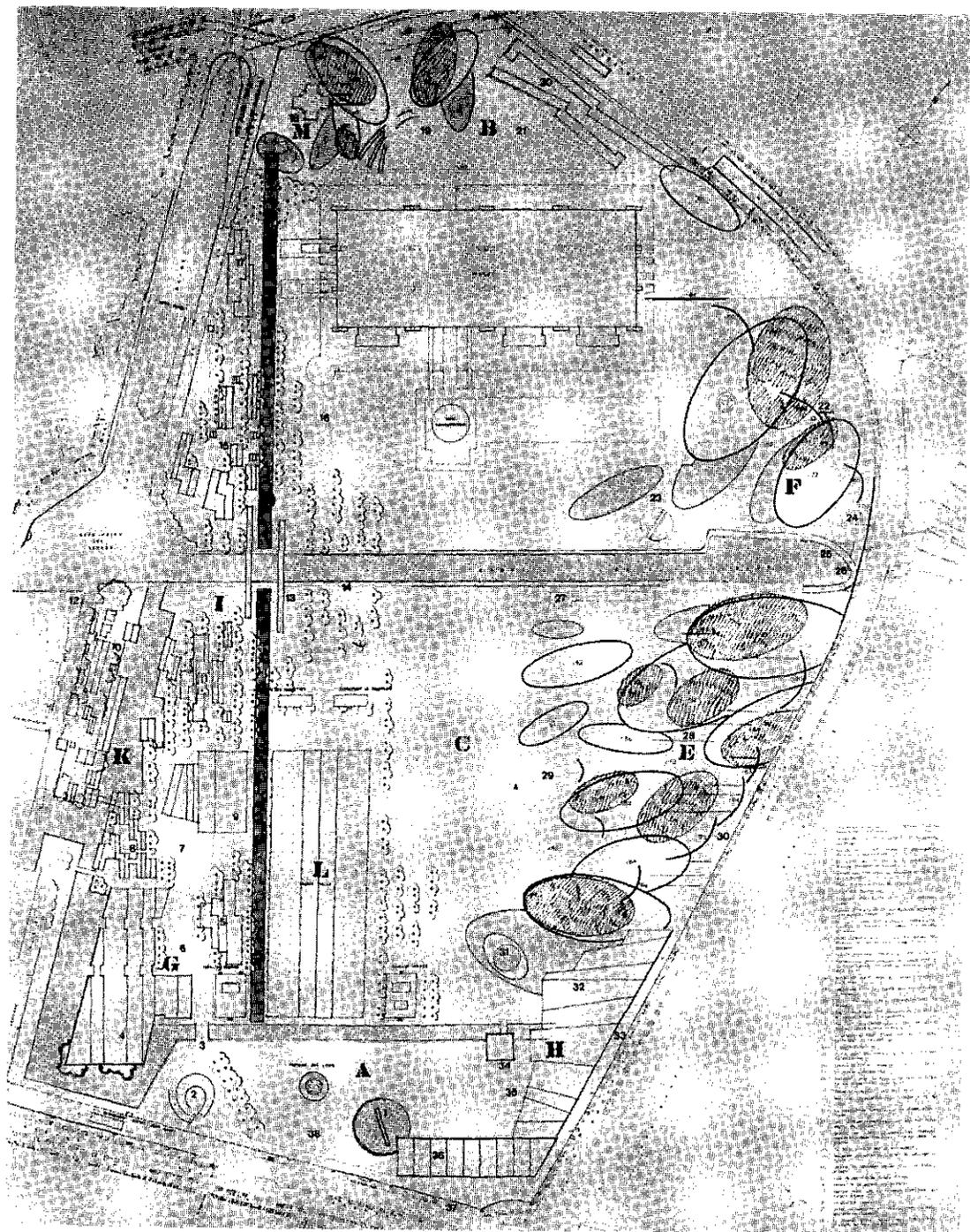
The design of the ordinary park gives rise to careful observation, one in which the eye grows restful and contemplative. This approach is found in a wide variety of works of art: from seventeenth-century landscapes and still lifes, to the work of Mondrian. Slow and serious perhaps for the rhythm of this age, but because of the quality of intimacy and, at the same time, unemotionality, a unique moment of beauty.

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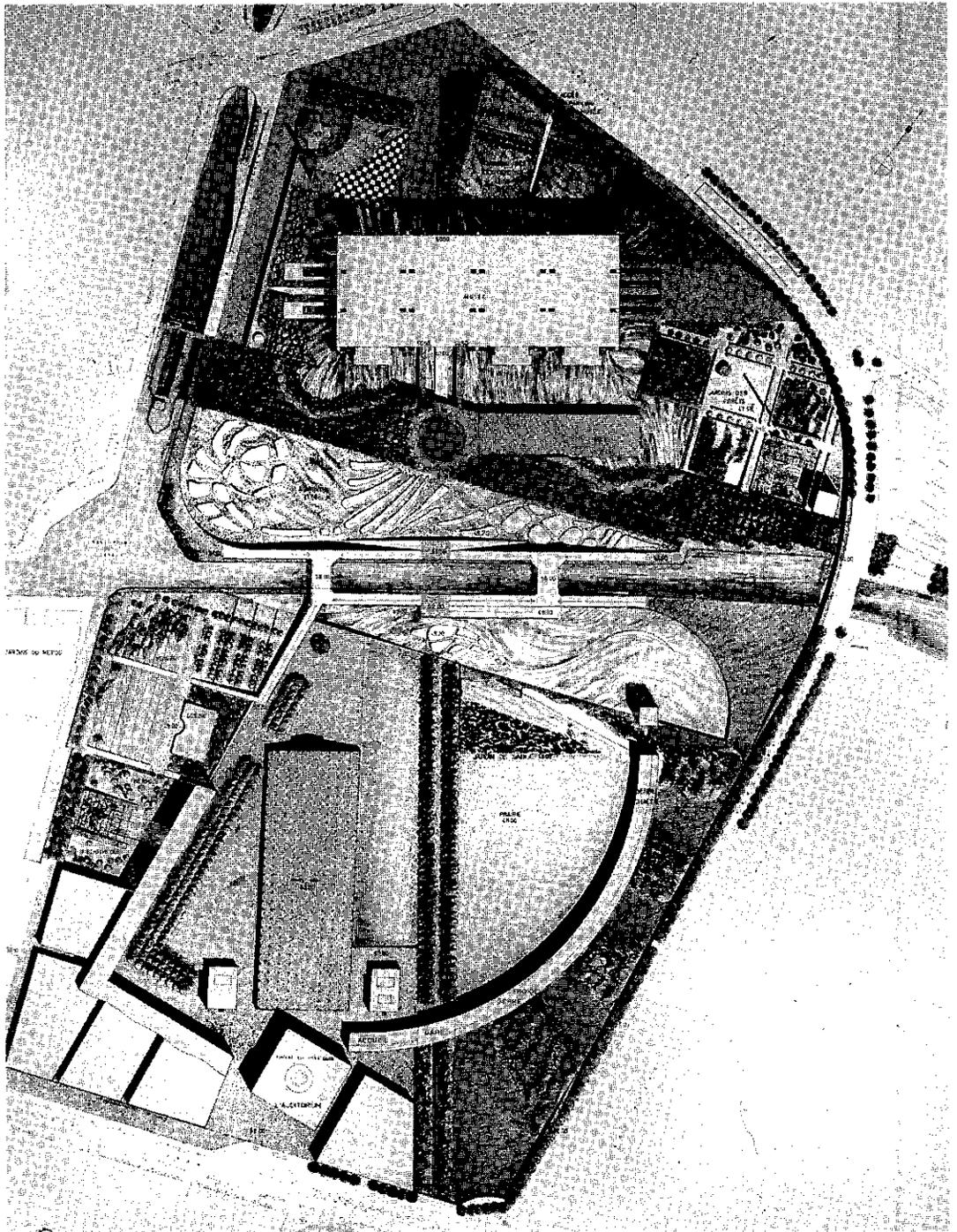
**Part four** *Ground-plans referred to in the text*

There follows a list of the ground-plans from the La Villette competition referred to in the text. It includes, in alphabetical order, the six plans that have been extensively analysed and forty-four other plans to which the text refers. The nationality of the team is given in brackets after the name of the design team's representative. The original scale of the plans was 1:1000. They are reduced here to a scale of 1:6000.

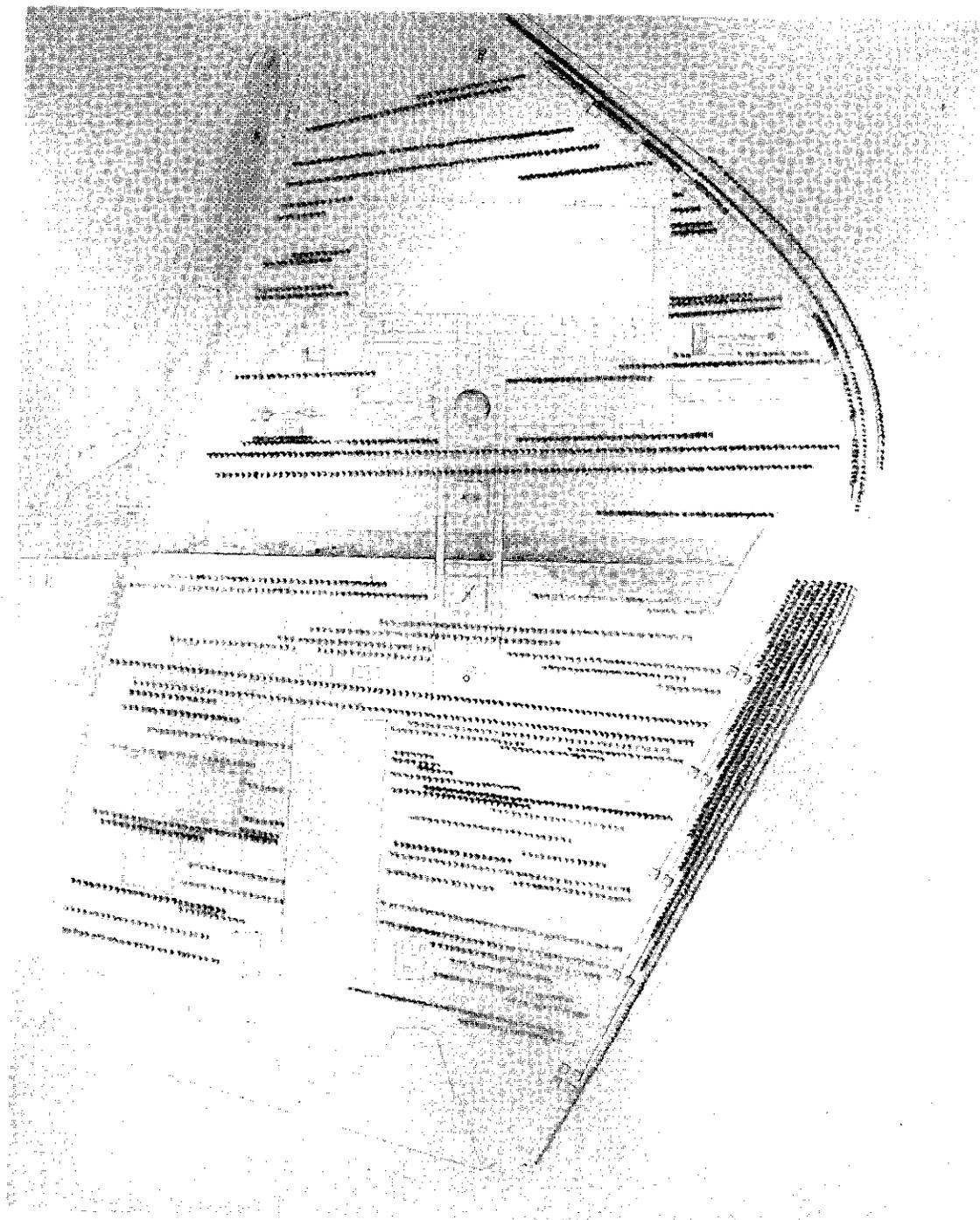




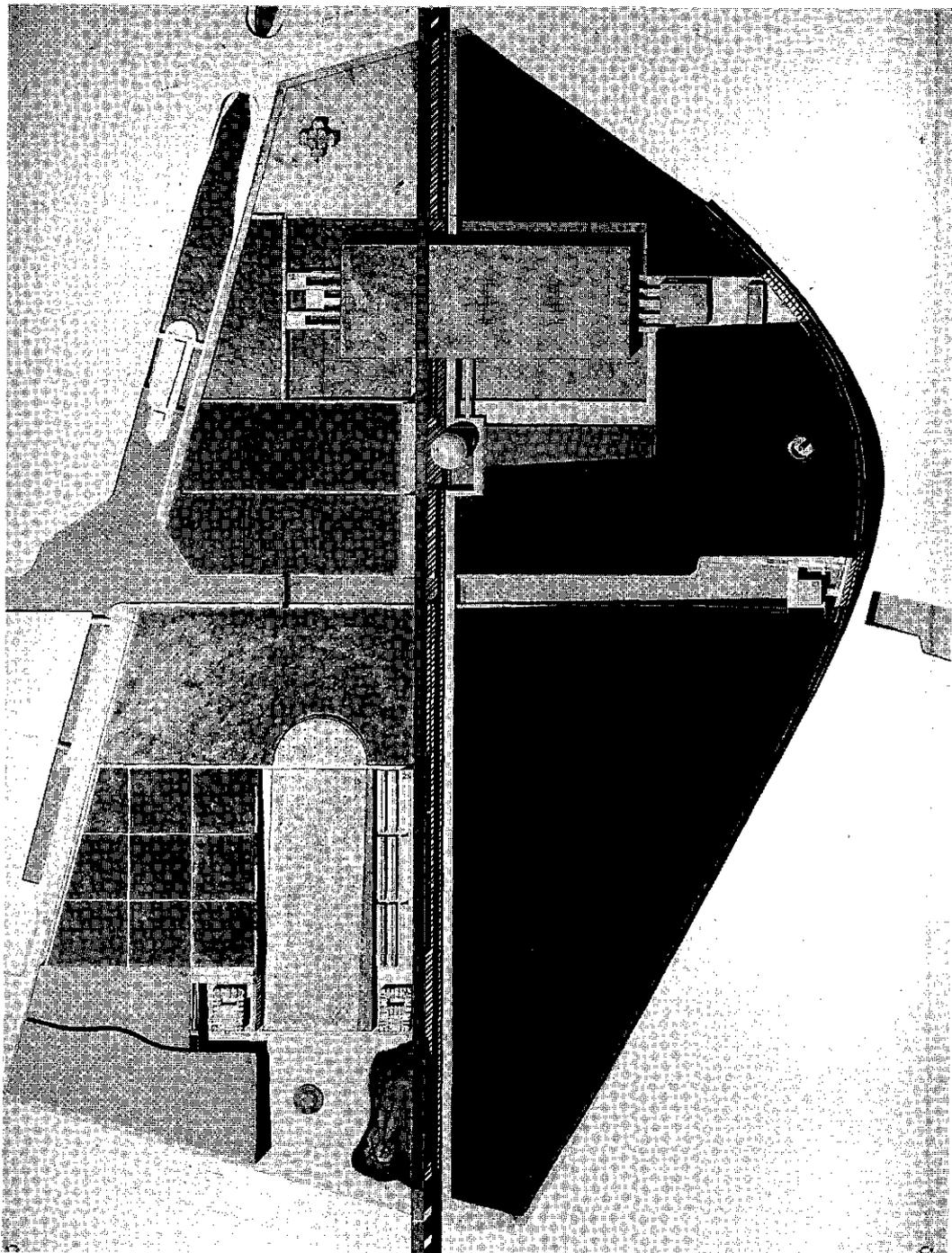
138 Sven-Ingvar Andersson (DK)



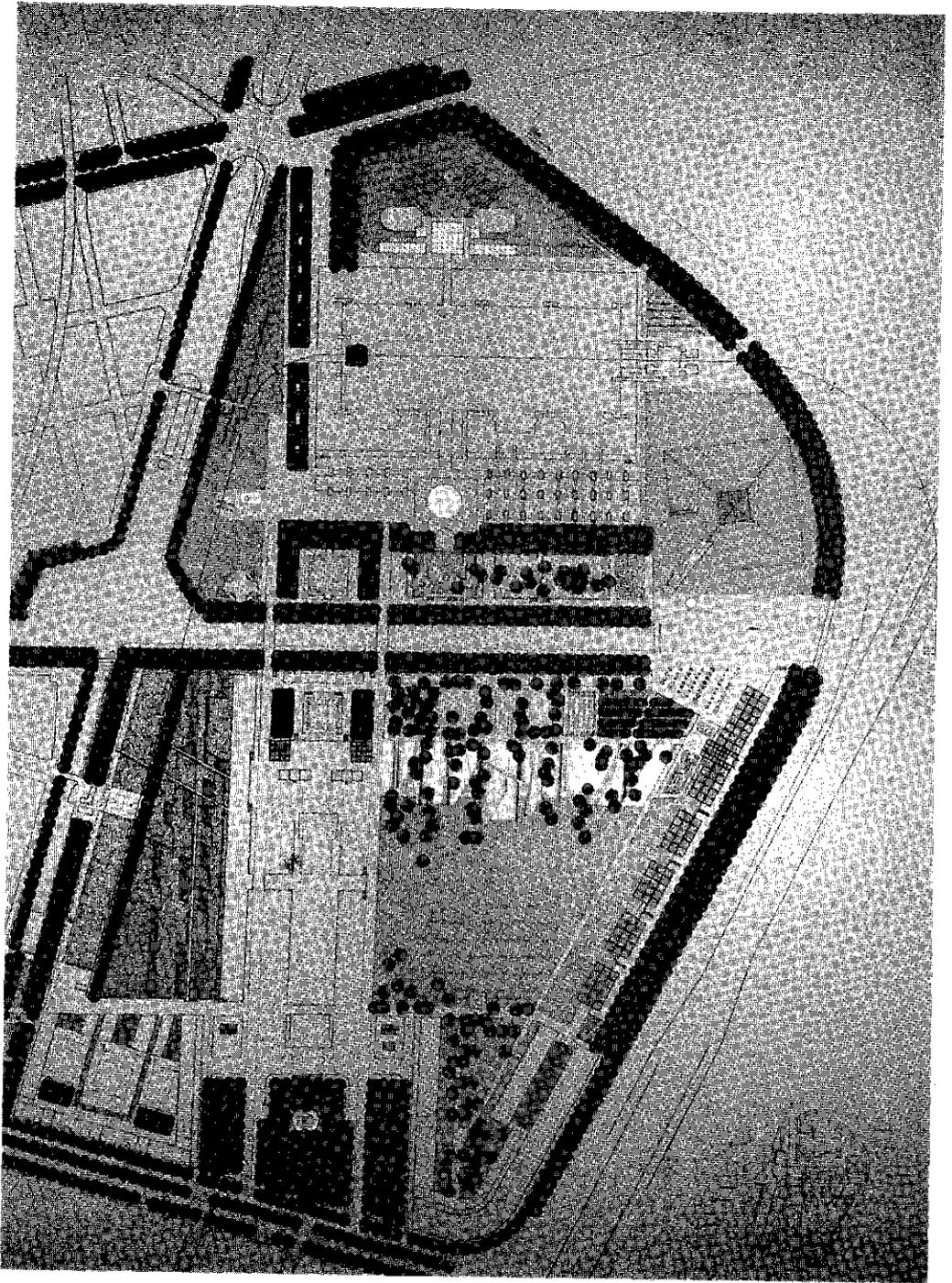
139 L'Arbre en boule (F)



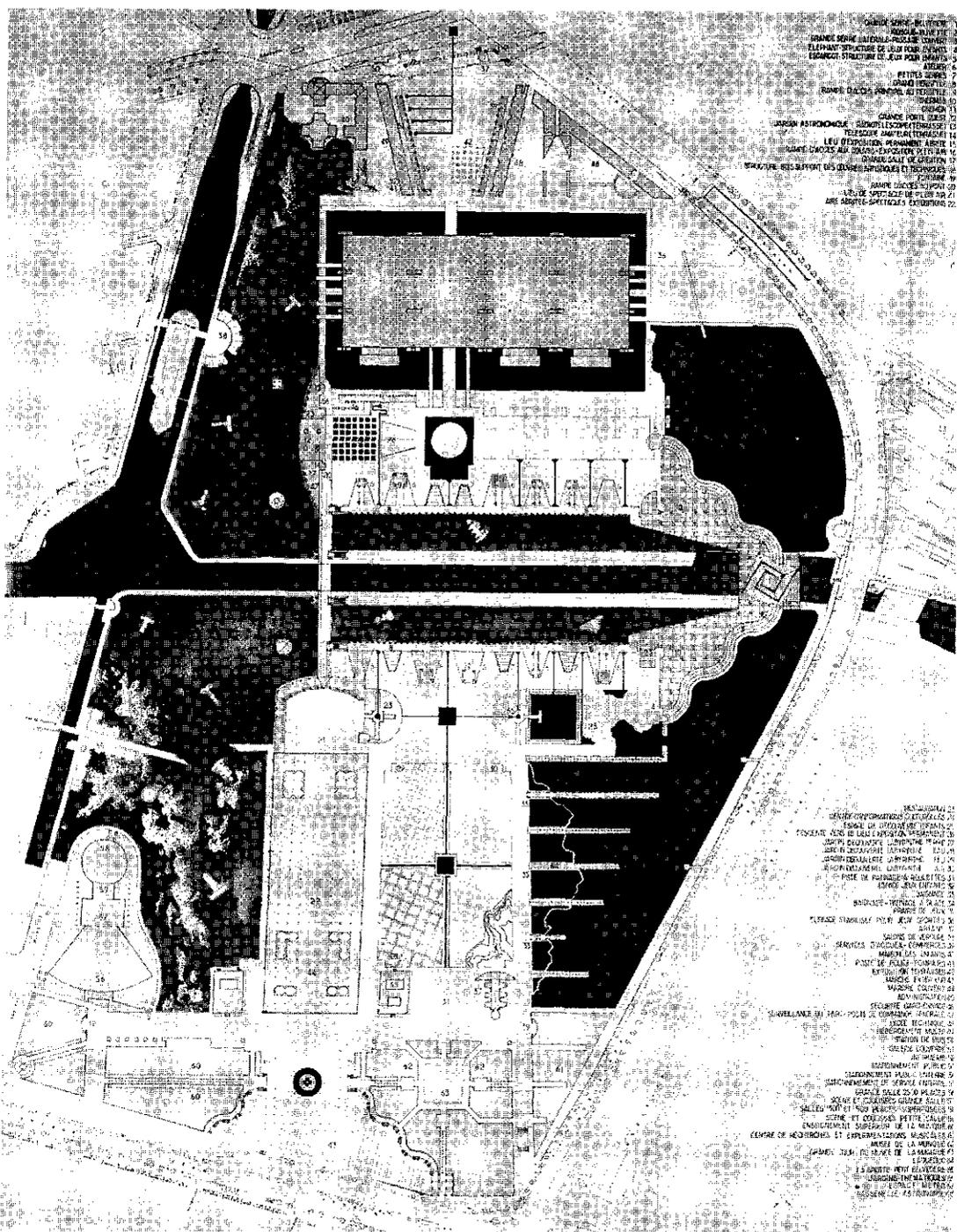
140 Andreu Ariola / Fiol / Gali / Quintana (SP)



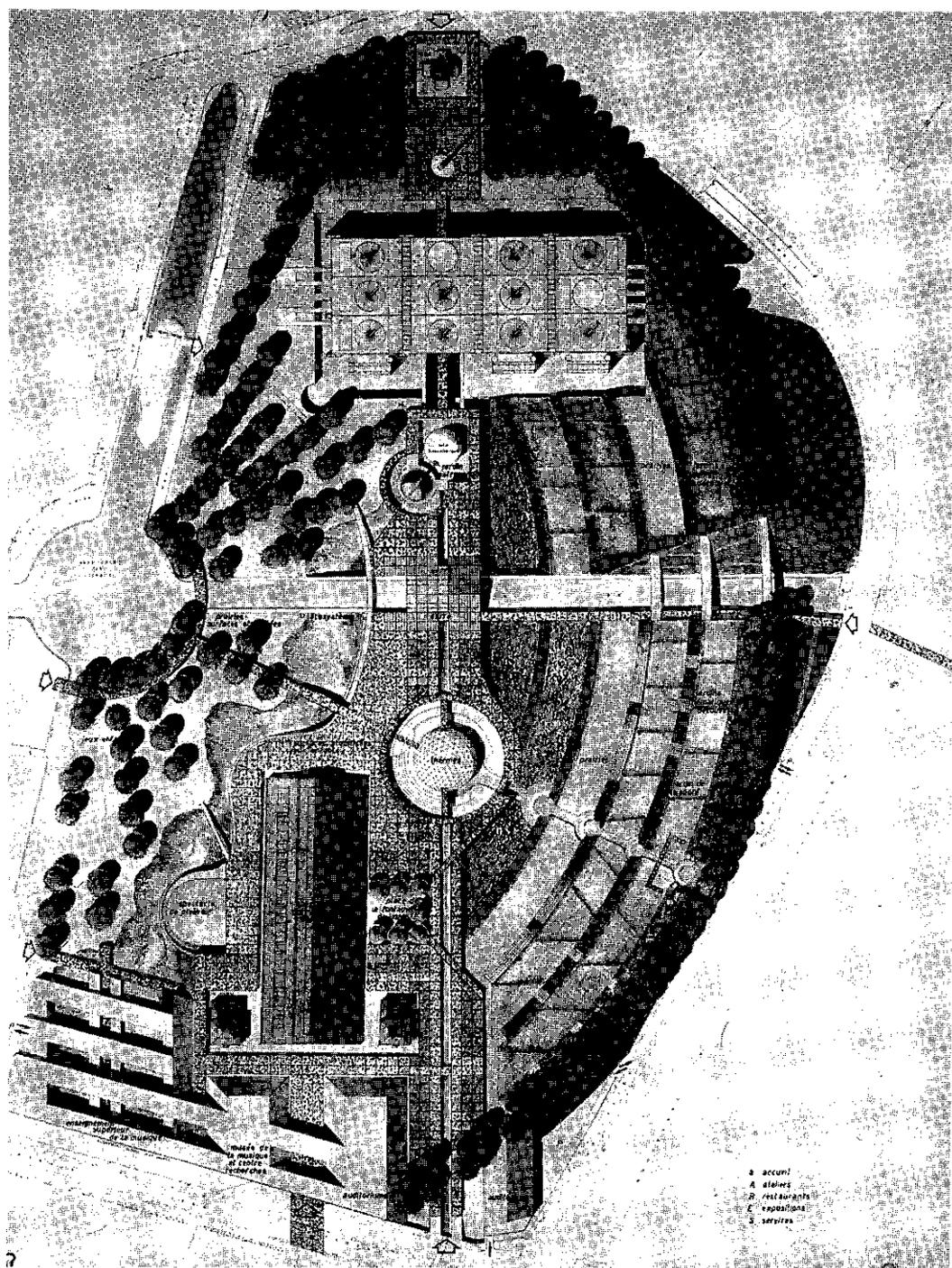
141 Carlo Aymonino (1)



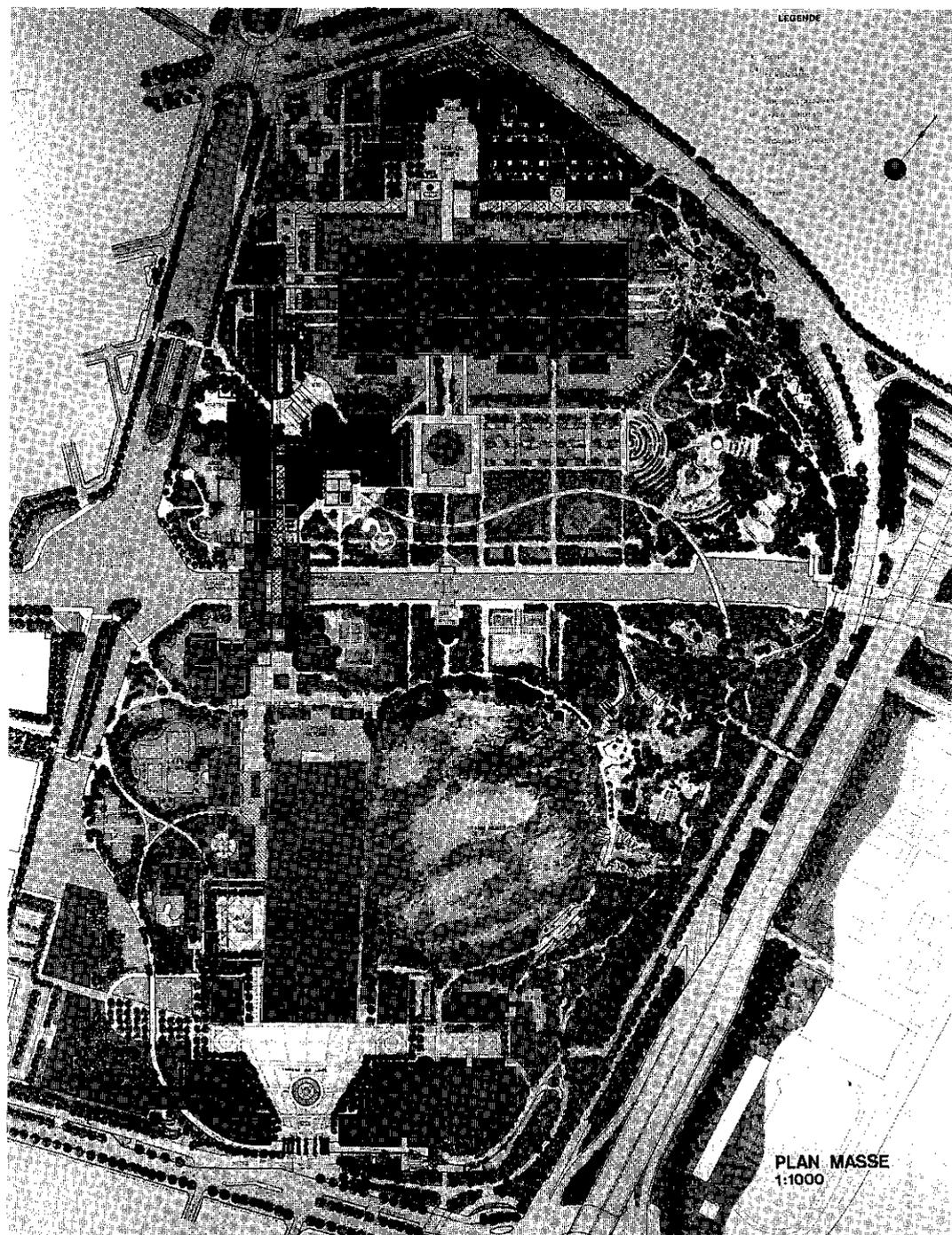
142 Bakker and Bleeker (NL)



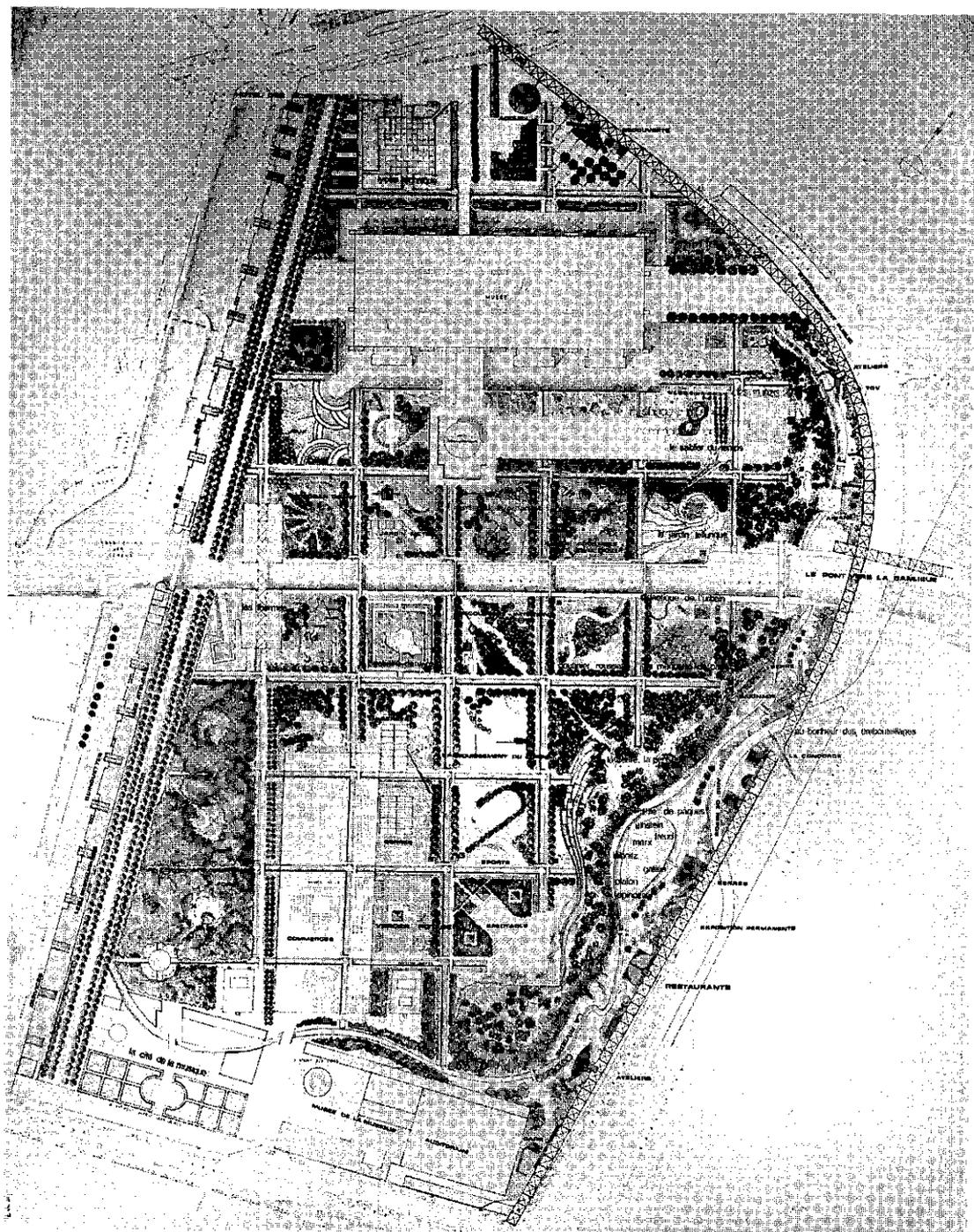
143 Olivier Baudry (F)



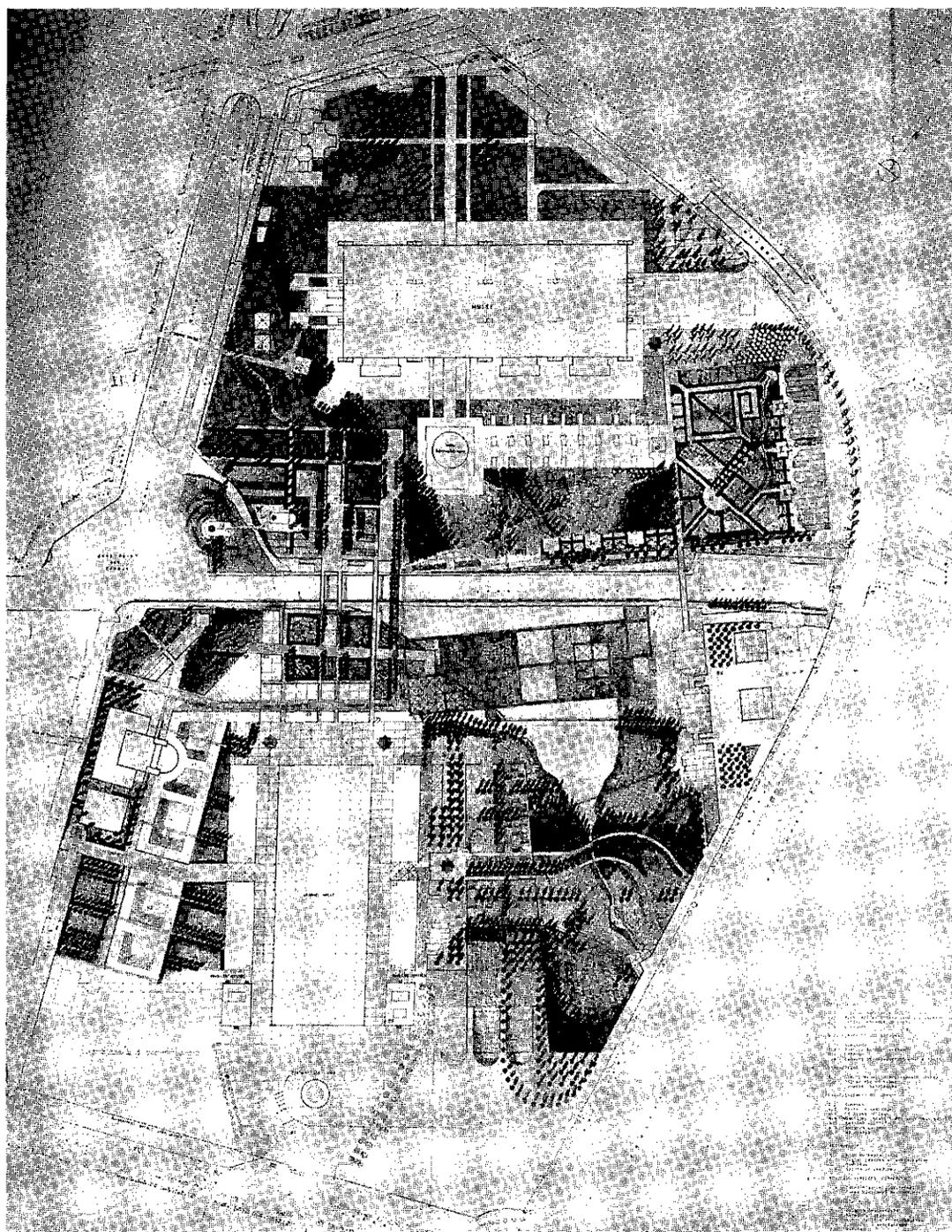
144 Mario Bellini (1)



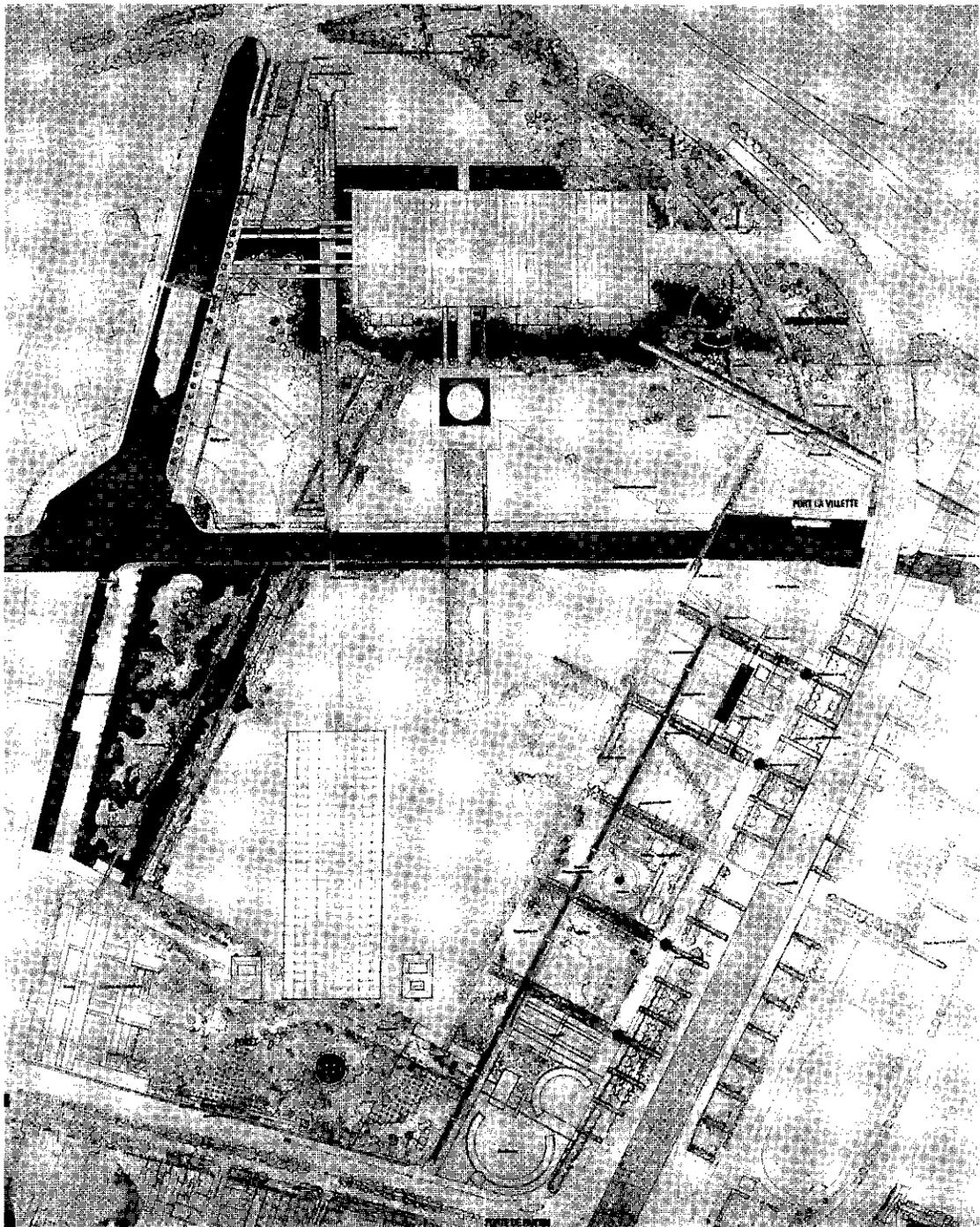
145 Jean-Noël Capart (B)



146 Castro (F)



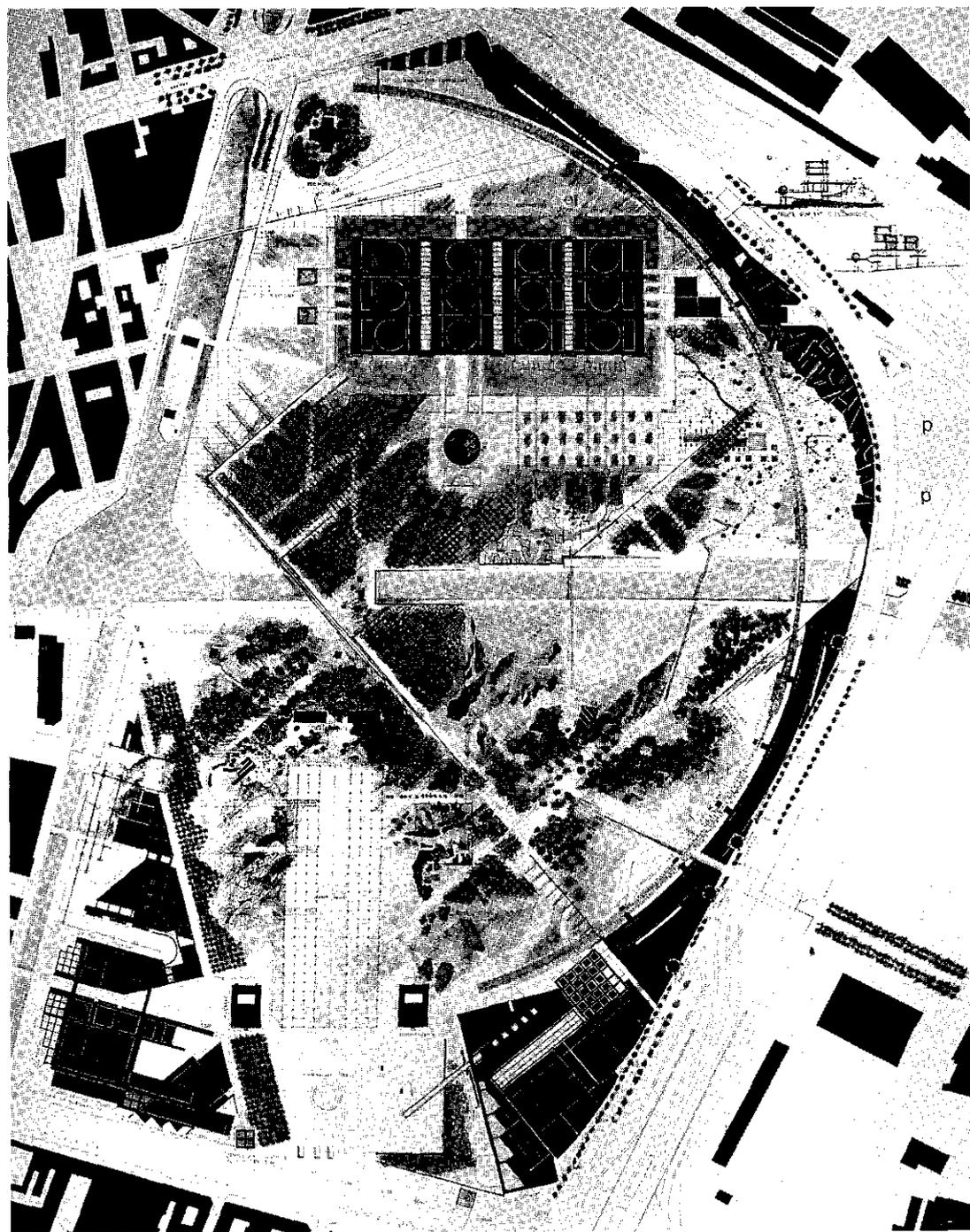
147 Causin / Conradt / Vermeulen (F)



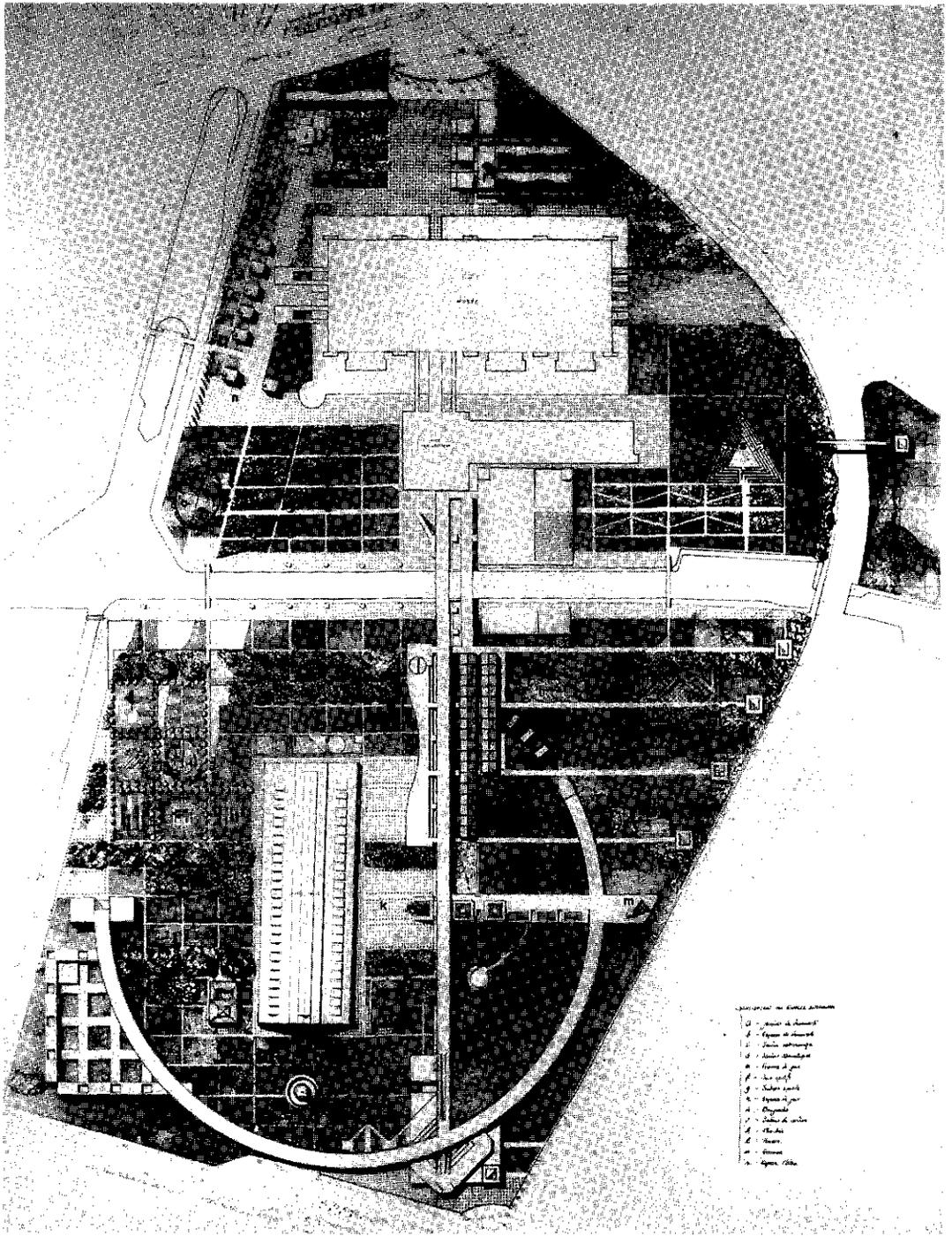
148 Alexandre Chemetoff (F)



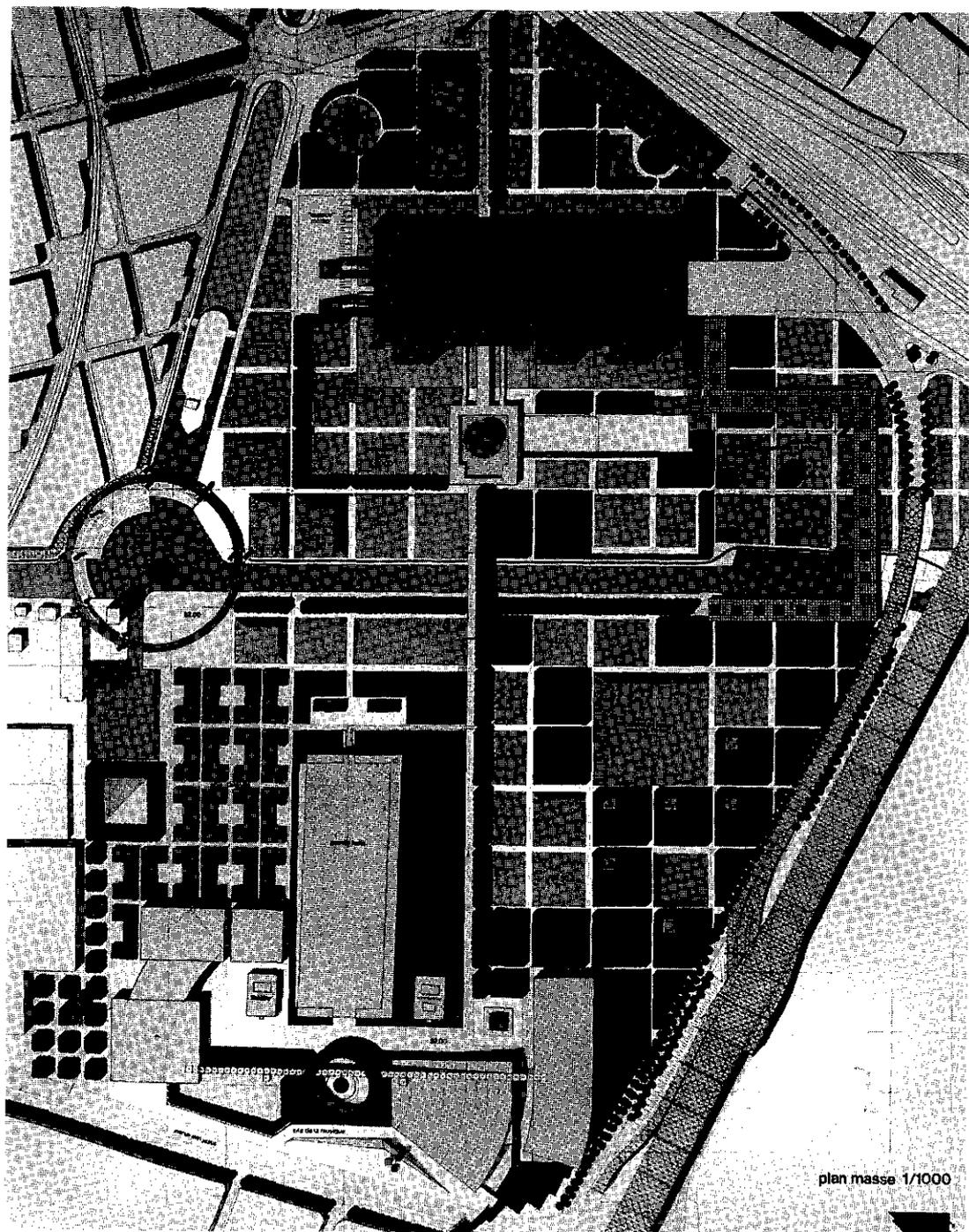
149 Michel Corajoud (F)



150 Jacques Coulon (F)

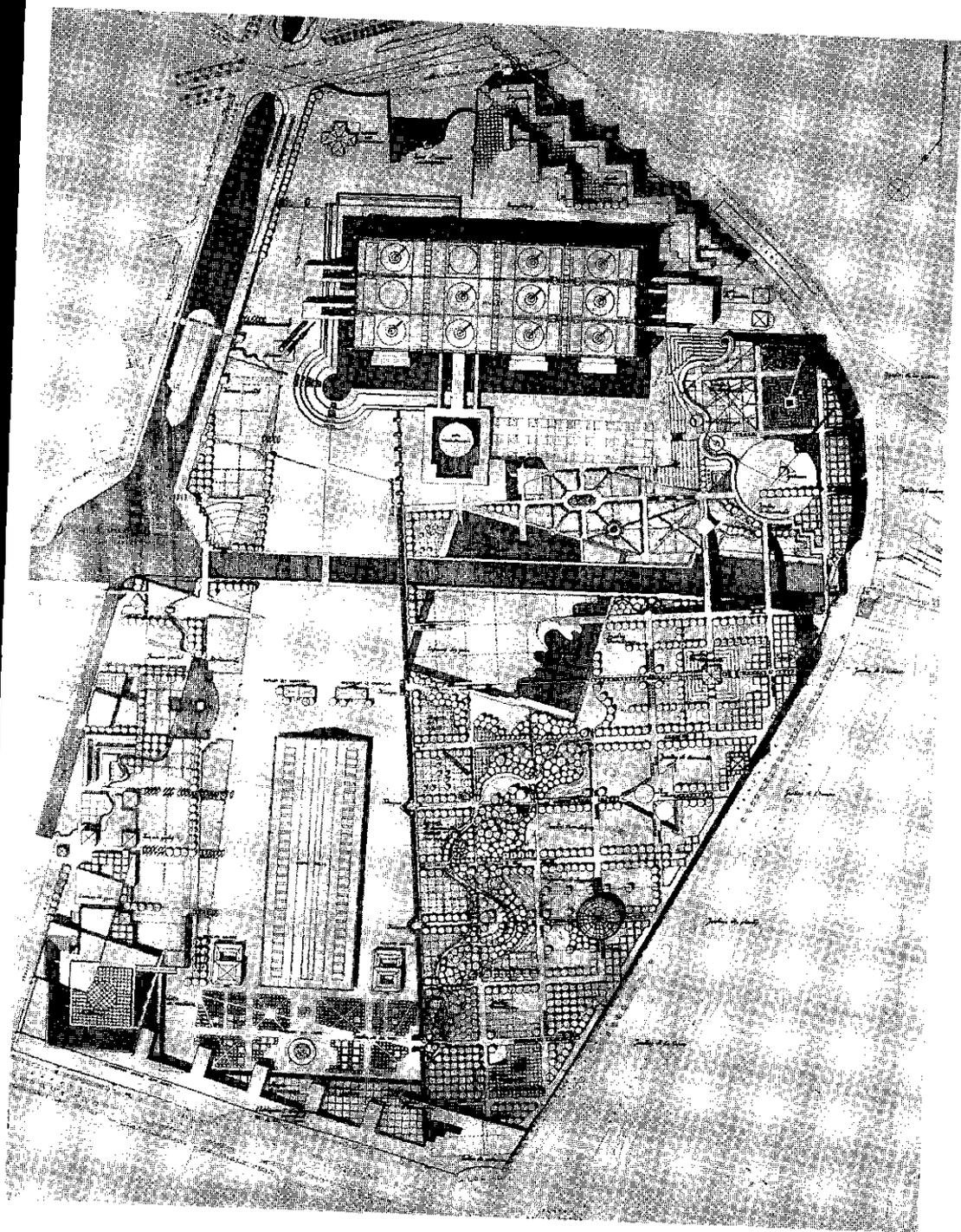


151 Bernard Desmoulin (F)

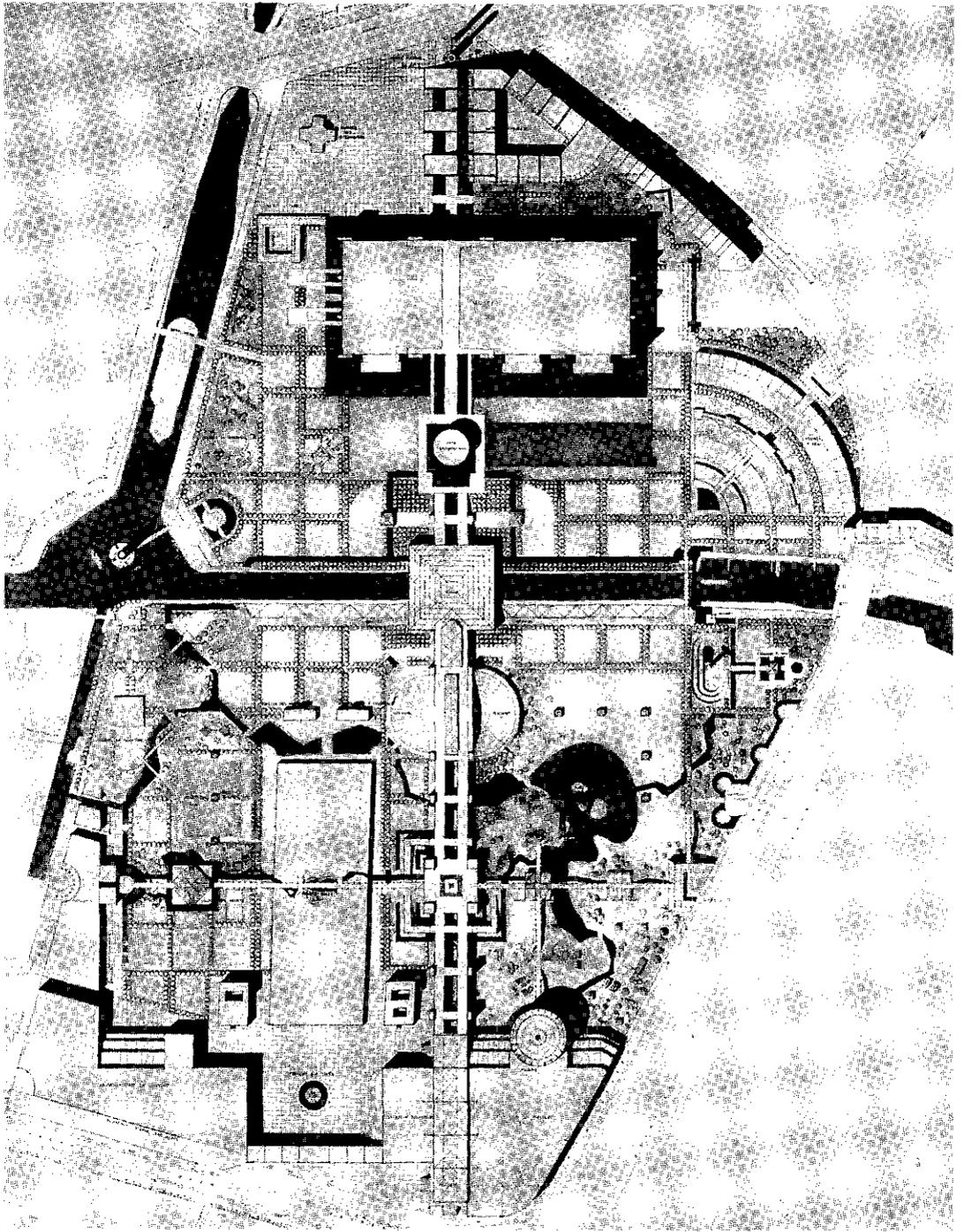


plan massa 1/1000

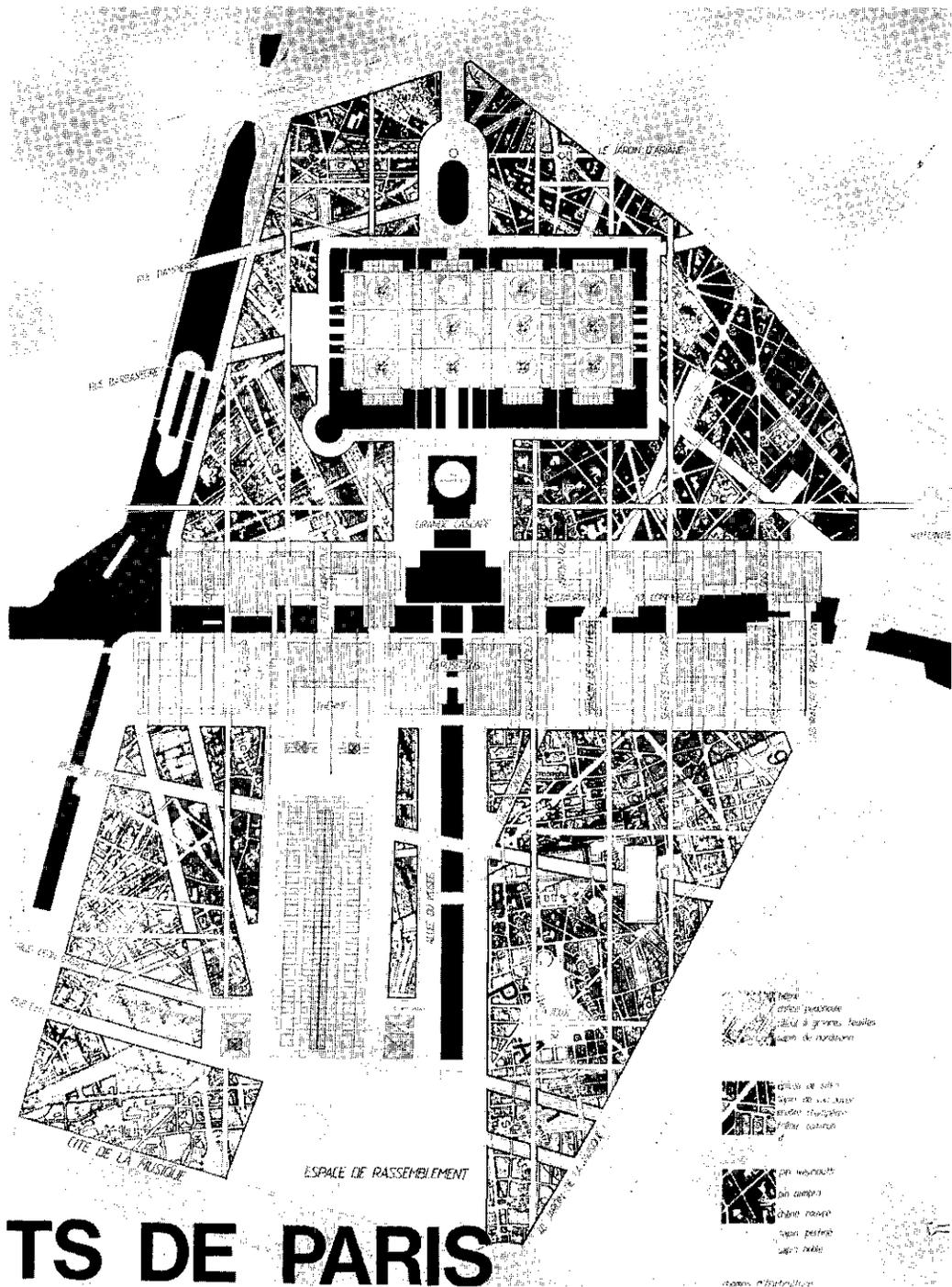
152 Bart Diepen / van den Bosch (NL)



153 Edwin Drewniak / Gajewski / Lisowski / Piotrowski (p)

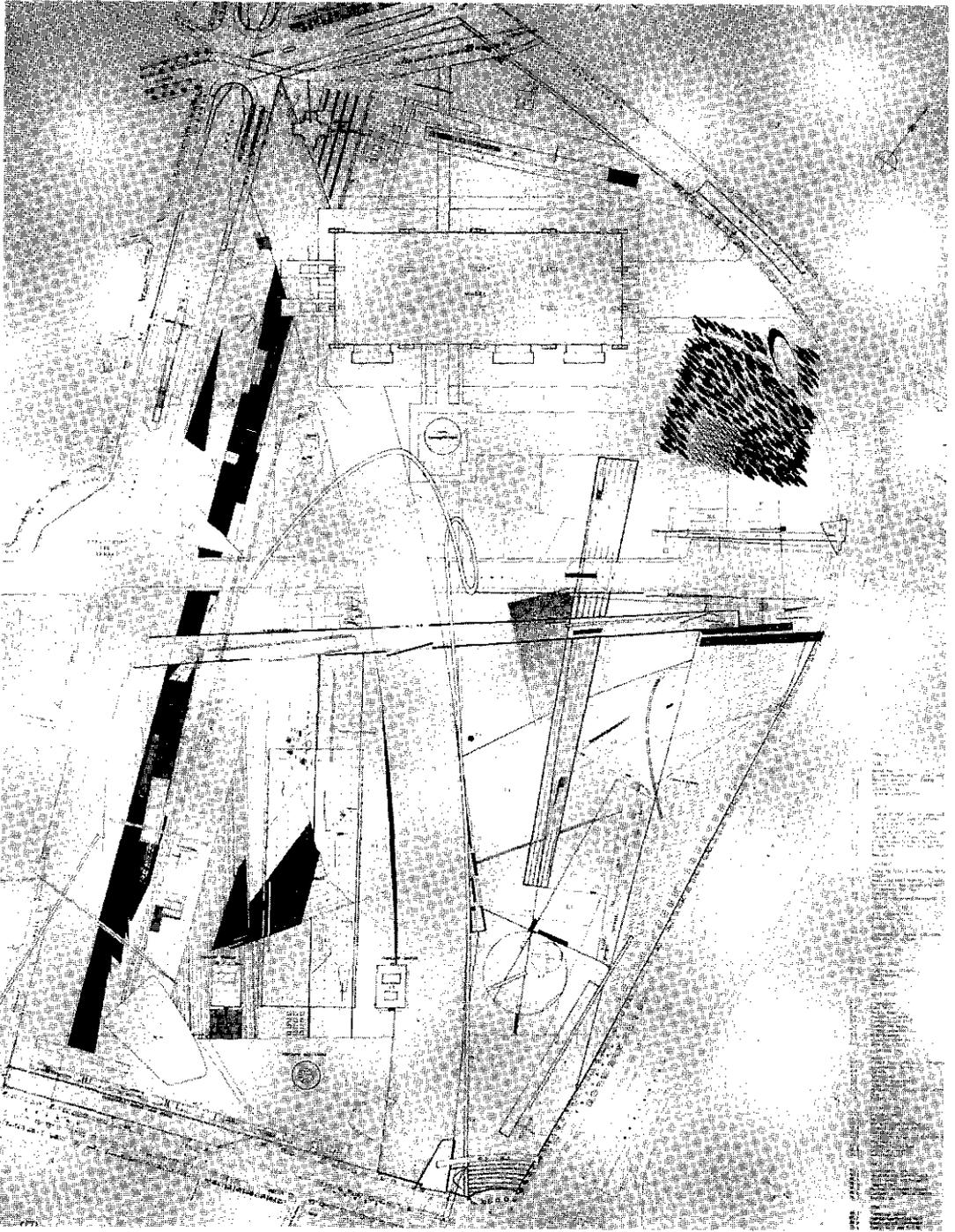


154 Didier Drummond (F)

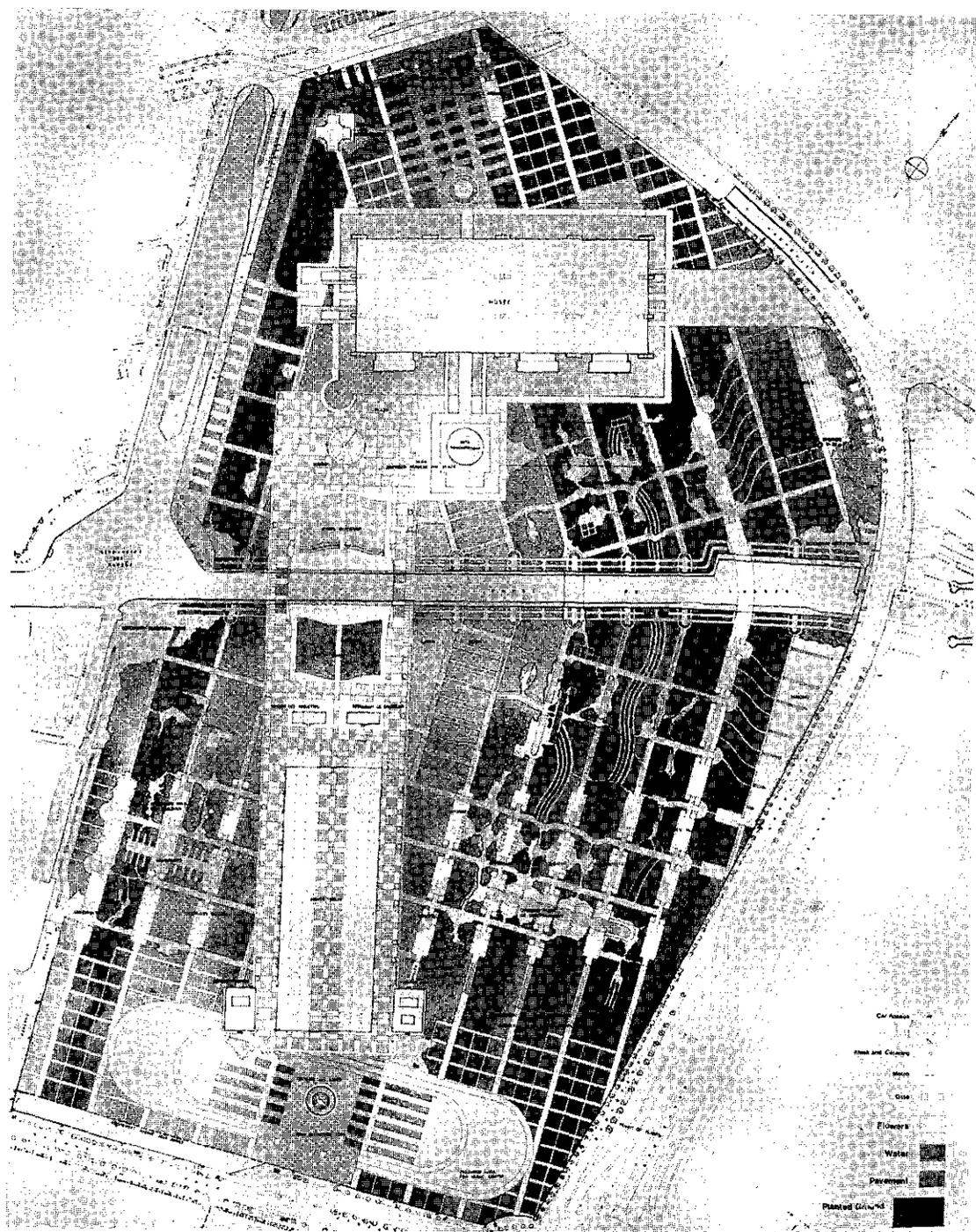


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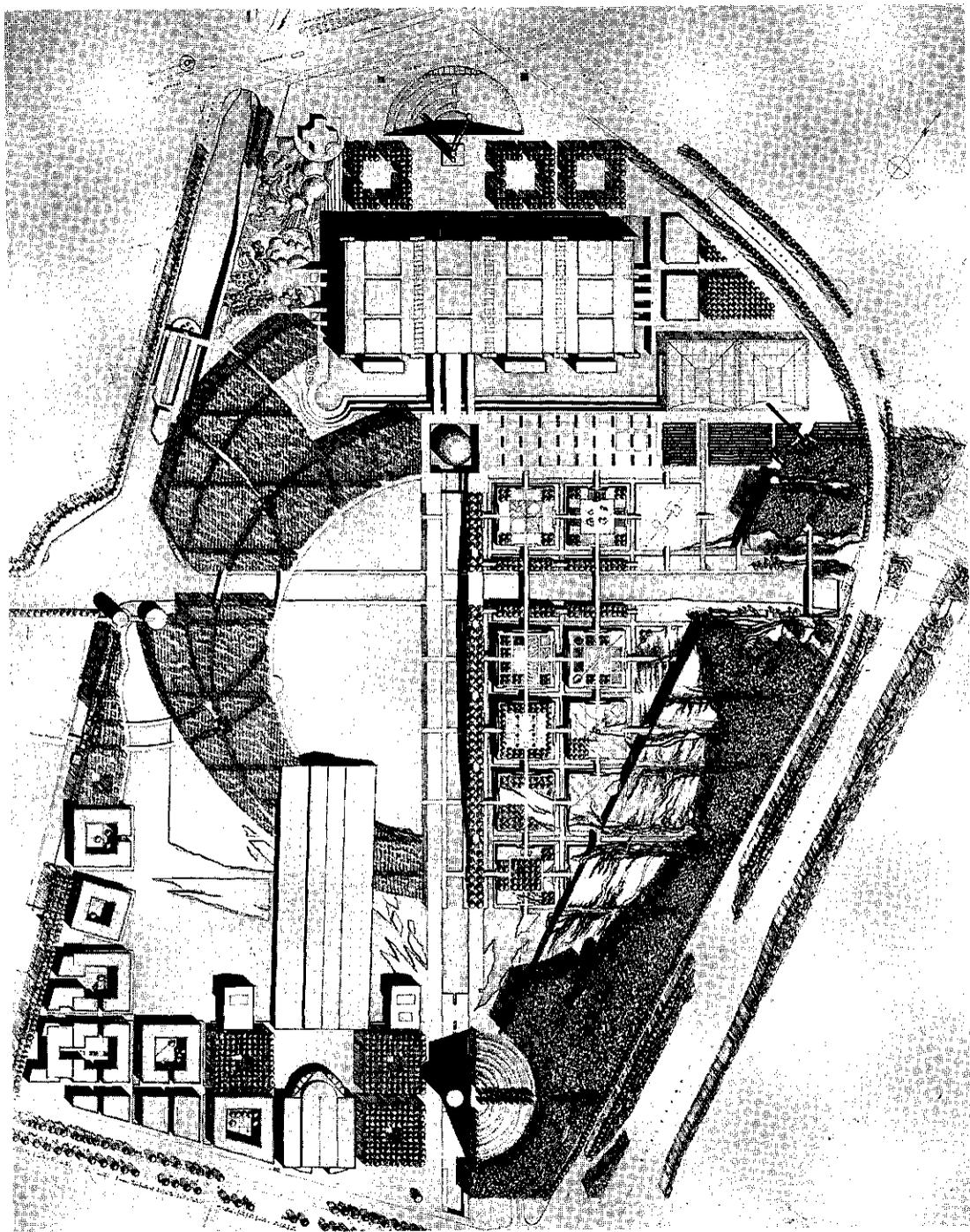
155 Philippe Gautier (F)



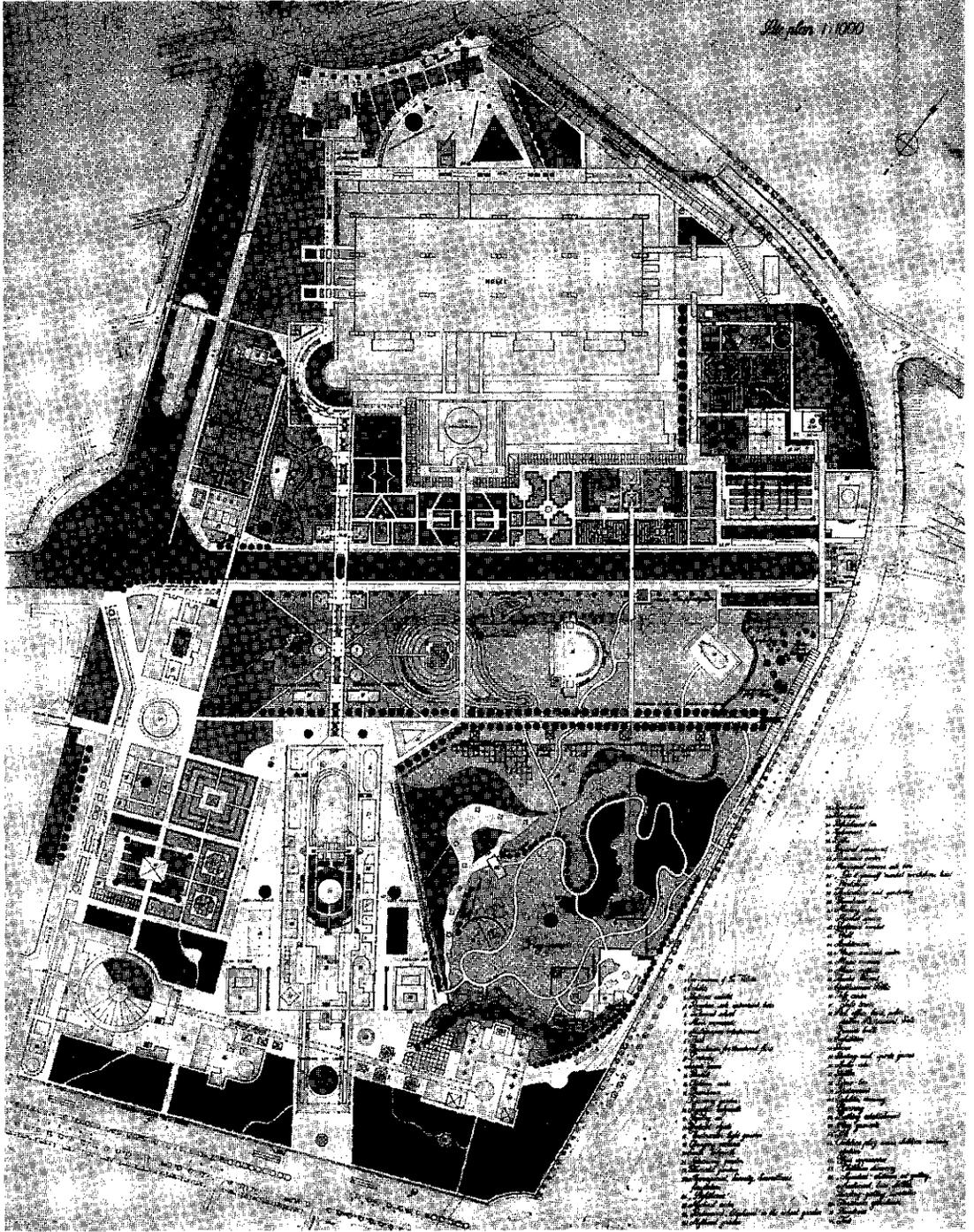
156 Zaha Hadid (GB)



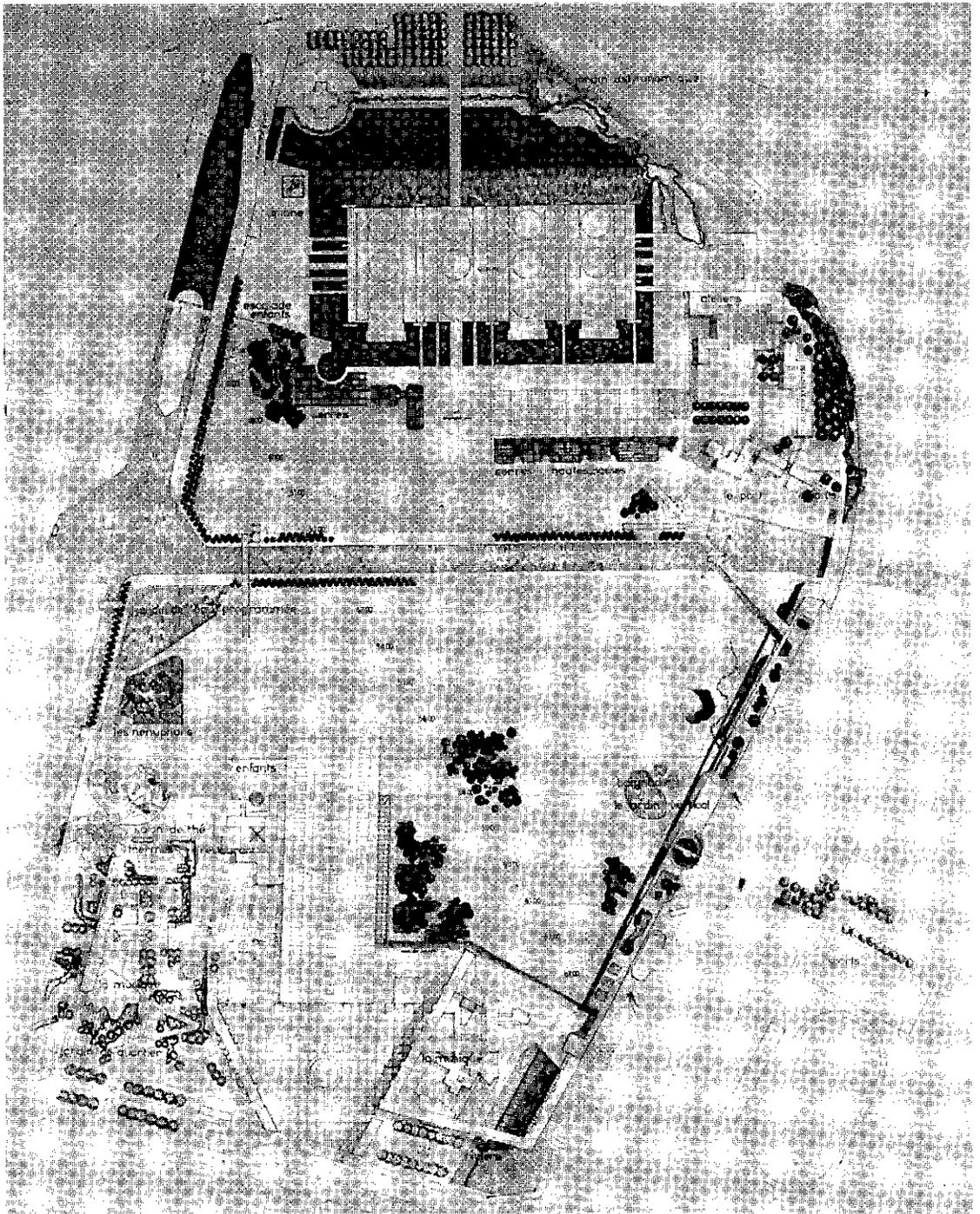
157 Hiroshi Hara (J)



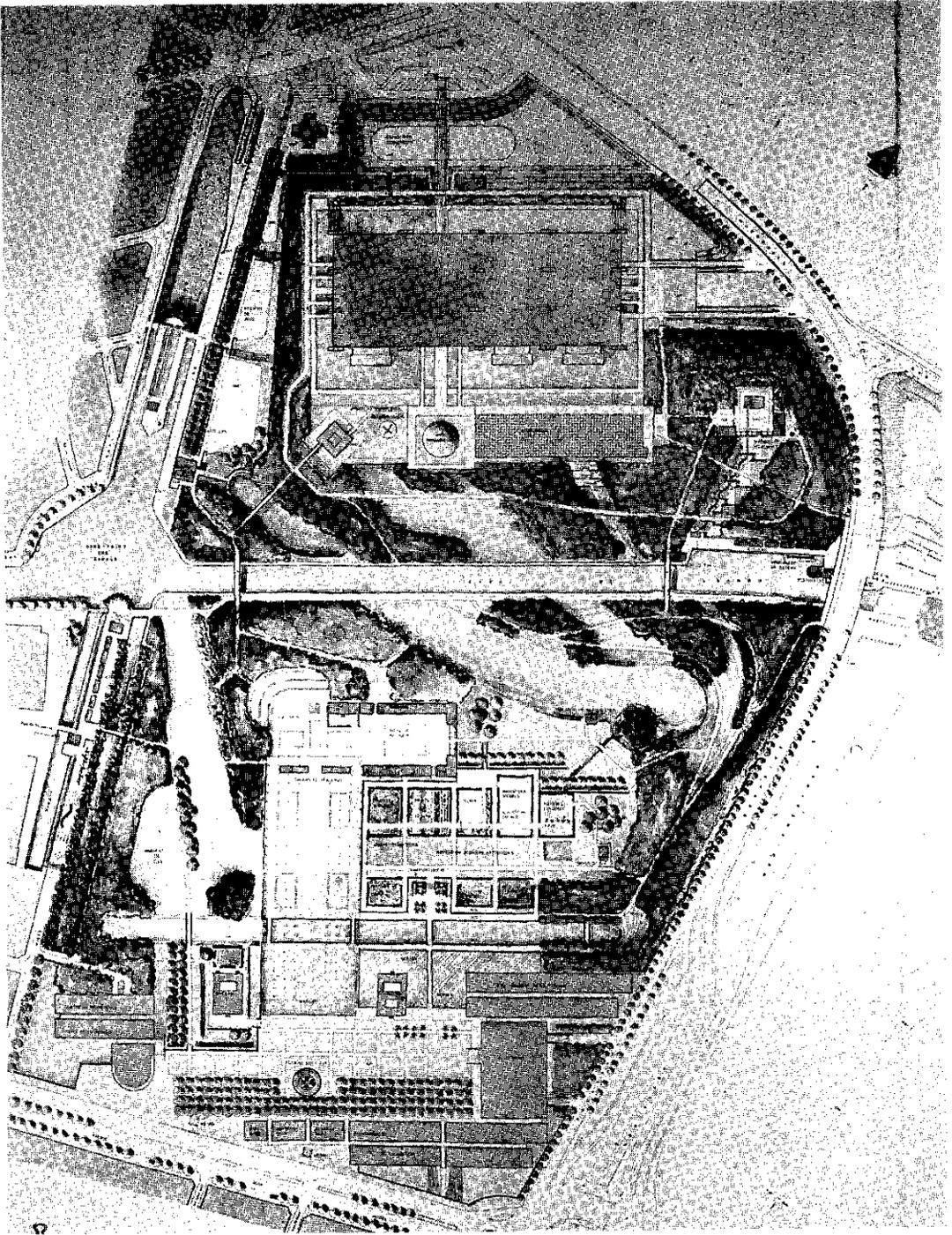
158 Dominique Juglar (F)



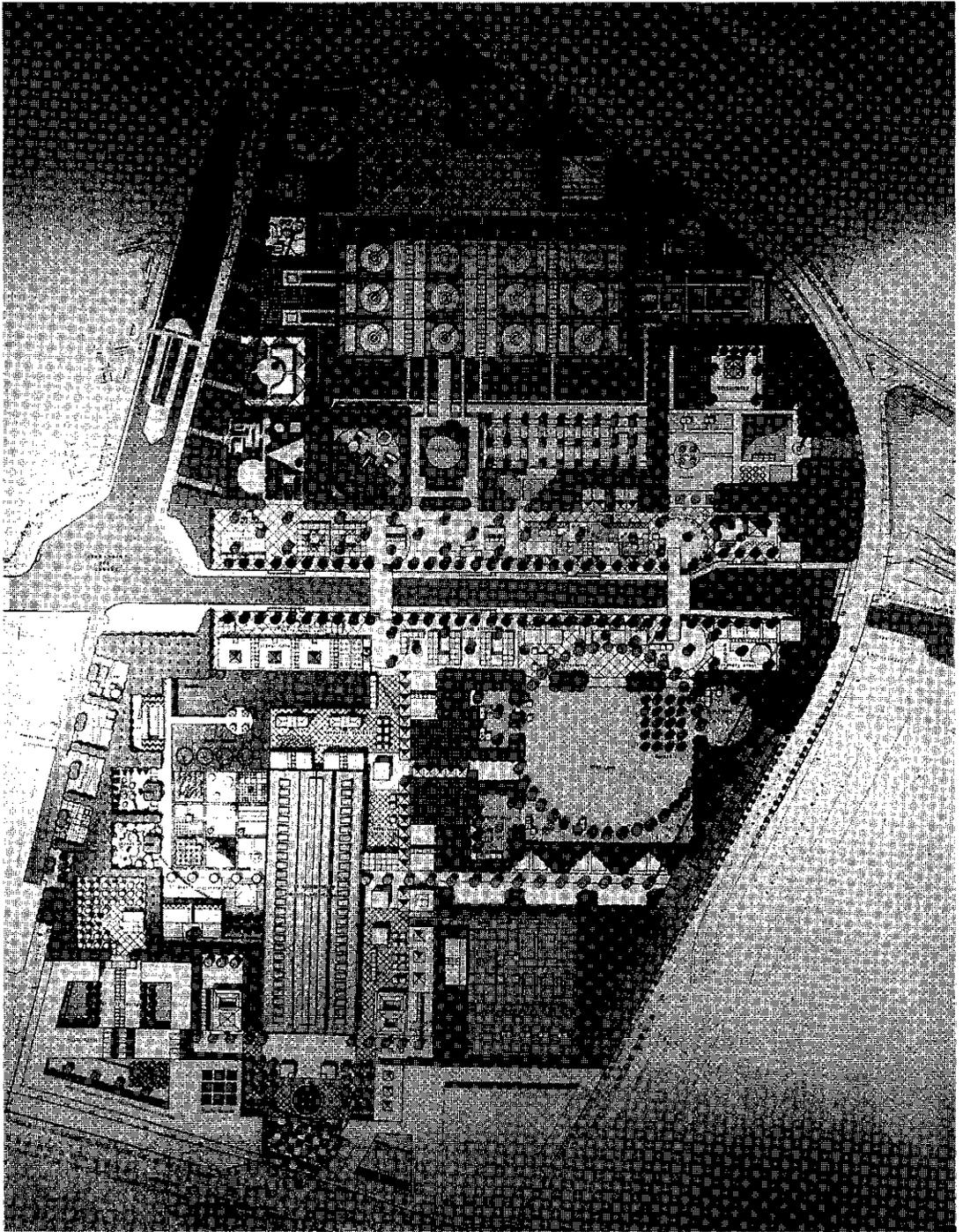
159 Vilen Kunnapu / Padrik (USSR)



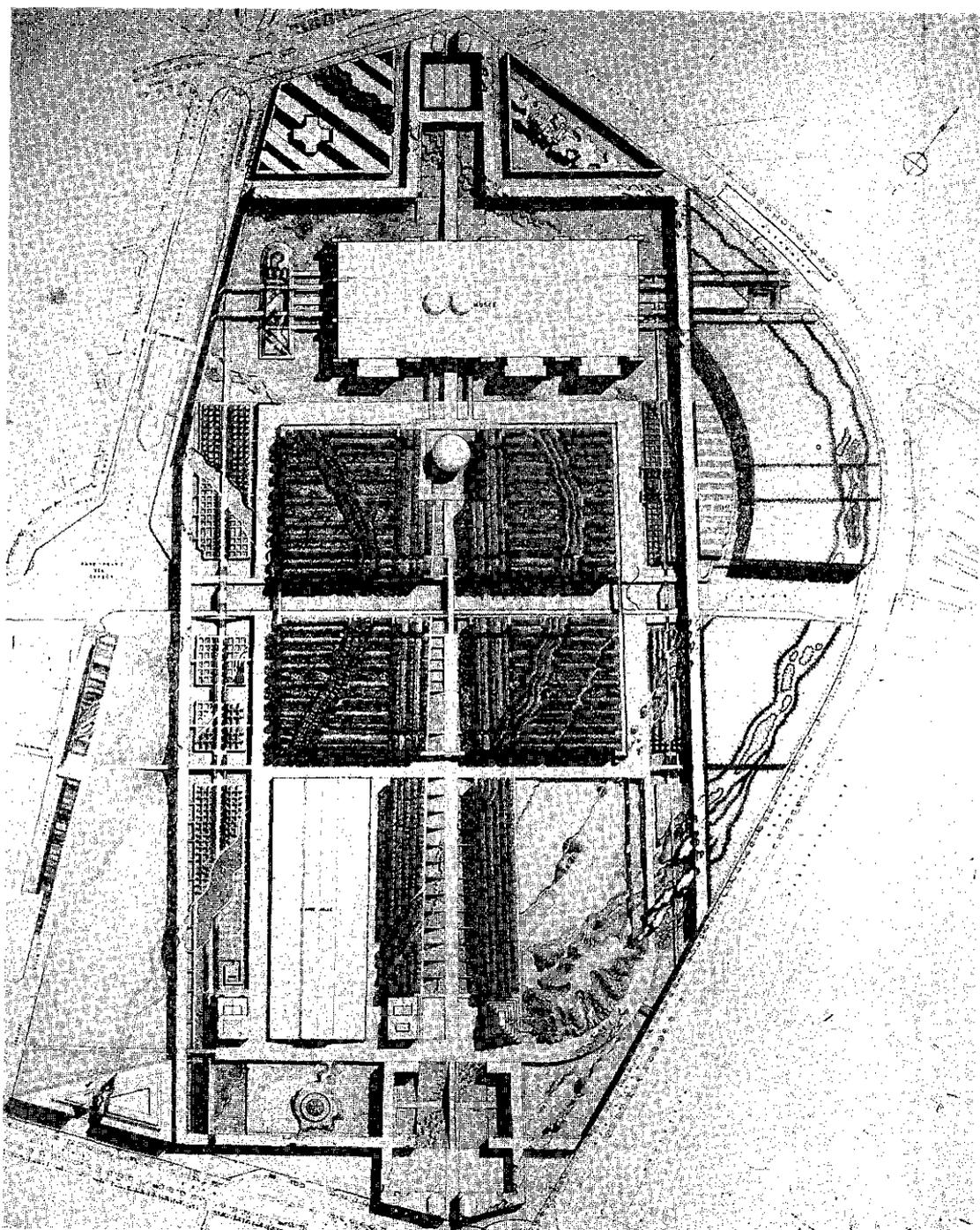
160 Bernard Lassus (F)



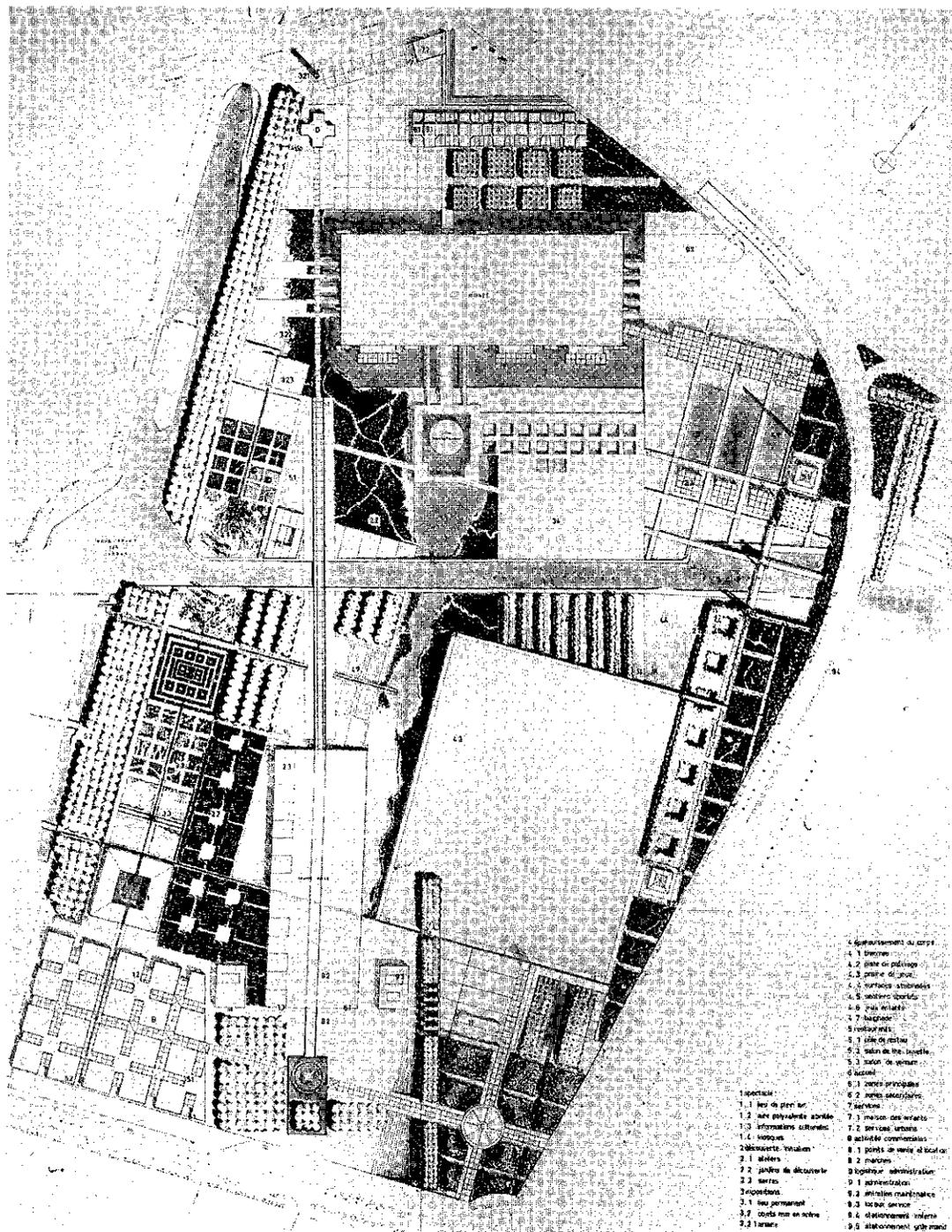
161 David Louwse (NL)



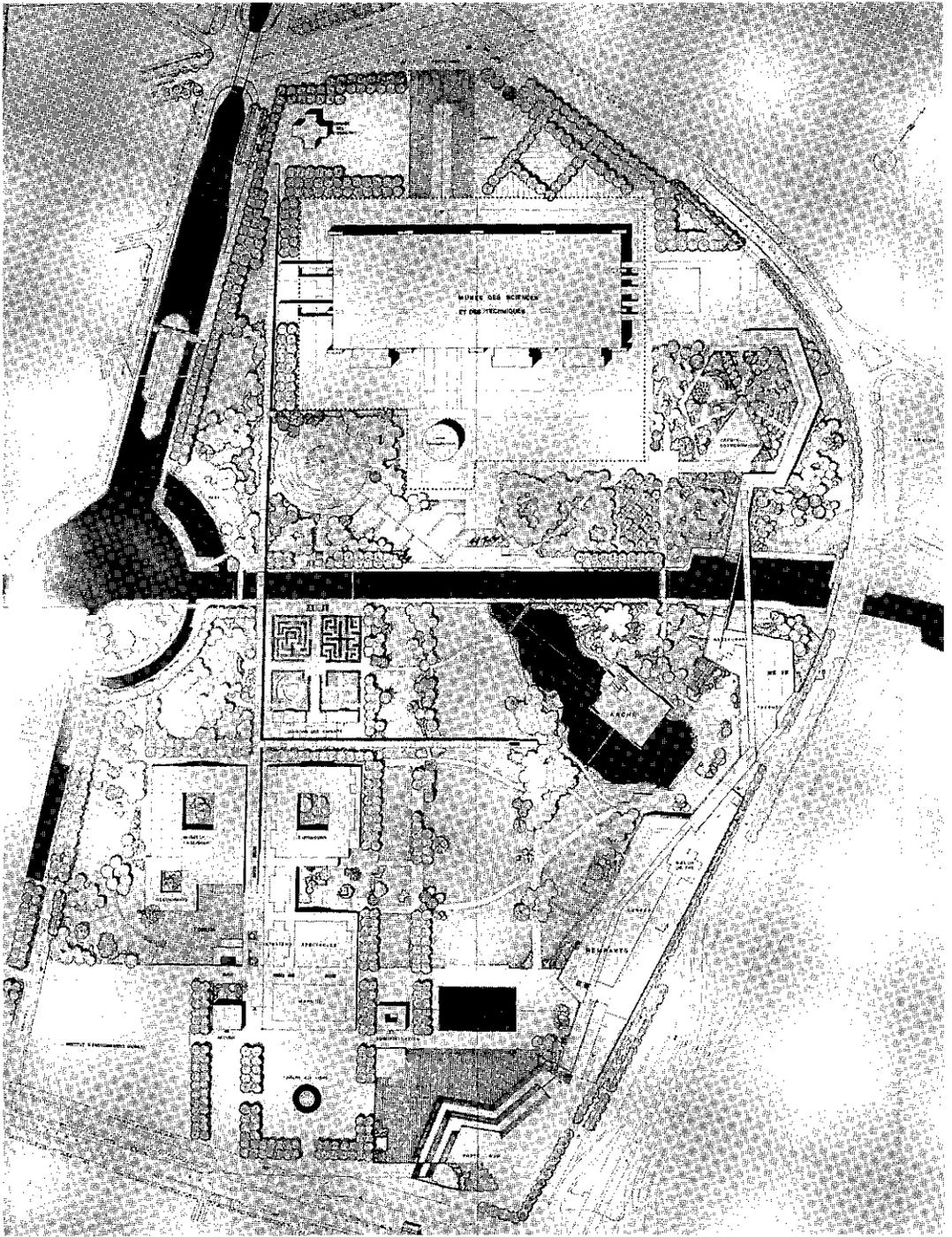
162 Cameron Lyon (AUSTRAL)



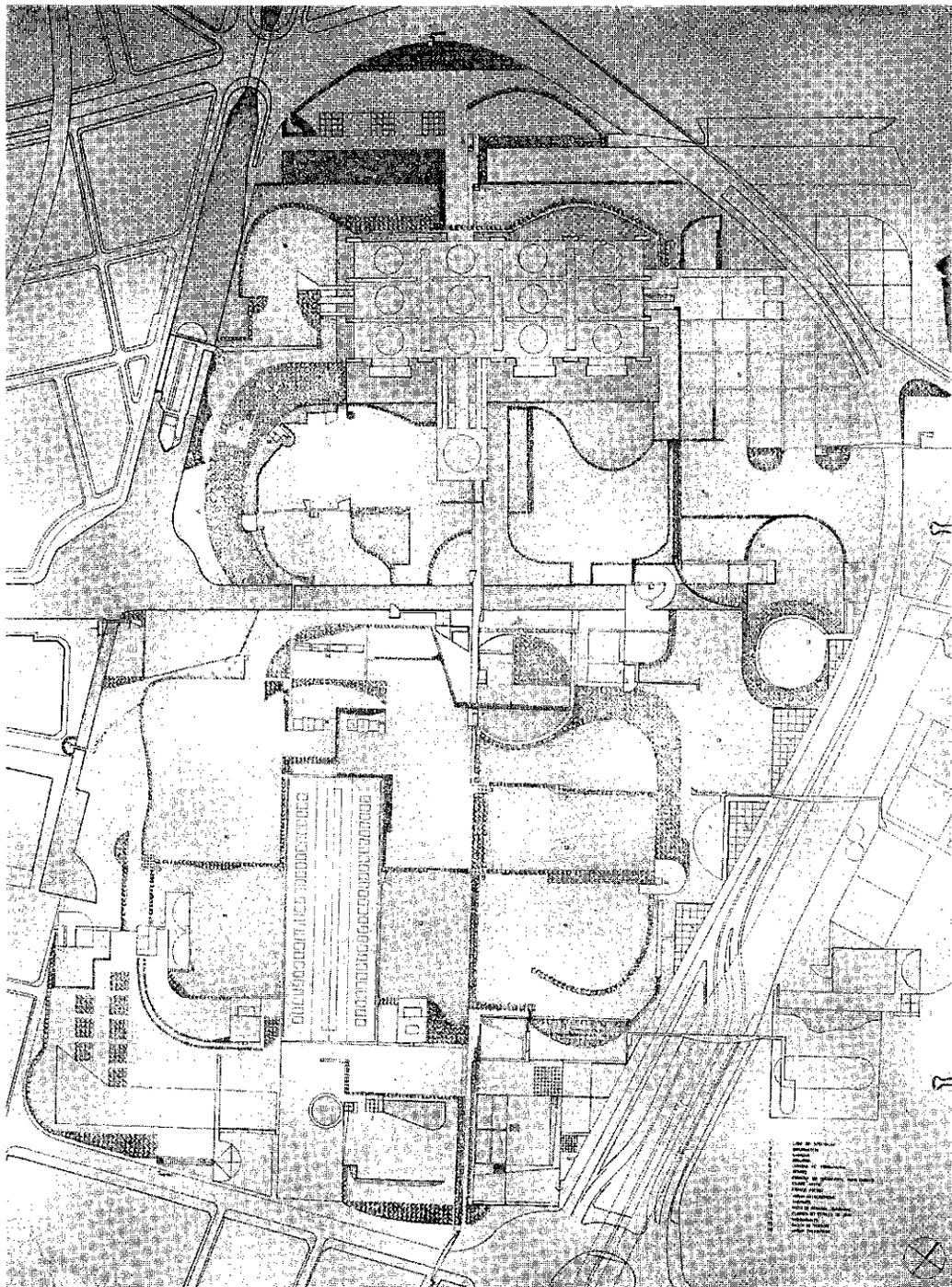
163 Jean Magerand / Mortmais (F)



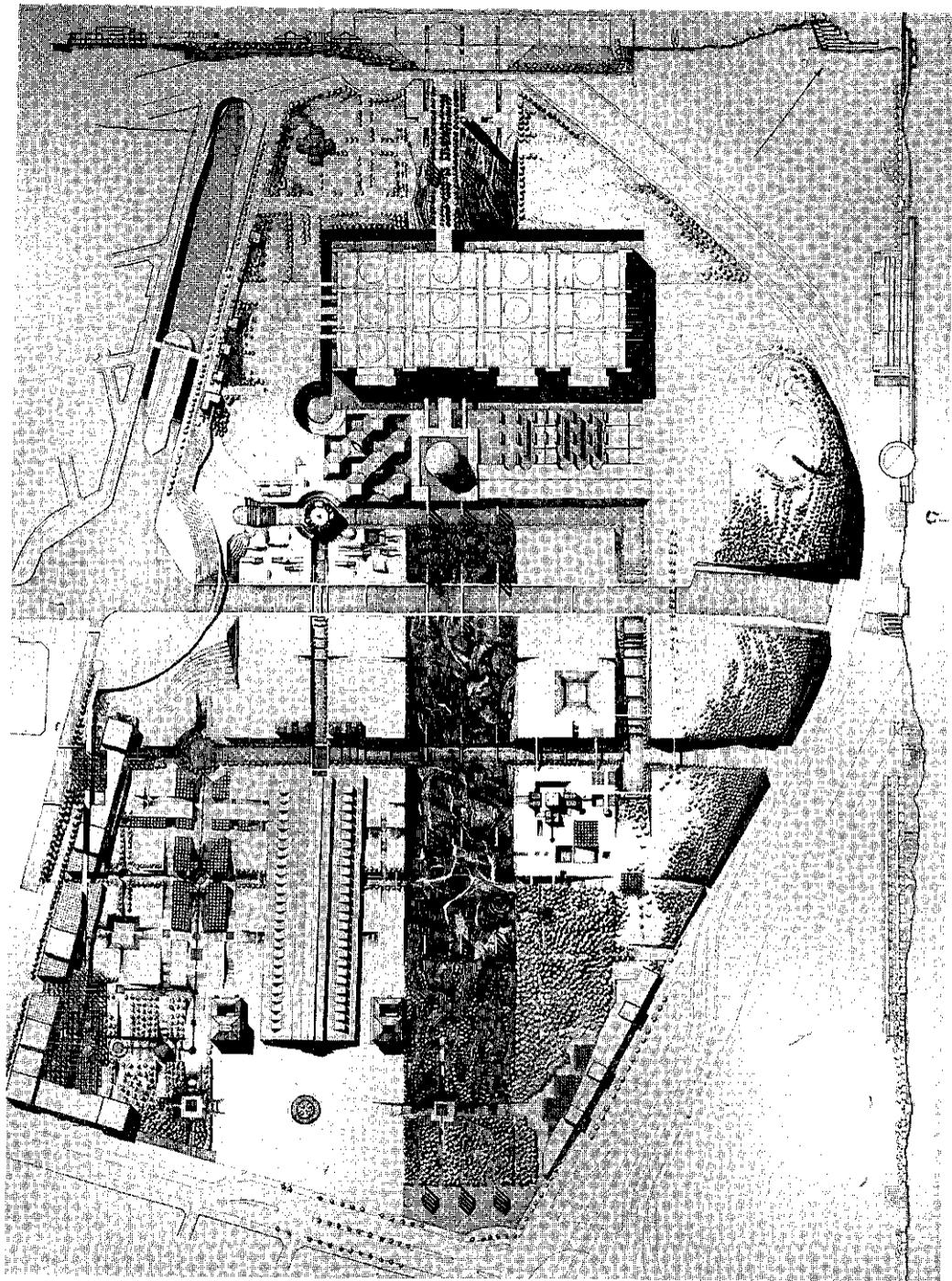
164 Alain Marguerit (F)



165 Vittorio Mazzucconi (1)

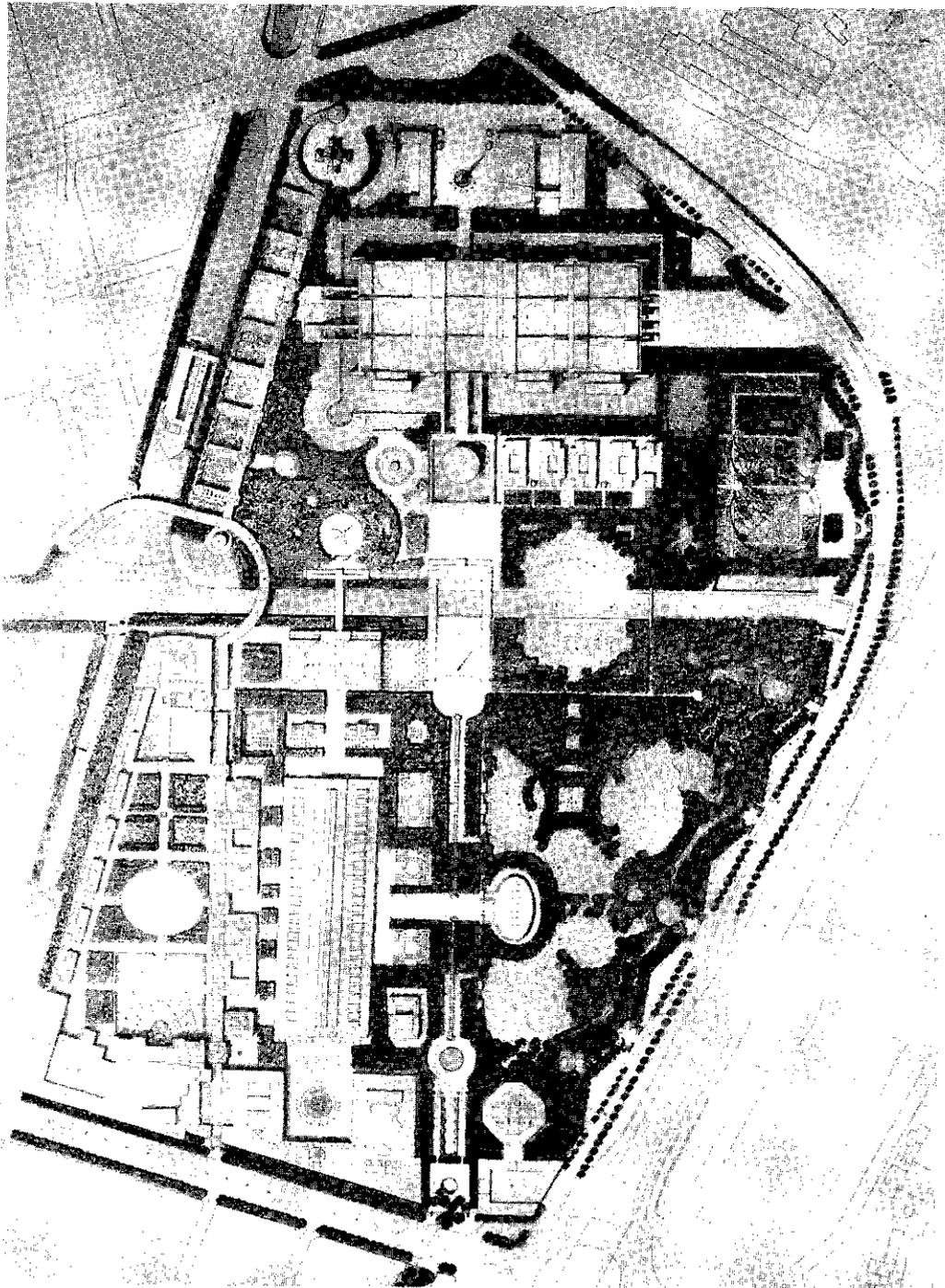


166 Richard Meier (USA)

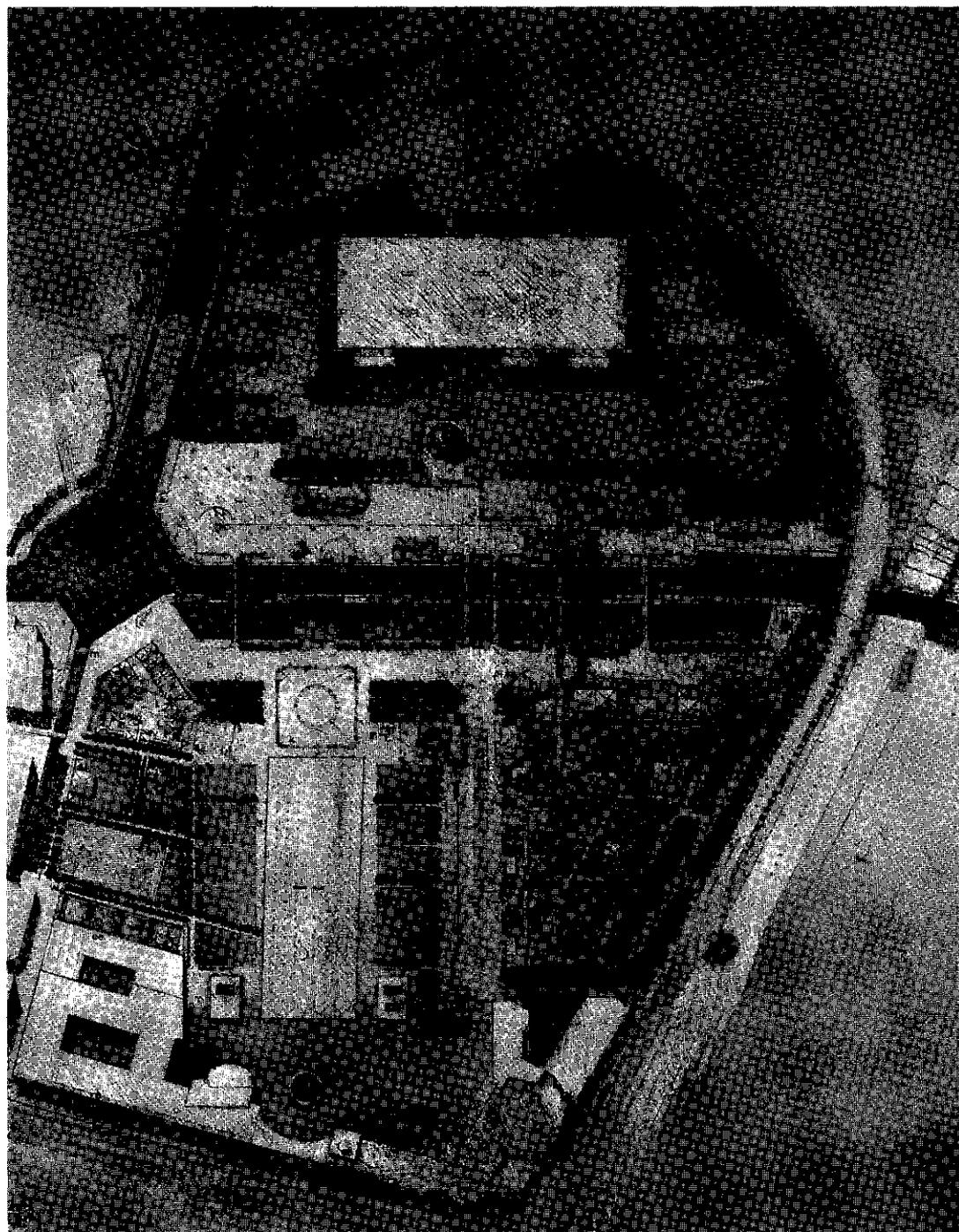


167 Henri de Miller (F)

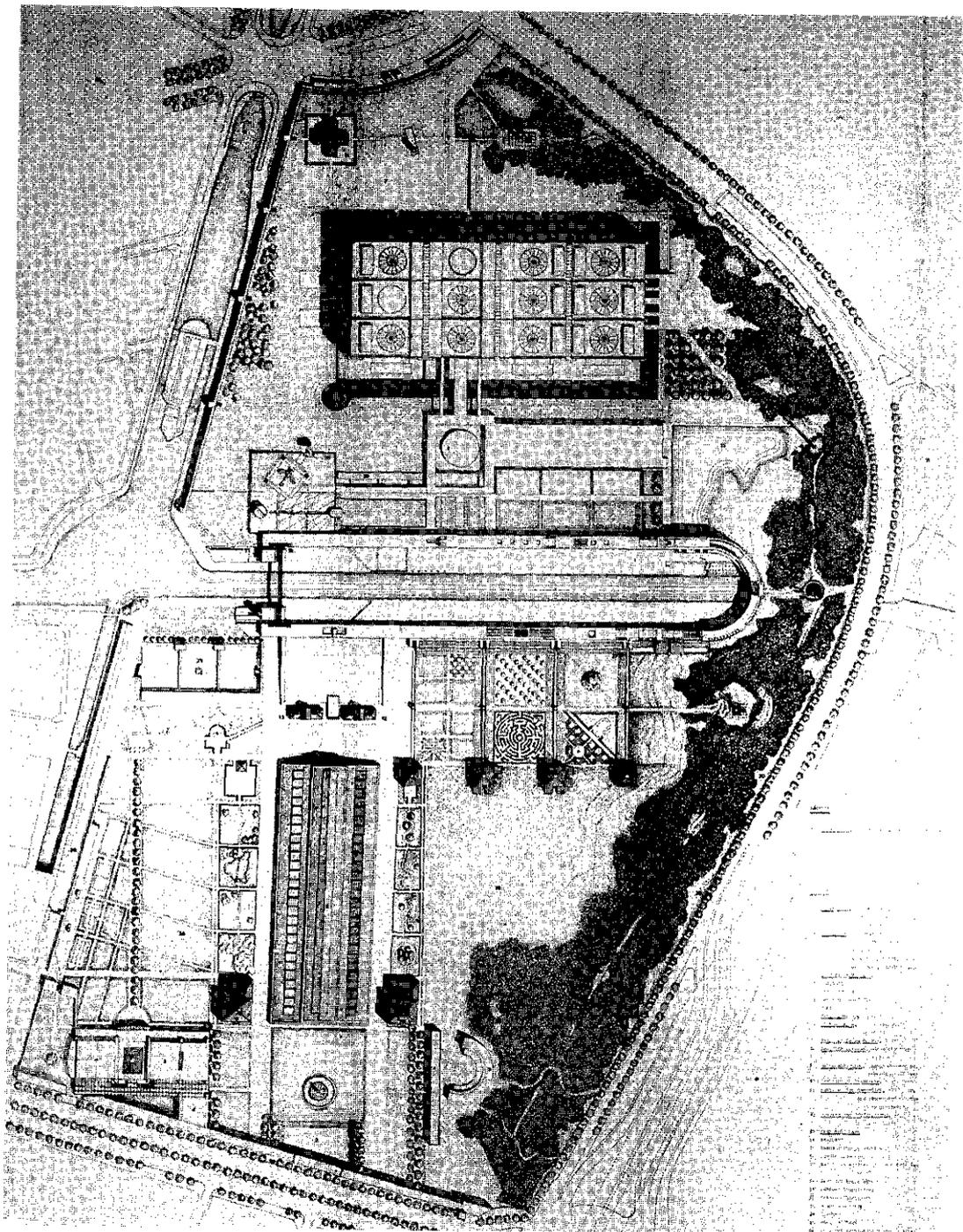




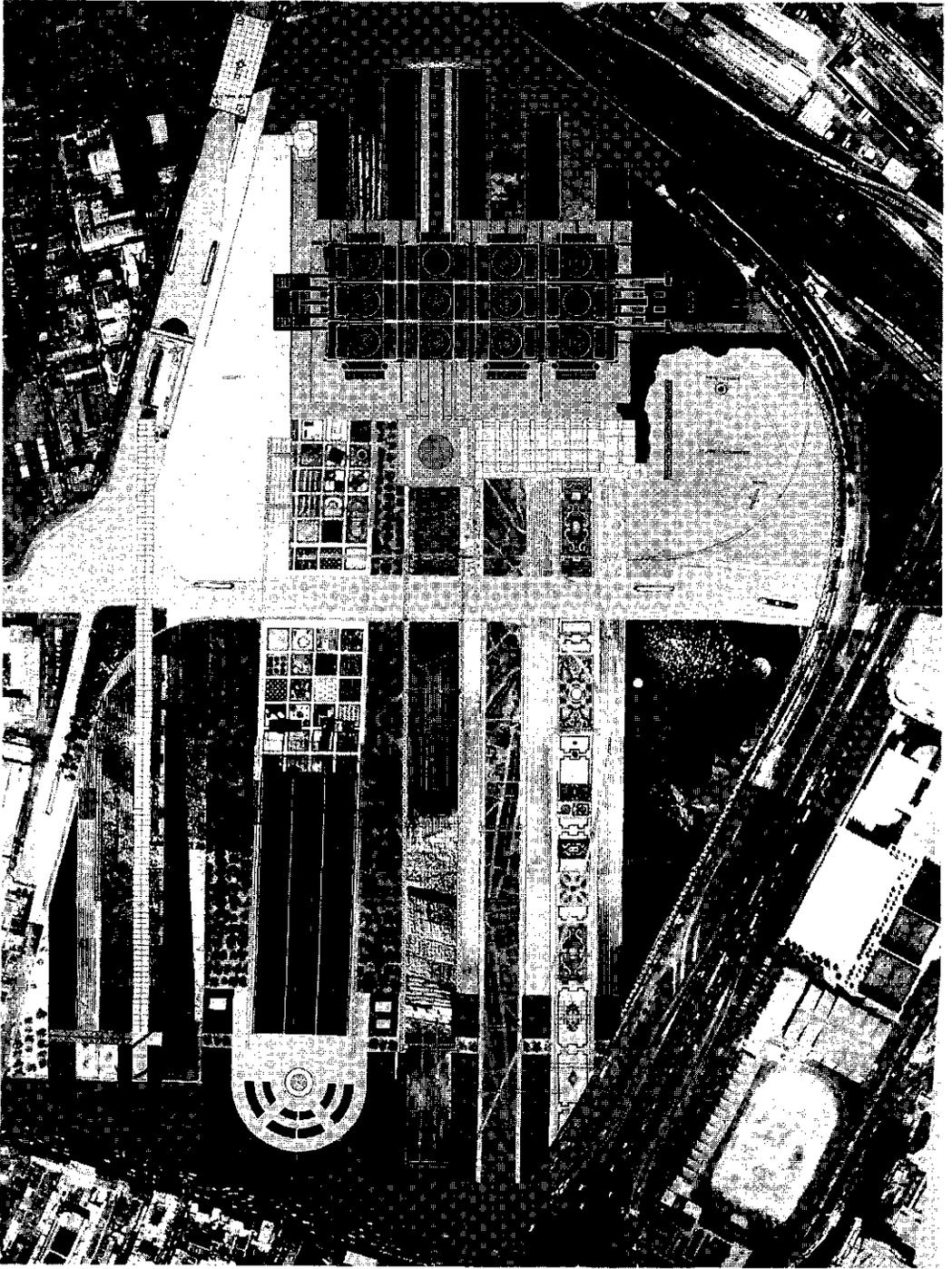
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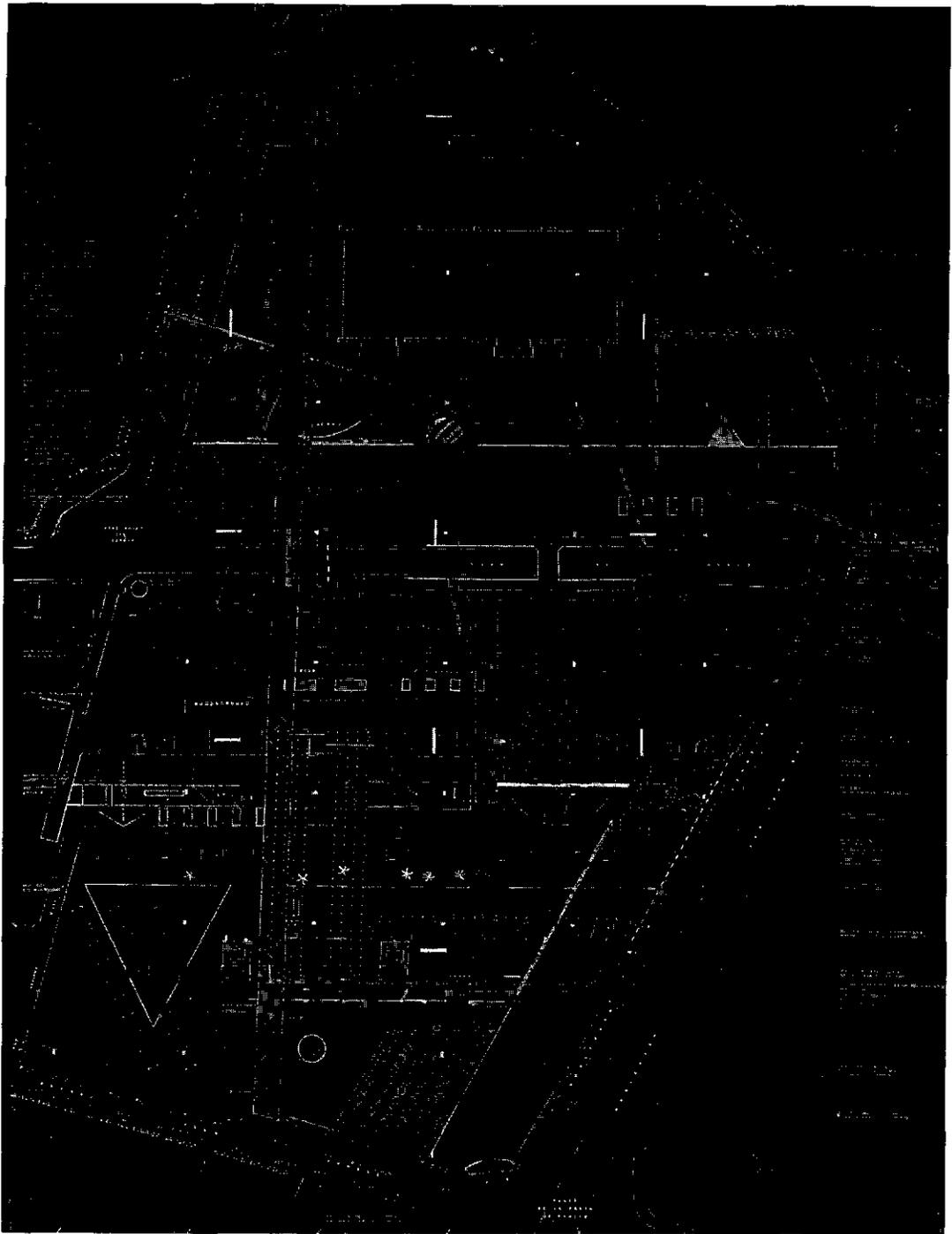
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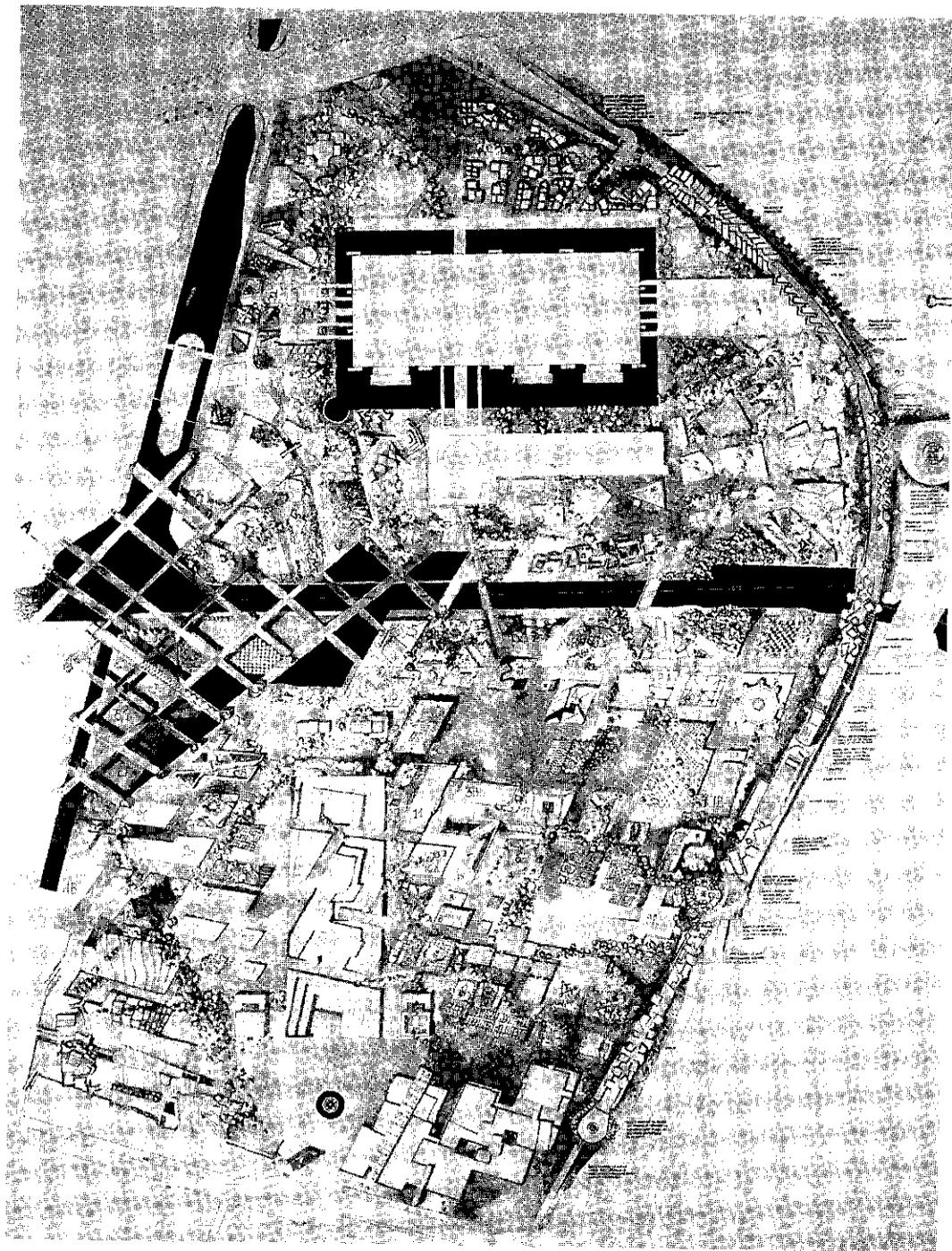
171 Walter Noebel (t)



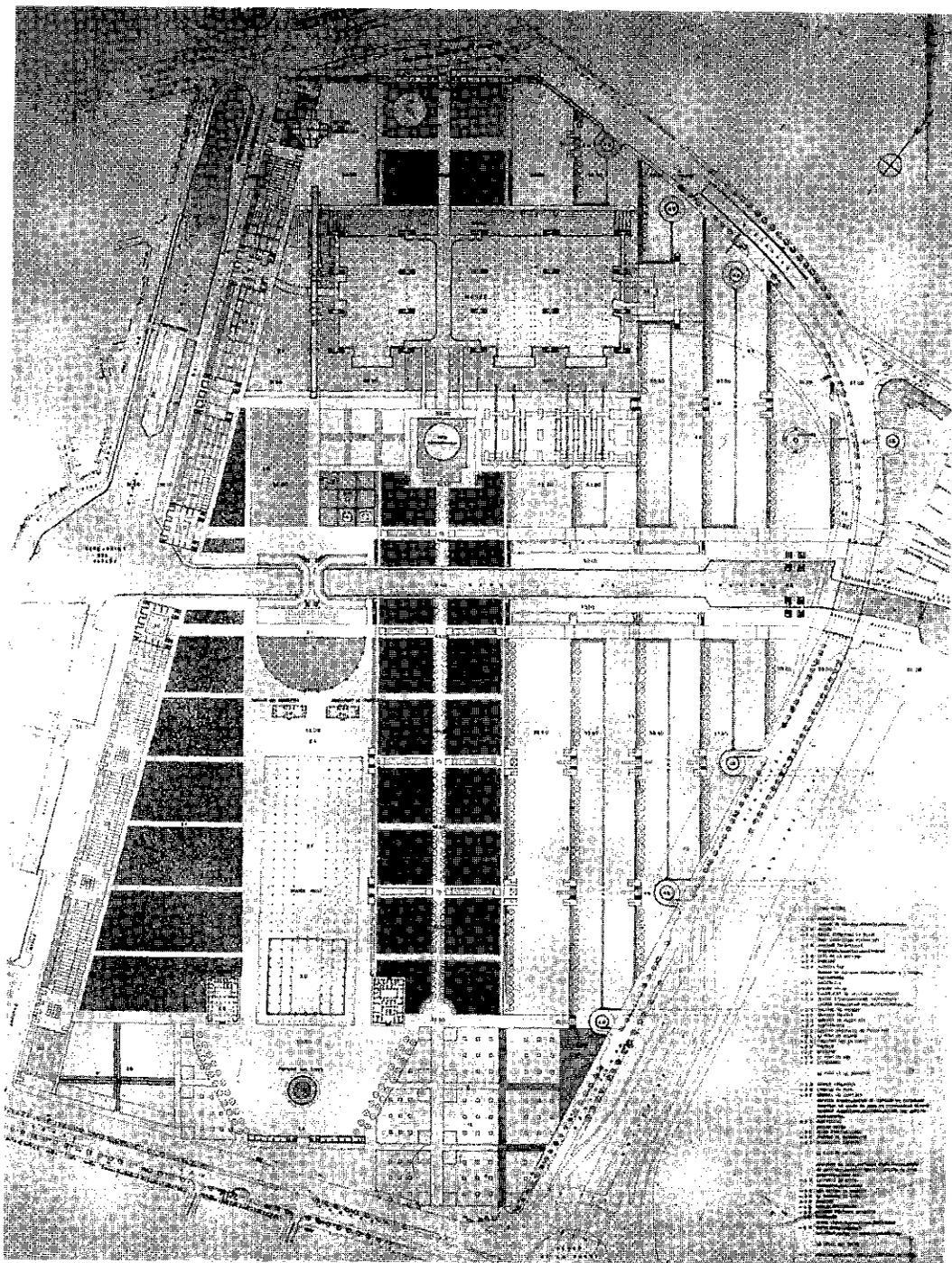
172 Jean Nouvel / Soria / Lezenes (F)



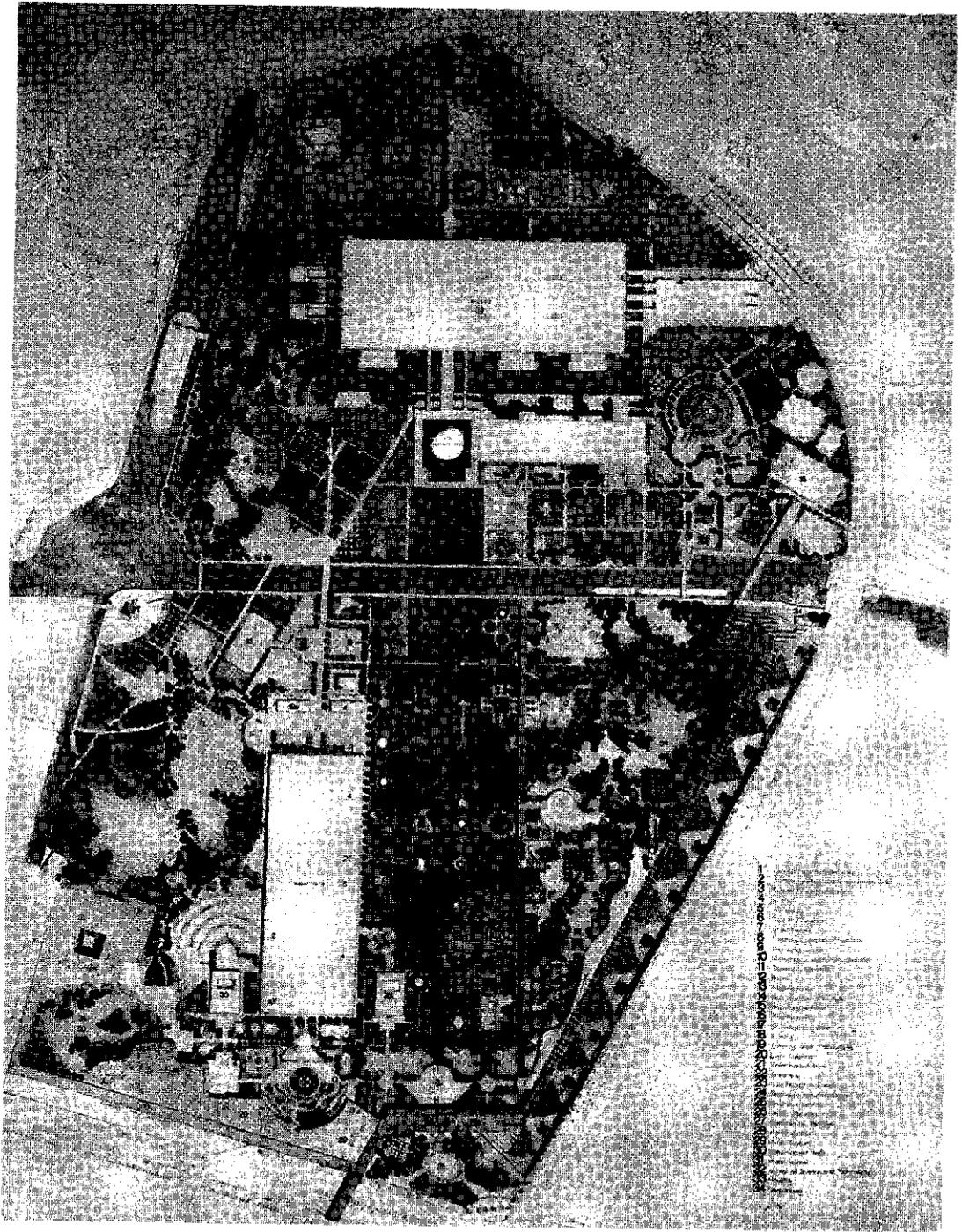
173 OMA (GB)



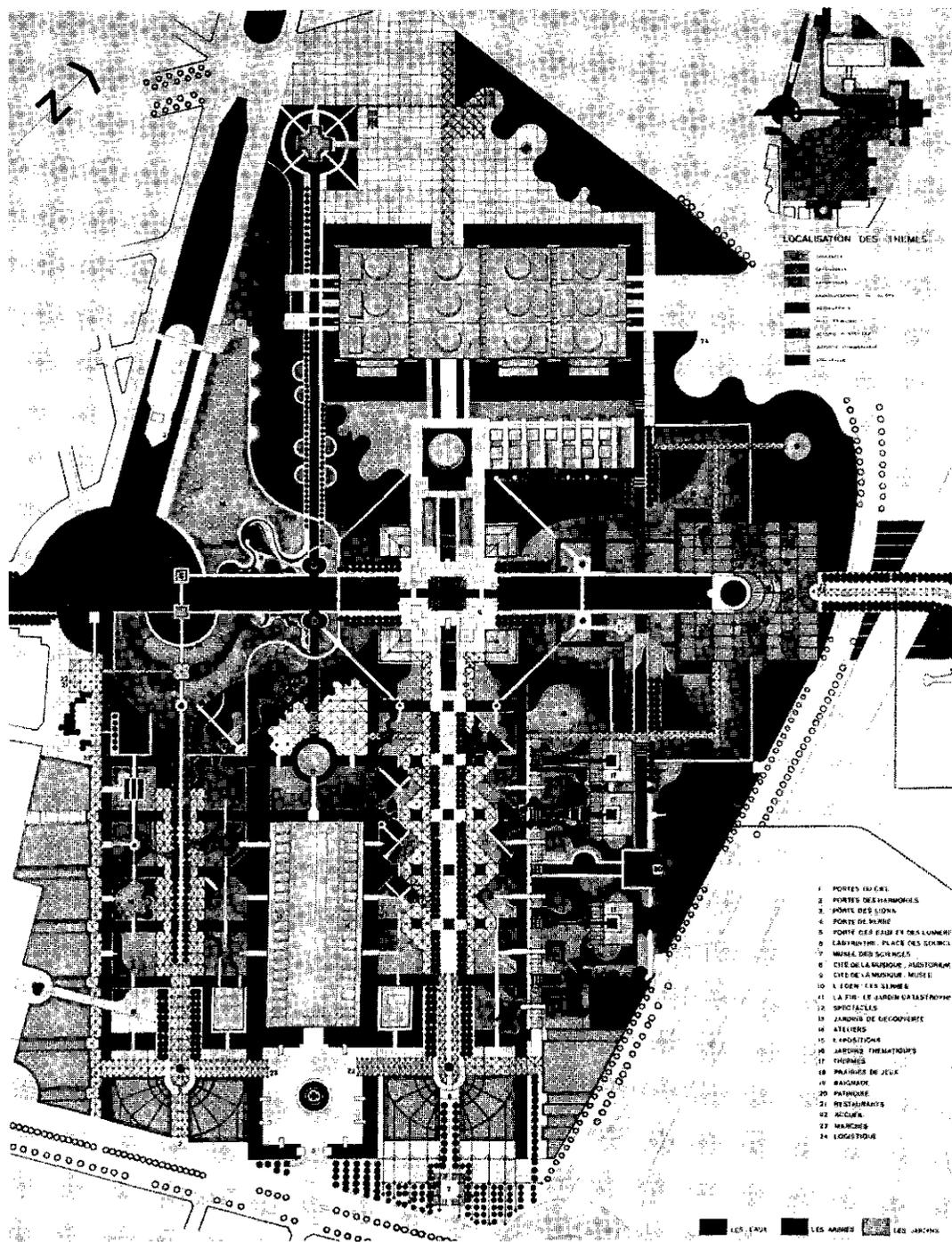
174 Gaetano Pesce (F)



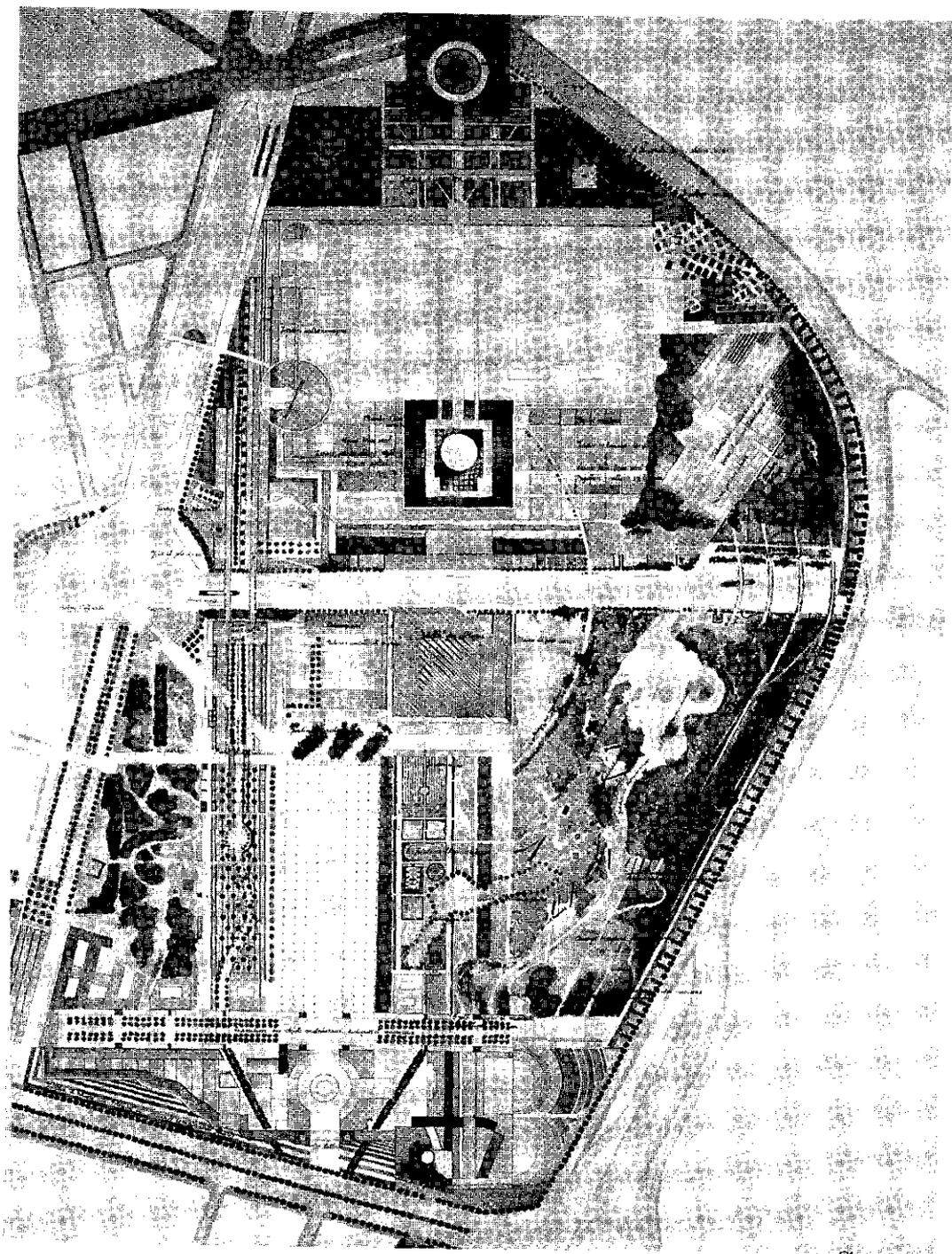
175 Marie Petit (F)



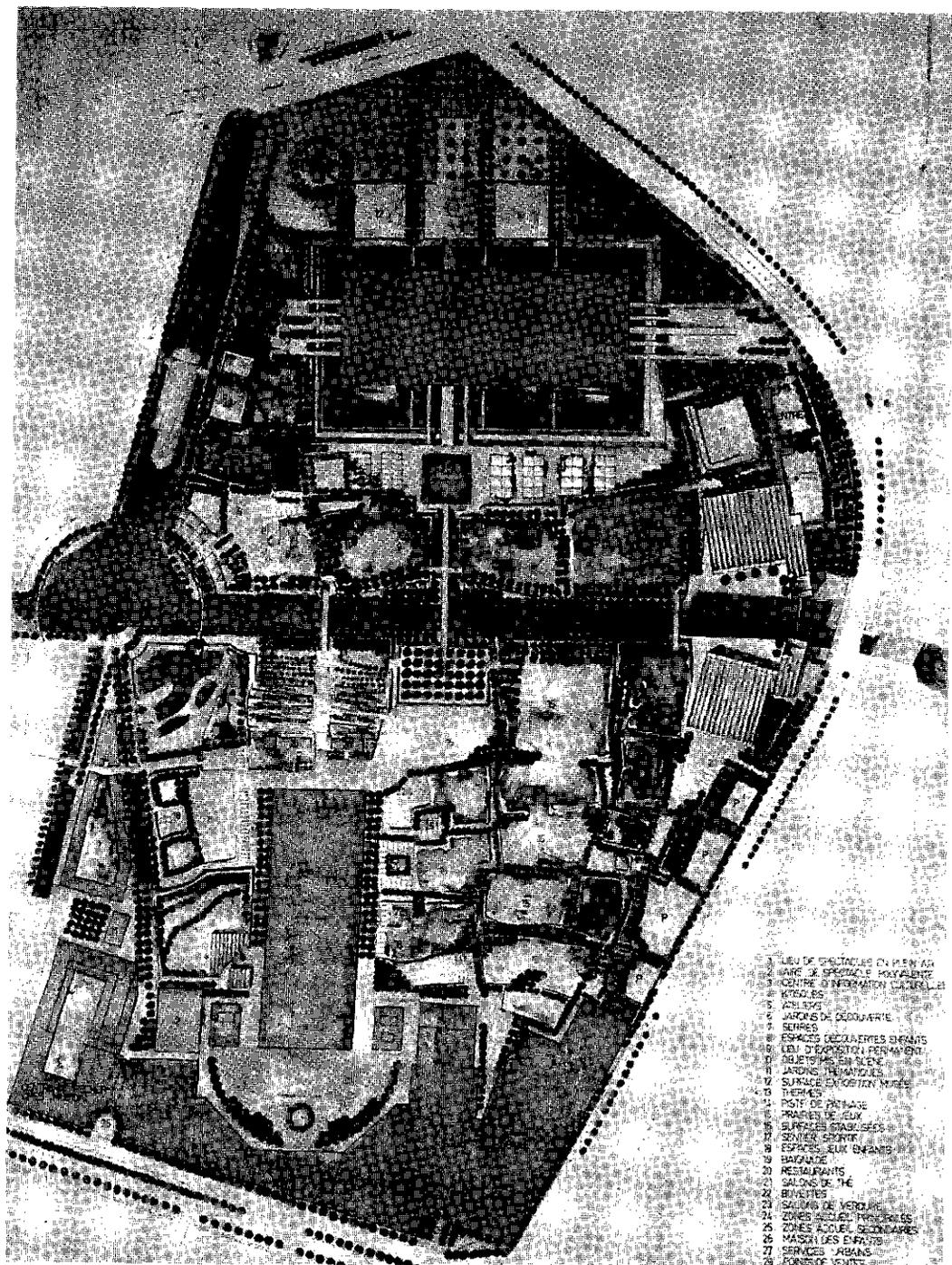
176 Adrian Duncan Pilton (AUSTRAL)



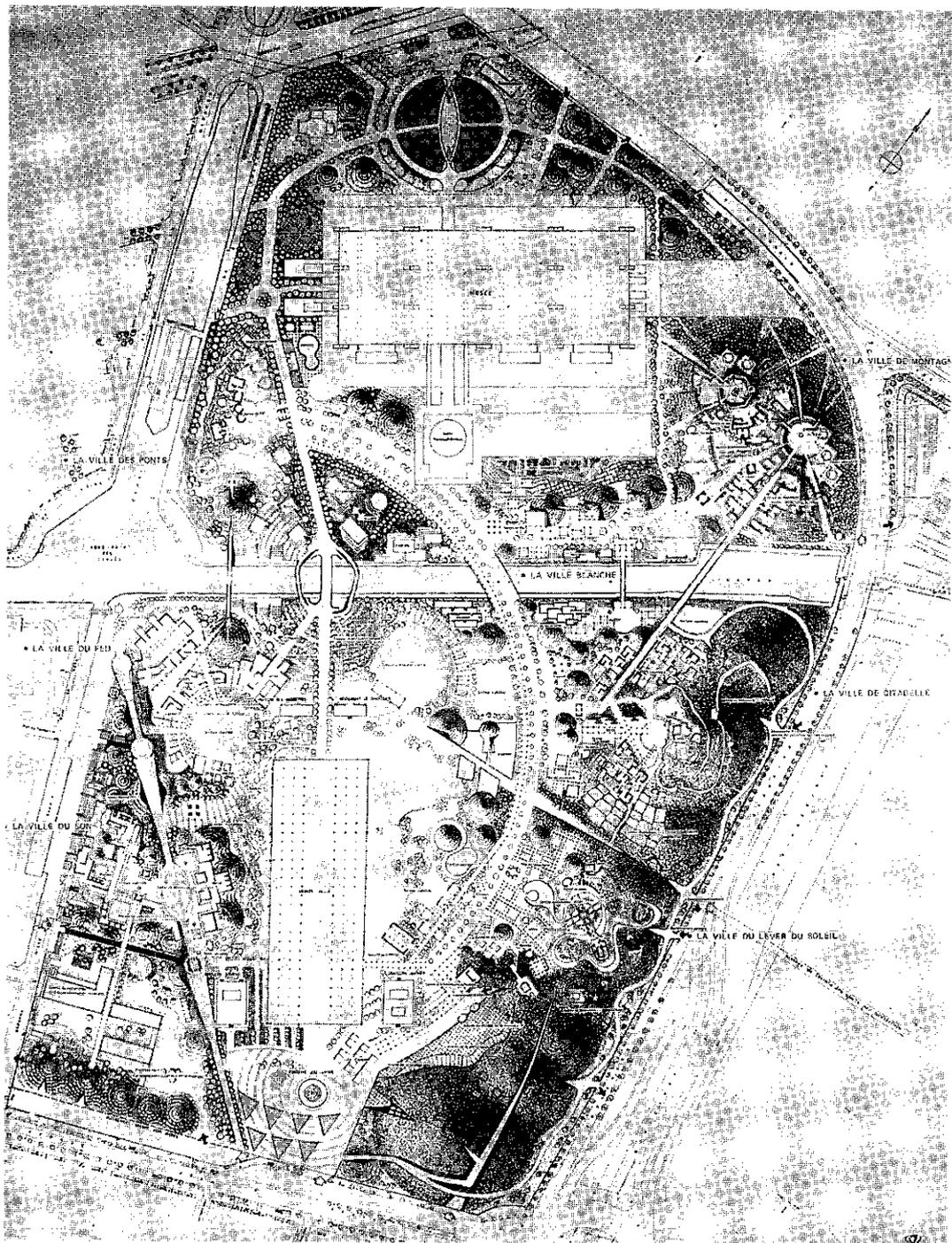
177 Alain Provost (F)



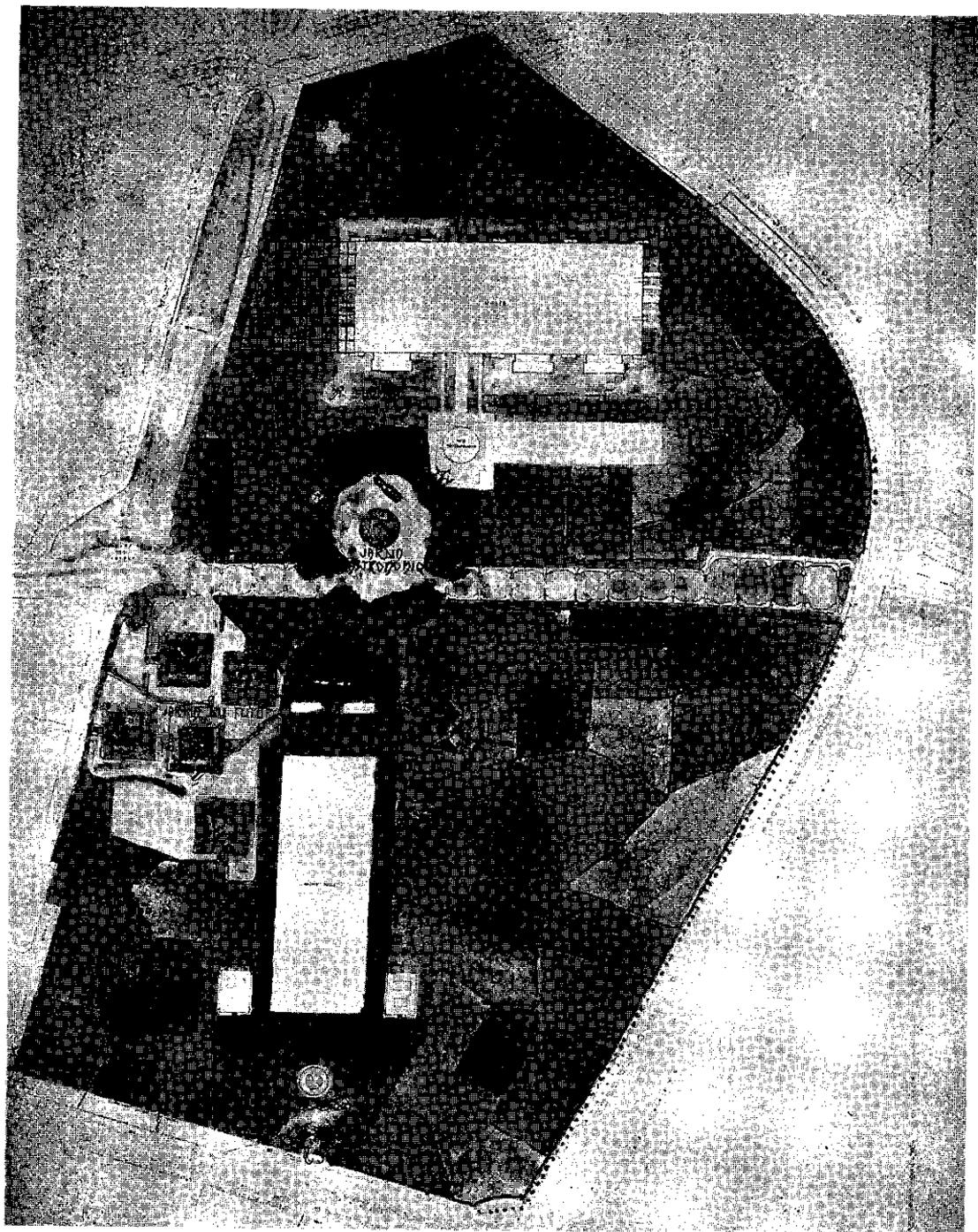
178 Alain Sarfati (F)



179 Team Grün-Plan (D)

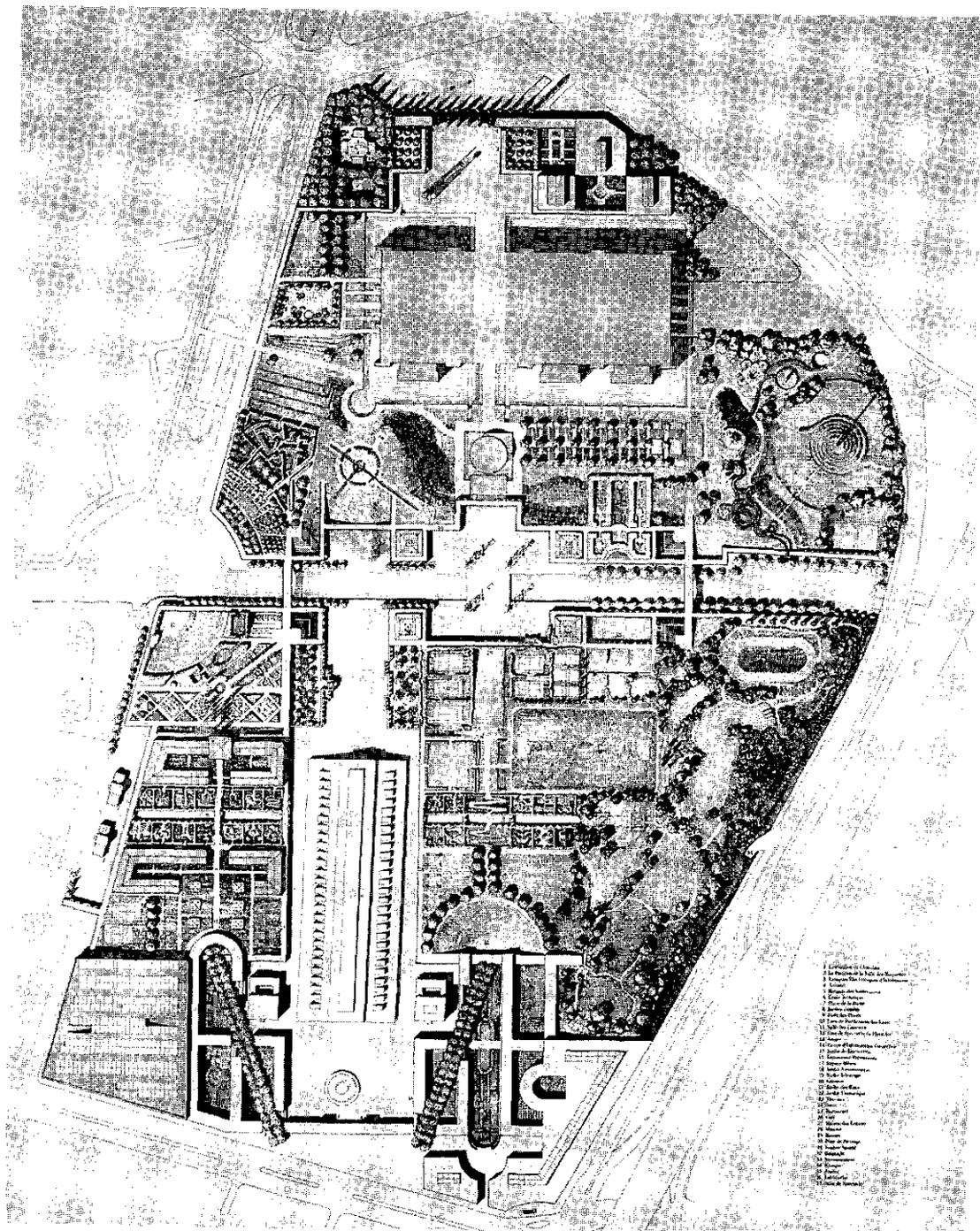


180 Team Zoo (J)

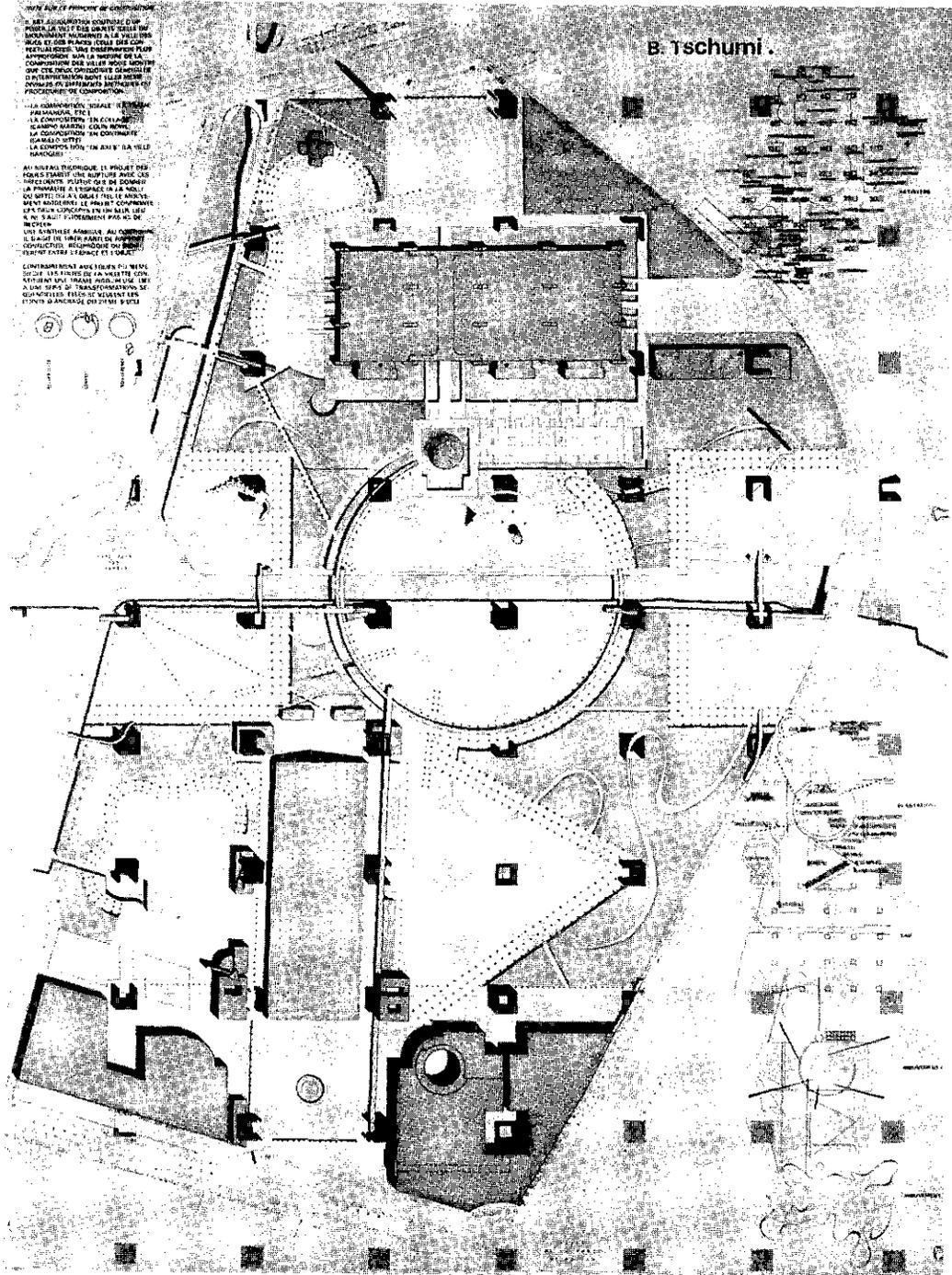


181 Philippe Thomas (F)

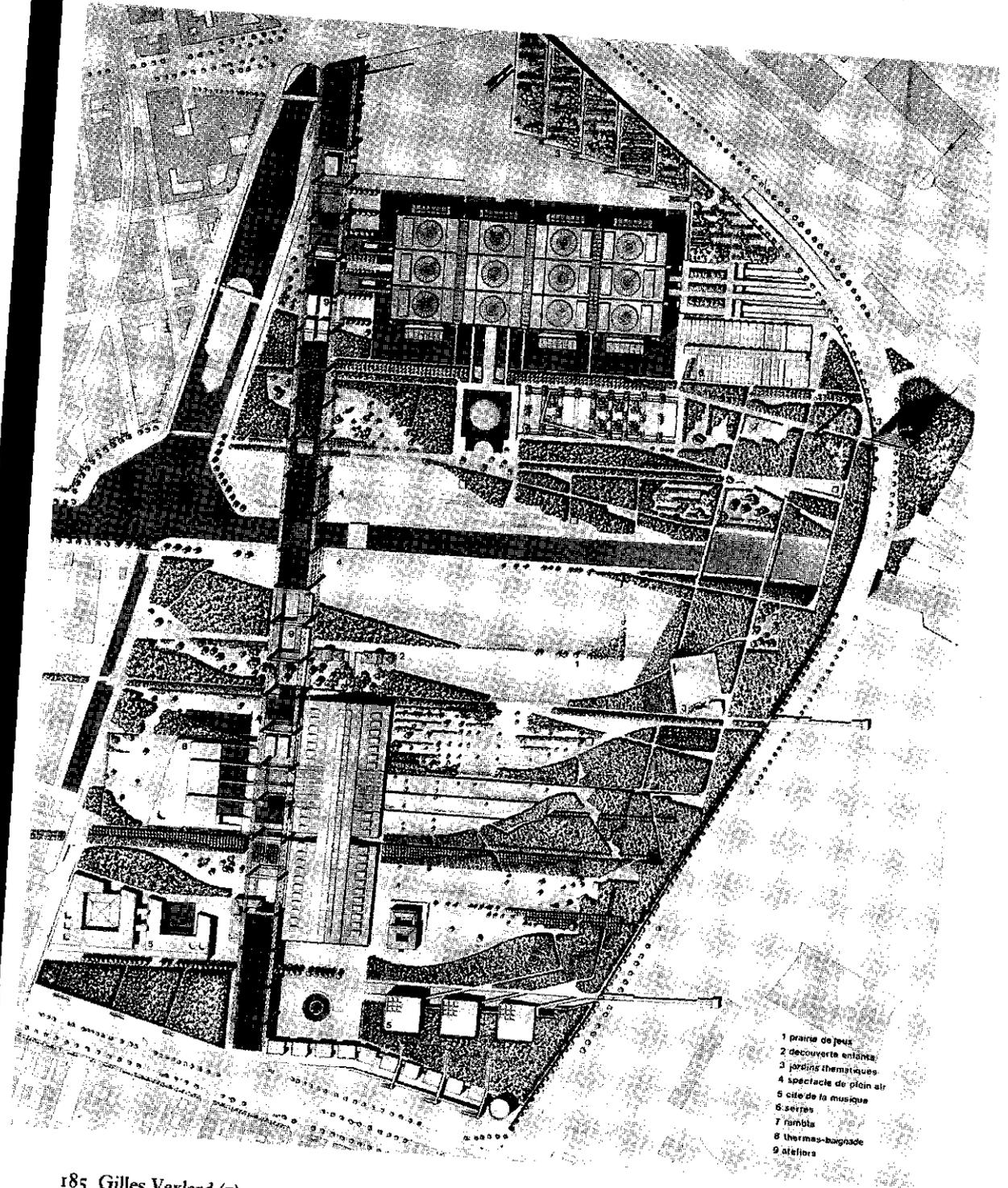




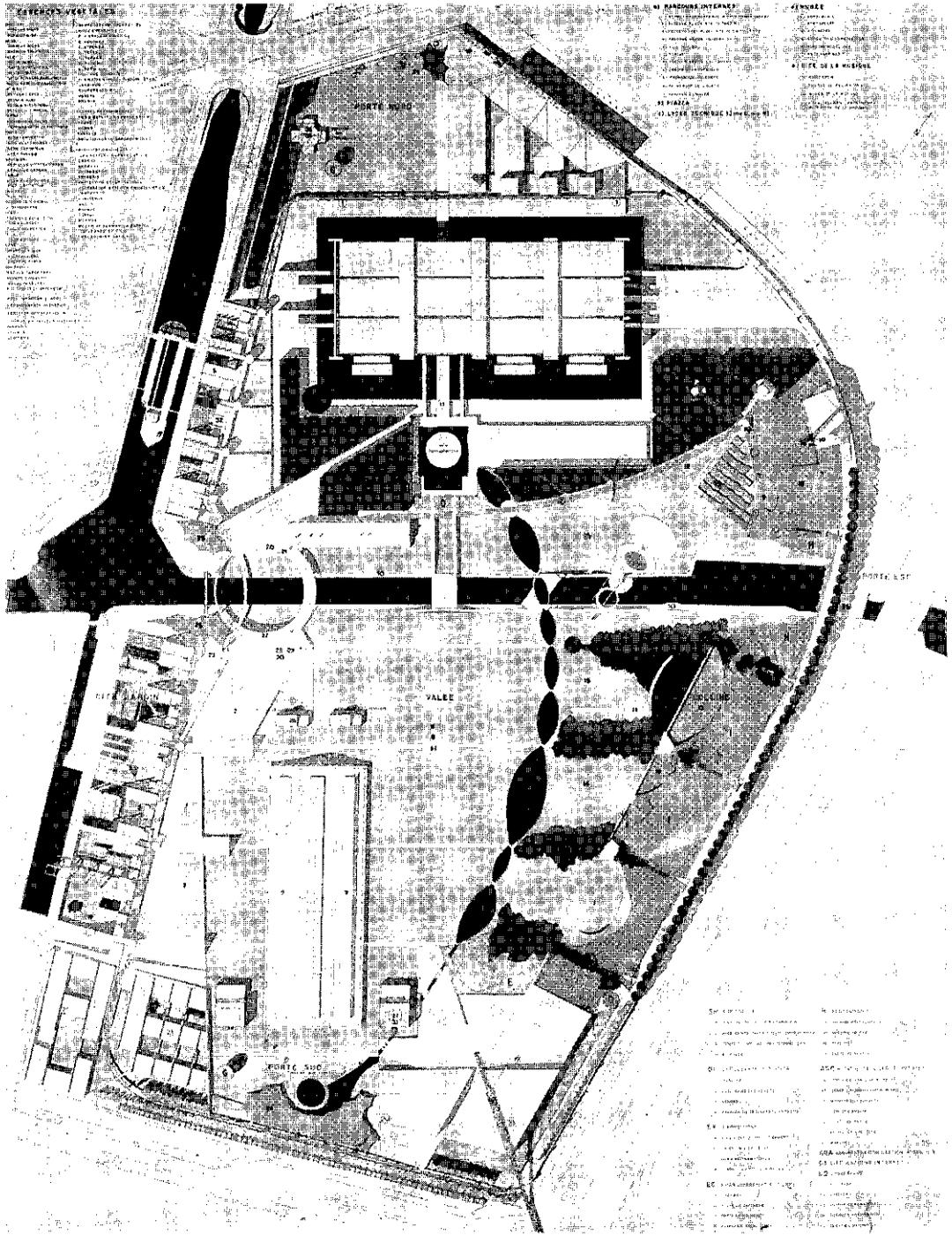
183 Stephen Townsend (USA)



184 Bernard Tschumi (USA)



185 Gilles Vexlard (F)



186 Franco Zagari (1)

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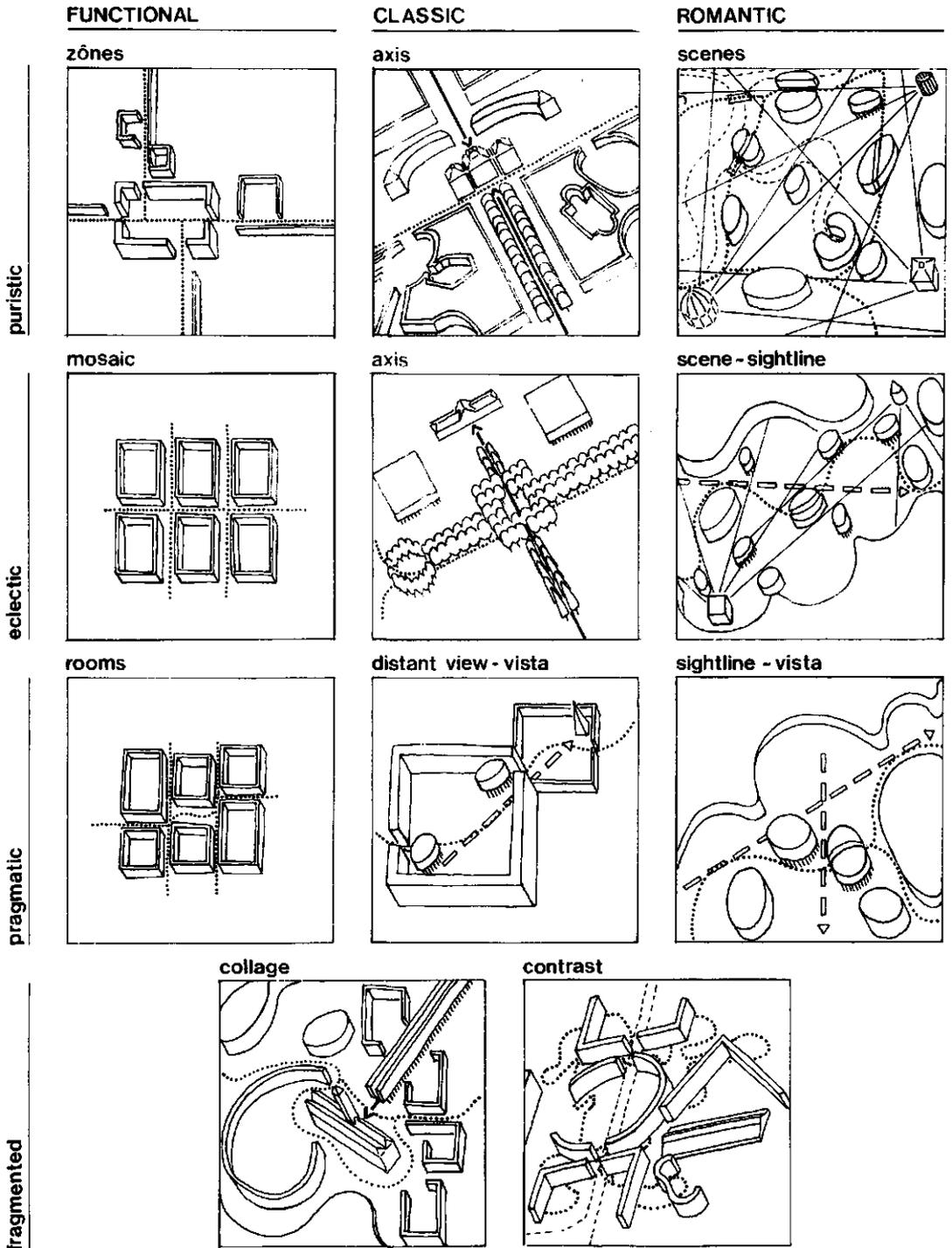
## Appendix

*A summary of Meeus' analytical method as developed and applied to the plans discussed in the design seminar 'Land van Hoboken'.*

The design seminar produced a catalogue of *design philosophies* that can be clarified: firstly, by reconstructing the *design methods* used, the different ways in which designers can view the programme and can draw inspiration from the site itself; secondly, by describing the *principles of composition*; and, thirdly, by decomposing the *form, space and design concepts* that have helped to shape the design.

The first stage in the analysis involves a consideration of five questions related to the characteristics and the potential of a site: How do I get from A to B? (*Routing*: by weaving the pattern of circulation in the redesigned site into the existing network of the surrounding area, accessibility is optimized.) Where am I? (*Orientation*: a great deal of attention is paid to the landmarks, lines and surfaces that prevent unwary visitors from losing their way.) Does this place provide a feeling of openness? (*Coherence*: open space is a precious thing in city-centre areas. It should therefore not only be subdivided into compartments, but instead form one interconnected whole.) Is a dominant atmosphere recognizable in this place? (*Dominance*: in order to distinguish the site from its surroundings, it must have a distinct atmosphere, ambience, its form and layout must be attractive. Where this quality is lacking, a new dominant form can be superimposed on the site.) And, finally, what does this place remind me of? (*Meaning, Reference*: by using images evoked by the designer, the distribution of form and space and the variety of elements, materials, and alignments may not only suggest present use, but also the memories of bygone times, the history of the site, or perhaps far away places.)

The second stage of the analysis tried to identify the principles of composition. By principles of composition we mean the way in which a designer (or a design school) orders continually varying landscape forming elements in relation to each other, using one or other associative images. Designers apply these principles in order to avoid a dull multiformity of spaces. This does not mean that individual designers are to interpret something in only one way.



187 Meeus' decomposition diagram

Which principles of composition are available to the landscape architect? A number can be highlighted here. *Historical continuity*: one can speak of historical continuity when contemporary functional use can be fitted into a historical framework, when the designer decides to fit the 'new' into the 'old'. *Continuity*: when newly introduced functions on a given site clash with existing elements and functions to such a degree that a harmonious solution is out of the question, one can decide to remove all what exists and introduce a completely new harmonious functional pattern. *Flexibility*: when future changes in land use are unknown or unpredictable and links with the occupational history of the site cannot be established, one can establish a so-called 'timeless framework' capable of absorbing changing use over time. *Fragmentation*: when unification is considered to be impossible. The city is perceived as a collection of loose, sometimes overlapping elements, each with their own function and meaning, and each consisting of relics or fragments of earlier plans and projects. The object is not to eradicate these fragments, but to restore them in a new context, in the contemporary setting. *Formal autonomy*: in the city there are many forms with a pre-determined and all too obvious meaning. This can have an oppressing and even paralysing effect on the creativity of designers. This is why some deny the existence of a relation between form and meaning or form and context and thereby proclaim the existence of 'formal autonomy'.

This series of principles begins with more rather than less reference; with spaces and form with significance and an emphasis on simplicity and ends with principles associated more with emptiness and multiformity.

In the third and final stage of the analysis the designs are 'unravelling', decomposed, in the search for the motive, the experience and the value judgements that lie at the base of the ordered image of the final design: the concept. The notion of concept, as it is applied here, can be described as a preconceived structured (albeit sketchy) image of the final design, that encompasses functional relationships, meanings and references, and a choice of a set of form rules or design style).

The analysis aims at the use of eclectic and pragmatic neo-styles (impure styles) and the classification of elements and patterns that results from this. There are three fundamental sources of inspiration in contemporary landscape architecture. *Functional style*: a hierarchy of monofunctional spaces acquires added value and coherence. This results in simple open spaces with diverse activities, as is evident in the original *Volksparken*. *Classical landscape architecture*: this makes use of an interplay between symmetrical axes, parallels and cross-lines and is based on the ideal of a central perspective, an overall view from one dominant point. The total impression is one of elegance, ceremony, distance and representation. *Romantic landscape architecture*: playing with scenes consisting of foreground, middle and background or vista, symbolizing a glorified nature. Via sinuous footpaths the observer is exposed to one surprising view after another. It contains Romantic references, such as views of temples, pagodas and ruins.

What types of form are relevant to design? A number of neo-styles can be distinguished in recent plans and in the academic literature. Because of the uncertainty among designers and clients about the most desirable composition for urban parks, familiar, tested and sometimes stereotyped examples showing distinction and allure are used. With the help of a decomposition scheme, the differ-

ent neo-styles can be identified. A neo-style is here described as a combination of principles of composition with some stereotyped references to historical styles and that give a new meaning to landscape forming elements in a contemporary context.

The scheme is an instrument enabling analytical interpretation. It should be read from left to right and from top to bottom [ill. 187]. The first line list the *pure* styles. The *eclectic* styles then follow, whereby the designer separates the original meaning from the form so that elements from the historical context can be extracted and placed in a new context. Eclectic design involves playing with associations, meanings and clichés.

*Pragmatic* concepts involve the use of whatever form also seems suitable. It occurs in an unpretentious way, and the use of specific characteristics associated with a style is rejected. There is an *ad hoc* use of form.

On the last line is *fragmentary* design. As different contrasting neo-styles compete for domination, a collage arises. A collage is a composition of dissimilar parts within an enveloping frame. Clashes between parts that have different meanings are supposed to endow the design with extra value. If the design is built up of different superimposed layers on top of independent patterns, then complex and strong contrasts arise. The city consists of a number of layers or superimposed patterns, each of which conveys a certain logic in its origins, functions, effects, meanings or space. As these layers keep shifting over each other, all sorts of contrasts come in to being, illustrating the complexity of urban life.

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## Notes

### Chapter 1 *The analysis of urban parks*

- 1 There are similarities between this debate and the development of abstract painting in relation to naturalism.
- 2 The first English garden cities, such as Welwyn Garden City, also bore a resemblance to an unfolded park.
- 3 This can be seen in the so-called garden suburbs of the Amsterdam Algemeen Uitbreidingsplan (AUP) (Extension Scheme) of 1934.
- 4 In the same period in which van Eesteren drew up the Amsterdam AUP, he also designed the Amsterdam Bos. This park makes a traditional appeal to and stimulates the imagination because of its fantastical and poetic qualities.
- 5 For this reason, an urban park can never be constructed solely on an ecological basis. For the latter refers to characteristics of local nature and tends towards the maximal. The ecologically organized terrain is easier to manage the larger the area. The significance of an ecological garden lies in the field of education: the 'wilderness' garden. The educational garden usually lacks subtlety in its references.
- 6 This has largely been since the Second World War.
- 7 Repton, 1806, p. 8.
- 8 Landscape architecture is not an art; it can, however, create art in exceptional projects. The realization of a project always has a cultural dimension.
- 9 This is also sometimes referred to as 'commentary' (Warnau, 1989).
- 10 The initial intention was to study recent developments in the profession by collecting and analysing designs other than those for the Concours International: Parc de la Villette. This research has, indeed, largely been carried out, but the time and space available proved to be insufficient to permit these results to be included in the present study in any detail. The results do support the findings of our analysis of La Villette however. See, for example, the following undergraduate theses submitted to the Department of Landscape Architecture at the Agricultural University, Wageningen: Bijvoet and Groen (1989), van Iperen (1989), and Almekinders and Knuyt (1990).

- 11 Van der Laan, 1985, p. 26.
- 12 Van der Laan, 1985, p. 29.
- 13 Garden design has, in this century, become less and less the task of the landscape architect, however, probably as a result of the decrease in the size of gardens and higher labour costs. This means that the designer has fewer opportunities to practice detailing and the management of plant material. The traditional knowledge, which is also necessary for the successful design of larger projects (for example, the spanning of scale levels from large to small), is insufficiently developed as a result.
- The fact that garden and landscape architect are no longer represented in a single individual also has consequences for garden design. 'Die Hoehe und Intensitaet unseren kuenftigen Gartenkultur haengt ganz besonders davon ab, wie der Garten-Dilletantismus die ihm zufallenden Aufgabe erfuellen wird' (Migge, 1913, p. 87).
- 14 Landscape architecture must acknowledge its traditions, for the river no longer flows where its bed has been removed.
- 15 The repudiation of traditional forms by some avant-garde architects with anti-historical pretensions was a reaction to the banal eclecticism at the end of the nineteenth century. A good example of dialogue with tradition is the development of the style of the German *Volksparcken*, described in Chapter 8.
- 16 'Practical questions are increasingly being reduced to technical questions, and the awareness of the fact that something can and must be learnt in the fields of ethics, aesthetics, meaning, sociology and politics, seems a long way off. These have become areas of personal taste, about which one does not argue' (Koningsveld, 1988, p. 39).
- 17 Articles devoted solely to La Villette were published in: *Archivert*, April 1983; *Architecture d'Aujourd'hui*, February 1983, June 1984, June 1989; *Architectes*, May 1983; *AA Files*, April 1983; *Arkitekten*, December 1983; *de Architect*, March 1983; *Building Design*, December 1983; *Bulletin d'information de l'U.I.A.*, May 1983; *Casabella*, July 1983; *Contour*, August 1983; *Garten und Landschaft*, May 1983, April 1989; *Groen*, September 1983; *Landskab*, March 1983; *Landscape Design*, March 1983, February 1988; *Landscape Architecture*, July 1983; *Paysages actualités*, January 1983, April 1983; *Plan*, February 1983, July 1983; *Progressive Architecture*, February 1983, May 1989; *Technique et Architecture*, May 1983; *U.I.A. International Architect*, February 1983; *Werk, Bauen + Wohnen*, June 1983; *Wonen/TABK*, December 1983. The competition and its result also received extensive coverage in newspapers and weeklies. In addition, there are many other publications in which La Villette is discussed. The reader is referred to the bibliography for further references.
- 18 It appears from the examination of a number of turning points in the history of urban parks, which was made in order to discover similarities with the aspect of innovation in the La Villette brief, that, for the purposes of design analysis, an integral and chronological view of history must not be sought, but rather that history (stylistic themes, compositional rules and suchlike) must critically and pragmatically be examined from the point of view (practice) of the landscape architect. An example is given in Chapter 8.
- 19 'We all like the new, the invention. That is what we want to see and name, and

- because of this we are given to oversimplification [...] You can only see the significance of innovation clearly when you also acknowledge the undercurrent of tradition' (Klotz, 1988, p. 15).
- 20 Meuwissen, 1984, p. 26.
- 21 'The fitting of new form and changed use into an existing site with a complex history is not a process of applying logic and deduction alone. Finding clues and tell-tale traces of historical developments, and assessing these, is a difficult task. Imagination is needed in order to find one's way in the multitude of impressions gleaned from the site' (Meeus, 1990, p. 125).
- 22 An example is the empathic-scientific approach of the art historian Jaffé. 'Empathy is essential in order to arrive at an intuitive understanding of what takes place on the other side, but the most difficult and the most creative part of research lies a stage further: being able to distance oneself sufficiently from one's intuitions in order to be able to interpret them and to lend them universality. The great danger to which scientists are exposed is that of overestimating their own intuitions, and of overestimating the significance of their own subject of research' (Haveman, 1988).
- 23 Warnau, 1989, p. 17.
- 24 There is some difference; for, certainly at the start of analysis, consistency in a design philosophy is looked for, whereas during the elaboration of a design relativization and exception can be brought into play.
- 25 The researcher is, thus, not merely an interpreter of the design, but, moreover, responds to his or her own design approach.
- 26 'Writing is perhaps a spontaneous activity. In any case, there are writers who work very spontaneously. As a writer it is best to pretend it has been invented so. But reading is definitely secondary. It is only years later that one realizes what the intention really was. A certain expertise is, then, also necessary' (Donner, 1988).
- 27 'In many literary works the author has invented something in some way or other, using, of course, all manner of real experiences. In such cases, the reader has to imagine along with the author. In so doing, of course, he primarily follows the text, but he also has to add something. He fills in empty spaces; connections are made or surmised; and, with a greater or lesser degree of fervour, the reader lives situations of which he has no experience. That too takes place, to be sure, on the strength of experiences the reader has actually had, but imagination is, moreover, also called for. Further, there is the understanding, expressed by many, that the reading of a literary work requires—the interrelating of its various components and aspects' (Mooij, 1981, p. 25).
- 28 In addition to the comparative analysis, open-minded receptivity to experiences also plays a part in the designer's training. This is a question of inspiration. Contemplation and instinct thus complement each other.
- 29 Indeed, the activity of designing must not become scientific. 'The acceptance of a design as a dissertation seems initially to be progress towards landscape architecture as a modern technological science. This denies the fact, however, that in the case of a profession that is both artistic and a craft, it is a challenge to culture that is involved rather than the solving of technical problems and their scientific justification' (Meeus, 1984a, proposition 10).
- 30 Sources of uncertainty in planning are, firstly, the repeated occurrence of human

errors, mistakes, 'black-outs' and suchlike; and, secondly, lack of knowledge, for 'We cannot in any way ensure that the unknown will become known in time [...] not of factual knowledge, but of theoretical knowledge [...] The detection of facts requires conceptual frameworks and, as long as there are none, these facts will remain invisible to us [...] The formation of theories cannot be planned [...] that requires one's knowing where the formation of theories leads to, and that is the case only afterwards. In short, the idea of a practice completely controlled by means of planning, that safeguards against surprises, is a fundamental error. The corollary is that practices in our daily life still essentially retain the character of an experiment. That experimental moment can never be entirely relinquished by means of research' (Koningsveld, 1988, p. 40).

- 31 Incidentally, borrowing is permissible if it takes place with a relativizing smile.
- 32 An example of this can be found in the case of the Floriade The Hague-Zoetermeer 1992, where the jury for the competition discerned the following trends in the entries. A derivation of form from function; designers hoped to infer a form from the programme, the circulation of people and the amusement of the masses. A focusing of attention on expression; designers set themselves the task—independent of function—of giving expression to the character of the age. Designing flexible structures; designers anticipated users' initiatives by presenting structures that were as transparent as possible and by leaving interpretations open as far as possible. Design emptiness was also a trend observed by the jury: designers ascribed an ideal quality to emptiness (expression of peace, tranquillity, and contemplation); using a minimum of means, a maximum spatial effect had to be created. See the jury report, *Ideënprijsvraag entreegebied Floriade 1992*, 1987, pp. 8–9.
- 33 The International Design Seminar on Hoboken was organized by the City of Rotterdam Municipal Development Department and the Department of Landscape Architecture at the Agricultural University, Wageningen, in September 1985. Landscape architects, teachers and students from academic institutes from a number of European countries took part. Six park designs were presented. The results, including a description of the context and an analysis of the plans, were published in Vroom and Meeus, 1990.
- 34 Vroom and Meeus, 1990.
- 35 The method is the result of Meeus' unremitting attention to the analysis of plans, as is apparent from his dissertation (Meeus, 1984a), and his analysis of the Kerkplein in Arnhem (Meeus and Verstegen, 1984b).
- 36 Chiefly the following individuals attached to the Department of Landscape Architecture at the Agricultural University, Wageningen: Ank Bleeker, Norfried Pohl and Hans Warnau.
- 37 De Boer and van Dijk, 1983, p. 12.
- 38 This final group contained plans that scored variously in the four assessment rounds of the competition.

## Chapter 2 *Concours International: Parc de la Villette, Paris, 1982–3*

- 39 The background to such projects as the provision of a sewerage system, the construction of a central abattoir and the laying out of public green spaces was the nineteenth-century movement for the advancement of public health.

- 40 Competition programme: *Données sur l'existant*, EPPV, p. 18.
- 41 'Un cheminement piéton continu et pittoresque' (Competition programme: *Orientations d'Urbanisme...*, City of Paris, p. 9).
- 42 The *Petit Robert* defines this as 'philosophie suivant laquelle les êtres sont multiples, individuels et ne sont pas (en tant que modes ou phénomènes) d'une réalité absolue'.
- 43 The specification of an iconographic programme often occurs in French competitions. See, for example, Parc Citroen-Cevennes, Paris, 1985.
- 44 'Les documents du dossier n'ont pas la même force de contrainte. Il nous semble en premier lieu que le «Rapport d'objectifs» s'impose aux concurrents et doit donc être suivi fondamentalement dans son esprit' (*Responses*, p. 5).

### Chapter 3 *The park as a graphic composition*

- 45 It is not only classical and modernist parks that have an underlying geometrical scheme; landscape-style parks also often have a similar basic scheme directing the composition.

### Chapter 4 *The layout and spatial coherence of the park*

- 46 'An important requirement that a composition ought to meet is that it introduce structure in that which is perceived. Whether it be words, sounds or images, the function of structure is that it provides something for human perception to hold on to, that it introduces order in that which appears before us in time and space, and in such a way that we can form an image that we can keep in our memories. It is not a question of the primary emotional sensation, but of the function the composition has in establishing relationships between individuals and their surroundings, in the sense that the surroundings become understandable and – eventually – familiar' (Dijkstra, 1985, p. 10).
- 47 Lynch, 1971, p. 206.
- 48 Repton, 1806, p. 341.
- 49 See also the distinction between *composition* (forming, composition) and *disposition et distributions* (disposition, arrangement and distribution, dispersal) in Dezallier d'Argenville, 1709.
- 50 'The «openness» of open space is not so much a matter of how few buildings stand upon it but rather of how open it is to freely chosen actions of its users. Openness is a product of physical character but also of access, ownership, management and of rules and expectations that govern activity' (Lynch, 1971, p. 352).
- 51 'Spatial dimensions are reinforced by light, color, texture and detail. The eye judges distance by many optical features, and some of them can be manipulated to exaggerate or diminish apparent depth: the overlapping of more distant objects by closer ones, the parallaxic movement of objects disposed in depth, the expectation that farther things will be higher above the horizontal base line, the smaller size and finer texture of things far away, the bluish color of distant surfaces, the convergence of parallel lines. Used with restraint, these manipulations add to the spatial effect' (Lynch, 1971 p. 191).
- 52 Steenbergen, 1990, p. 112.

- 53 Repton, 1806, p. 187.
- 54 Instead of a simple hierarchy, duality is presented in contemporary design discussions (chiefly by Venturi, 1966) as a theme that must not be suppressed in architecture, but, on the contrary, be exploited in order to relativize dominance in favour of complexity and contradiction.
- 55 'Such arrangements are tested structural methods, which underlie most of the successful site designs of the past. The designer may use many-centered forms, interlinking networks of paths, continuously varying characteristics of activity and space, or multiple sequences that have no determinate beginning or end. Such forms are complex and more difficult to employ without a lapse into disorder. Moreover, they still rely on variations sequentially organized, on emphasis, and on grouping' (Lynch, 1971, p. 221).
- 56 De Jong, 1987, p. 65.
- 57 This was something demanded by the competition organizer. A park need not be a unity in all circumstances.
- 58 Water is a strong theme, particularly in the landscape style: the stream valley or the languidly flowing river. It is also present in a comparable way in the modern park design: canals. In the Italian classical garden in Italy the sequence of fountain head, cascade and mirror pond symbolizes birth, life and death. In France the Grand Canal flows in an almost infinite space to the horizon.
- 59 The psychological-emotional effect of an object depends on the constitution of the observer and is, therefore, closely linked to time, culture and the individual. For this reason it is not included in this section of the study. The meaning of the relationship between form and function also plays a subordinate role here. The signal that the form gives concerning the use (that is possible) is less strong and less determinative in a park than in a building; the relationship is looser.
- 60 Lynch, 1971, p. 190.
- 61 Lynch, 1971, p. 203.
- 62 Dijkstra, 1985, pp. 15-16.
- 63 The garden is ruined by insensitive extensions to the building and by negligence.
- 64 Repton (1806) speaks of 'comparative proportion'.
- 65 Dijkstra, 1985, p. 15.
- 66 Church, 1983, p. 31.

### Chapter 5 *The design strategies*

- 67 In the United States, for example, the pursuit of embellishment is so strong that it becomes an aim in itself. It is combined with neatness and manifests itself, for instance, through the White House Committee on Beautification, set up in the 1970s. The grounds of State Capitol buildings thus commonly have a layout characterized by the use of decorative plantings and sculptures as 'décor' (see, for example, the results of a competition held in 1985 for a 15-hectare site at the foot of the Minnesota State Capitol; many designers assumed that a decorative décor as a design directing objective was sufficient for the development of a spatial plan (van Iperen, 1989)). This predilection for the decoration and representation of public areas without taking account of the spatial totality also played a major role at the end of the previous century.

- 68 Lynch, 1971, p. 221.
- 69 Lowenthal, 1982.
- 70 Luiten, 1989.
- 71 The term is used by Corajoud in the commentary on his plan.
- 72 'At present the category of contrast, as a fundamental aesthetic principle for contemporary intervention in the existing historical structure, is a thing of the past. If there is already a common attitude within present-day architecture, then it is the preference for the method of analogy [...] major architectural theorists, such as Rossi, Grassi, Ungers, Moneo, Bohigas, Huet, regard the architecture of the past not as a piece of scenery, as a mere *repoussoir* with which their own work sharply contrasts. Neither do they take refuge behind a subservient attitude, or choose the copy, that ironic travesty of the analogy. Conscious of the fact that objective knowledge of the architecture of the past is not possible, and that neither does such a thing exist as an original concept or intention [...] they go in search of what in their view is the true theme, in order to make that the intellectual and formal substance of the new design' (Taverne, 1987, p. 47).
- 73 On this problem see the results of the seminar 'Landschaftsplanung und geschichtliche Identität' held at the Technical University of Berlin in 1982. The brief was to design the emotionally charged site of the former SS and Gestapo headquarters (Gollnow-Gillmann, 1982).
- 74 Yi-Fu-Tuan, 1974, p. 125.
- 75 Taverne, 1987.
- 76 This attitude is all too emphatically expressed in some academic textbooks, such as those by Ruthledge, Booth, Pannekoek and Schipper, which have cut out part of the complexity of reality for the purpose of immediate manageability.
- 77 Lynch, 1971, p. 35.
- 78 Lynch, 1981, p. 176.
- 79 'Time and again, a decision will have to be made concerning what can be fixed for the future and which space we should leave for change, infilling and elaboration by others as a condition for democratization and self-development' (Doevendans and van der Voort, 1984, p. 3).
- 80 'The central formulation of the problem becomes then [...] how can spatial configurations be developed in which the two fundamentally different forms of dynamics (flexibility/change and stability) can both be done adequate justice to' (Sijmons, 1988, p. 106). The means provided involve disconnecting the slow and fast wheels of change in the landscape, as a result of which independent networks are created with different forms of spatial dynamics.
- 81 Warnau, 1989, p. 26.
- 82 The classical garden contains good examples of varied adaptations of how sections in a grid pattern are infilled.
- 83 Tschumi, 1988, p. 33.
- 84 Wigley, 1988, p. 12.
- 85 Deconstruction in language is the method of reading texts with a constant shifting of perspective, so that it becomes impossible to establish unequivocally the meaning of a text; various meanings thus arise from the text. This method does away with the idea that every text has a single definitive meaning.
- 86 'A brief that displays parallels with the way in which nineteenth-century artists,

urban planners and architects succeeded in restructuring the negative experience of the metropolis into a new sensibility, a modern aesthetic, based on a positive approach to the artificiality and transience of life in the big city [...] The static perspective made way for acceleration and the «moving eye», in which the city appears as a succession of scenes and autonomous surfaces' (Verstegen, 1989, p. 10).

- 87 Koolhaas: 'You must not subdue the waves, but roam over them with virtuosity.'
- 88 'In this sense it's an abstraction of social reality, an attempt to make high art from the heterogeneous fragmentations that surround any major city, particularly Paris' (Jencks, 1988, p. 23).
- 89 Van Dijk, 1988, p. 6.
- 90 Rowe, 1978, p. 32.
- 91 'Urban voids without a powerful morphological context, but with all manner of traces of the past, lend themselves well to such an approach. The new project transforms the situation, not by erasing the underlying traces, but by revealing them and incorporating them' (Verstegen, 1989, p. 10).
- 92 This does not refer here to plans with a copious miscellany of various stereotyped park situations, but to the multiformity and multifariousness characteristic of the gardenesque and the exclusive attention to the individual, preferably exotic, plant to the detriment of every spatial quality. Vistas are blocked with new varieties of plant, and the system of paths is made denser in order to be able to set more plants along it. Countless structures appear in various eclectic styles, even in places where they have no spatial function. A recurrent *fin de siècle* phenomenon?
- 93 This was the theme of a series of lectures on French and Spanish urban design held in May 1989 at the Academy of Architecture in Amsterdam.
- 94 Beune and Thus, 1985.

#### Chapter 6 *The styling of the design*

- 95 'Styling is the manipulation of forms to create a cultural unity, an activity which is always subjective and linked to time and place' (de Jong, 1987, p. 56). In this stage of the analysis only the timeless aspect of style is dealt with: the form. The time and place linked aspect, the meaning, is examined in Chapter 8.
- 96 Archetype is used here in the sense of the oldest, fully developed form of a style, from which later styles are derived.
- 97 This also raises the central subject of the historical development of landscape architecture, namely the treatment of nature; that is to say, the question of the character, the form and the symbolism of the representation of nature.
- 98 See, for example, Coenen's approach: 'He plunders architectural history, not indolently and consumptively, in order to mask a lack of conviction. On the contrary, history constitutes an entity of knowledge that is consulted with a strong normative consciousness. The examples to which Coenen refers are not cited by him, rather they are spoken with great resolution' (van Dijk, 1989, p. 10).
- 99 Van Dijk, 1989, p. 10.
- 100 'Coenen's eclecticism is of an inductive character. It proceeds from the particular: the various experiences he has gained while undergoing and studying individual examples. The general, the essence of architecture, cannot be grasped by reducing

- the richness of each of these mental pictures to a set of rules or operational procedures' (van Dijk, 1989, p. 12).
- 101 Norberg-Schulz, 1963, p. 158.
- 102 'Every stylistic period develops new concepts in which references and associations have been incorporated into and with what previously or elsewhere already existed, or into and with what is anticipated in the future, but assimilated and interpreted in such a way that one's own attitude to life and expectations can be projected in a new associative concept and, thus, transmitted. A new style form has, in addition, more power—and, they say, more quality—the more it has the capacity to offer concepts and forms that are utilizable as a representation of new social orientations and realities' (Dijkstra, 1985, p. 14).
- 103 'Within the limits of his heritage, tradition and dominant style, the average talent will assimilate a single element and present an imitation of this. The original spirit, on the other hand, will struggle with his version of tradition. He rejects part of it while welcoming another, and a substantial part he merely takes note of. Gradually, the imitation of his forefathers makes way for the crystallization of a «personal style»' (van Dijk, 1987, p. 35).
- 104 Thus 'local' does not mean 'provincial'.
- 105 For example, the *Volkspark* designs of Fritz Encke: 'Der barocke Garten diene ihm dabei nicht als Muster für die Inhalt, sondern als Anregung für die Ordnung und die Gliederung des Parkes sowie die Bildung von streng gefassten Räumen mit verschiedenen Funktionen' (Wiegand and Hennebo, 1975, p. 53).
- 106 Furthermore, a problem can arise. The history of garden design basically tells the story of the garden as a privileged place for the few, whereas the brief is now the designing of public parks for everyone. The forms handed down are in large measure tailored to being used and experienced by small numbers of initiated individuals.
- 107 Warnau, university lecture.
- 108 Collins, 1965, p. 35.
- 109 Thus Asian garden design has not been taken into consideration. These styles (illuminatingly described by Kuitert, 1988) were specifically tailored to gardens of limited size and expressly private use. There has been an absence of public projects. For this reason, the Japanese entries to La Villette show no evidence of their own tradition.
- 110 This term possibly leads one erroneously to suppose that it is a question here of immediately utilizable objects that can be taken from a neatly arranged stockroom. What is meant here is an interpretable whole of knowledge, insight, values, norms and emotions that is the professional background of the landscape architect.
- 111 Because of the educational and design philosophies prevalent in the 1960s and '70s—historical styles had, indeed, had their day—not every landscape architect has as clear-cut and extensive an image of the archetypes. Nevertheless, it constitutes a fixed, but scarcely tangible, frame of reference.
- 112 Crowe, 1958, p. 33.
- 113 Crowe, 1958, p. 33.
- 114 Crowe, 1958, p. 41.
- 115 Gollwitzer in Hazlehurst, 1974, p. 71.
- 116 Gollwitzer in Hazlehurst, 1974, p. 75.

- 117 Boyceau (1638) in Wimmer, 1989, p. 107.
- 118 In the literature considerable importance is frequently attached to the influence of the paintings of Claude and others on the rise of the landscape style. Lang (in Pevsner, 1974) shows, however, that the process was largely on account of the inspiring images evoked in the poetry of that time and to the vistas terminated by a building common in stage designs.
- 119 Although the creation of that new style did not take place completely consciously. Thus the English on their return from the grand tour realized their impressions of the classical ruins surrounded by farmers, herdsmen and cattle, whereas their objective had been to create a purely classical scene. An example of 'creative misunderstanding'.
- 120 'The pleasure which the mind derives from the love of order, of unity, of antiquity and of continuity, is, in certain degree, gratified by the long perspective view of a stately avenue; even when it consists of trees in rows so far apart that their branches do not touch: but where they grow so near as to imitate the grandeur, the gloomy shade, and almost the shelter of a Gothic cathedral, we may add the comfort and convenience of such an avenue to all other considerations of its beauty' (Repton, 1806, p. 336).
- 121 'The four principal characteristics of «the Romantic» are integrally incorporated in Brown's work, and in a lucid, pure manner. The treatment of nature is full of respect and is in complete harmony with the human presence. The sentiments and emotions evoked by these gardens are not determined by any coercive language on the part of Brown's forms, but can arise from within the observer's own personality. Precisely on account of the use of elementary forms, there remains a freedom to imagine for each in his own way. The whole is so subtly composed that it does, indeed, stimulate the imagination. Reality is manipulated, so as to give rise to a new idealized reality' (van Veelen, 1979, p. 37).
- 122 Price (1801) on the character of the picturesque: 'I am persuaded that the two opposite qualities of roughness, and of sudden variation joined to that of irregularity, are the most causes of the picturesque' (van Veelen, 1979, p. 37).
- 123 It was only after the development of the picturesque interpretation of the Brownian landscape and the accompanying reduction in scale that its application to the Dutch situation could begin. J. D. Zocher jun. (1791-1870) gave the most formal rendering of the English landscape style: a simple organization and a harmonious form.
- 124 In *Théorie des jardins* (1776) Morel distinguishes between the following four park genres: 'The Poetic, which takes its subjects from Mythology and ancient fables and sets out to present us either with an incident from the Golden Age or some pagan mystery; the Romantic, which aims to represent everything that the imagination can conceive and art can execute [...] enchantments, fairy dreams, the wonders of magic [...] the most extravagant inventions [...] unknown to everyone except to him who conceived them or to whom the inventor takes the trouble to explain them; the Pastoral, bucolic scenes nearer to nature; and the Imitative, where the Artist seeks to represent a foreign country, to recreate on the terrain entrusted to him the customs, forms, products and constructions of another country or century' (Stauffacher Solomon, 1988, p. 37).

Considerable adaptations are necessary in order to accommodate the landscape

- style to adverse initial situations, such as the flatness of Holland. Examples of this adaptation are described by van Leeuwen (1987b).
- 125 See, for example, van Leeuwen (1987a) on Paxton's designs for, among others, Birkenhead Park.
- 126 Steenbergen, 1985, p. 121.
- 127 Repton, 1806, pp. 111-14.
- 128 Walpole (1770) in Goode and Lancaster, 1986, p. 169.
- 129 Lang in Pevsner, 1974, p. 5.
- 130 Lang in Pevsner, 1974, p. 29.
- 131 Hill (1757) in Jacques, 1983, p. 74.
- 132 Crowe, 1958, p. 61.
- 133 In the Netherlands and Germany the modern period between the two world wars is called *Nieuwe Zakelijkheid/Neue Sachlichkeit* (New Objectivity). This term signifies what the movement pursued.
- 134 'It was only in the decade following the Second World War that the architectural ideas of the men described by Nikolaus Pevsner as «The Pioneers of the Modern Movement» were established; hence we may fittingly describe this decade as the beginning of a new era. From this time onwards, architecture was to have about it all the features of stability and orthodoxy [...]» (Collins, 1965, p. 83).
- 135 Van Doesburg, 1921, p. 24.
- 136 Crowe, 1958, p. 70.
- 137 The *Volkspark*, richly diverse on account of the presence of, for example, allotments, swimming pool and sports fields, has declined because of functionalist considerations. Elements became organizationally autonomous and subsequently spatially isolated in detached complexes. This has led to a coarsening of scale and the disappearance of visitors to the park.
- 138 Lubetkin, interview in *NRC Handelsblad*, 7 September 1990.
- 139 In functionalism the term 'beauty' is also loaded; a break is advocated with existing hackneyed forms of beauty as a result of eclectic design. Set against the traditional styles are the need to make the design process more scientific, social emancipation, ecology and the uniqueness of the brief.
- 140 See, for example, Eckbo's 'Principles of Esthetic Order': 'Art elements (Line, Shape, Color, Texture, Mass, Space) are organized through Rhythm, Balance, Emphasis and Proportion into a Harmony of Unity and Variety [...] Harmony is a product of proper Proportioning of the various functional and Art elements through Rhythm, Balance and Emphasis, to produce a sense of Unity, Coherence, Continuity, Strength, Clarity, Order and Stability' (Eckbo, 1969, pp. 199 and 206).
- 141 Maass, 1927, p. 44.
- 142 Lubetkin, interview in *NRC Handelsblad*, 7 September 1990.
- 143 Toes, 1985, p. 77.
- 144 Maass, 1927, p. 101.
- 145 Sørensen, 1966, p. 10.
- 146 Warnau, university lecture.
- 147 Kiley, in Rainey (1982), p. 25.
- 148 Le Nostre thus built a commentary on his own rules into, for example, the design for Conflans, challenged by the irregular terrain (see Hazlehurst, 1974).

- 149 Woodbridge, 1981, p. 15.
- 150 Van Dijk, 1988, p. 50.
- 151 Van Leeuwen, 1988, p. 15.
- 152 Corajoud's executed design for Parc du Sausset (Paris) shows a more convincing composition than his La Villette entry. On the far larger site of Le Sausset some interesting experiments in form are becoming apparent.
- 153 Commentary on old forms occurs particularly in post-modern designs.
- 154 See the in-depth analysis of the spatial structure and the form tools in classical garden design by Steenbergen (1990). In addition to a decomposition of, as he calls it, the formal design in landscape architecture, he demonstrates the applicability of the tools found in the description of contemporary developments around the Paris axis: Louvre, Tuileries, Champs Elysées, Arc de Triomphe, La Défense, and so forth.
- 155 The interest in ecology is not only recent though; see, for example, the phytosociological basis of the planting of the Amsterdam Bos in the 1930s and the utilization and grouping of indigenous plant material in the work of Jensen (the 'Prairie Style') in parks in Chicago at the beginning of this century.
- 156 Milchert, 1985, p. 642-52.
- 157 Rosenberg, 1986, p. 75.
- 158 The importance of ecology is increasing in larger projects, in which it is possible to utilize more self-regulating and natural covering.
- 159 See, for example, Stauffacher Solomon, 1988.

#### Chapter 7 *Evaluation of the method of analysis*

- 160 'The acceptance of a design as a dissertation seems initially to be progress towards landscape architecture as a modern technological science. This denies the fact, however, that in the case of a profession that is both artistic and a craft, it is a challenge to culture that is involved rather than the solving of technical problems and their scientific justification' (Meeus, 1984a, proposition 10).
- 161 'The competition is a suitable means for stimulating public and professional discussion about the landscape, on the condition that the entries are subjected to criticism' (Meeus, 1984a, proposition 11).
- 162 Meeus, 1990.
- 163 Meeus, 1990.
- 164 Meeus, 1990, p. 148.

#### Chapter 8 *Reflection in the designs*

- 165 De Jong, 1984, p. 42.
- 166 Jackson, 1980.
- 167 Hunt, 1975. These references were also intended to give expression to the fact that the British Empire represented a continuation of the Roman Empire.
- 168 De Michelis, 1981.
- 169 Meeus, 1990, p. 148.
- 170 Warnau, 1988, p. 38.
- 171 Goecke, 1981; Nehring and Hennebo, 1979.

- 172 One meaning always remains however: the meaning of the material (stone denotes rock and subsequently, certainly in an environment in which there are no rocks, mountains).
- 173 Warnau, 1989, p. 35.
- 174 Warnau requires that signs:
- ‘be succinct: as a sign, small in relation to their surroundings, with a limited reference
  - be subtle: casual, one must also be able to pass them by unnoticed; this also means: not pedantic, not demonstrative, comprehensive
  - be accessible: legible for as broad a public as possible, not élitist, no secret language for experts
  - be contemporary: also in the sense of referring to a topical subject, or to a historical subject that is once more the centre of interest
  - go beyond the old cultural spheres and are never mystical
  - be satirical: with double references, provocative as well as reassuring’ (Warnau, 1989, p. 36).
- 175 Broadbent, 1981; Jencks, 1977.
- 176 Harvey, 1987.
- 177 Repton, 1806.
- 178 Fein, 1968, p. 104.
- 179 Karling, 1980, p. 30.
- 180 Battisti in Coffin, 1972, p. 4.
- 181 MacDougall in Coffin, 1972, p. 53.
- 182 Gollwitzer in Hazlehurst, 1974, p. 81.
- 183 Stauffacher Solomon, 1988, p. 60.
- 184 Arnold, 1980, p. 37.
- 185 Walpole (1770) on the work of Kent, in Karling, 1980, p. 44.
- 186 Watelet (1774) in Lefaivre and Tzonis, 1984, p. 285.
- 187 Wittkower, 1983, pp. 181-3.
- 188 Clark, 1948, p. 36.
- 189 Clark, 1948, p. 22.
- 190 Repton, 1806, p. 8.
- 191 Levels, 1984, p. 7.
- 192 In La Villette the buildings of the Museum and the Grande Halle are so large and important in relation to the site that the park is, as a consequence, comparable to the garden of a palace or country estate.
- 193 Girardin, 1777.
- 194 Girardin, 1777.
- 195 Nature is now also conceived of as an exotic element added to a banal, everyday situation, which creates the condition and circumstances for kitsch. For example, a tropical planting in a shopping centre.
- 196 Hunt, 1975.
- 197 Fein, 1968, p. 101.
- 198 See, in particular, the outcome of residents’ participation.
- 199 Chadwick, 1966.
- 200 Even if one pursues the natural and the spontaneous in the living organism, this ideal can only be attained by taking as a starting-point a command of soil, water

- and plantings. It is only on the basis of this artificiality, not by an imposed 'organic' design, that these factors can develop and nature truly become itself.
- 201 'Beautiful' nature is also a chaos, however, full of decay, putrefaction and wastage. What is then the precise and correct representation of nature? This may be compared with the problem of nemesis in art history.
- 202 The real development is, of course, more sophisticated and more complex. The quotations at the beginning of this section give a general impression of this.
- 203 Bosch, 1988, pp. 24-5.
- 204 Moreover, in the countryside in France and Italy, in addition to the regularly worked land and fields there are often natural, waste or neglected places as a contrast. In the Netherlands, however, almost everything is artificial, organized and worked.
- 205 'Hier sind ökologische Nischen und interessante Biotope Vorbild. Beliebt sind Feuchtbiotope nicht nur wegen ihrer Artenvielfalt und Schutzwürdigkeit, sondern auch durch ihre Ästhetik. Für ländliche Streuwiesen und städtische Ruderalflächen begeistert man sich genauso. Nicht der gestaltete Freiraum, sondern die Abwesenheit von Gestaltung wird zum Prinzip und macht ästhetische Kategorien überflüssig.
- So entstehen Grünanlagen, deren Intention in der Weckung ökologischer Illusionen besteht. Der soziale Auftrag reduziert sich ähnlich wie in der Gartenkunst des Historismus im ausgehenden 19. Jahrhundert auf die ausschliesslich optische Aneignung der 'schönen Natur'. Entsprechend werden unterschiedliche ökologische Szenerien zitiert und effektiv an einander gereiht' (Richard, 1986, p. 32).
- 206 A powerful representation of time can be found in the work of Piranesi (1720-78). On the one hand, there is the time of the buildings, the ruins; on the other, nature's time, the overgrowth.
- 207 The relationship between planting and maintenance is not evident in the plans. This issue is difficult to present in the entry and is subordinate in most of the designs because the situation is determined by paving and architectural objects.
- 208 For a definition of the objectives see Chapter 2.
- 209 See also Chapter 6.
- 210 The research into the problems that arise in restoring historical gardens provides new material for designing. One is then forcefully confronted with considerations relating to the growth and development of plantings; not only the problem with respect to regeneration and maintenance, but also the recovery of design rules with regard to spatial composition, the arrangement and spacing of trees, and the selection and interaction of plants in time and space.
- 211 A similar view of tradition can be found in the work of such authors as Gombrich, *Norm and Form*, and Curtis, *Modern Architecture since 1900*.
- 212 'Art is a continuous process. However new the circumstances may be, it is virtually impossible to create a work of art without antecedents. The challenge of history is not whether it should be studied, but rather the interpretation of what is constant and therefore alive today, and what is ephemeral and only academic [...] All design therefore derives from impressions of the past, conscious or subconscious, and in the modern collective landscape, from historic gardens and parks and silhouettes which were created for totally different social reasons. Fundamentally, these again derived from impressions of the world: the classical from the

geometry of agriculture, the romantic from natural landscape. Only the small private garden remains true to its instinctive unchanged purpose of expressing, protecting and consoling the individual' (Jellicoe and Jellicoe, 1975, p. 7).

Thus this is not the rationalism that, in a 'scientific' manner, formulates and propagates a new 'well-founded' and utopian ideal model.

- 213 Goecke and Hennebo, 1981; Nehring and Hennebo, 1979; Wiegand and Hennebo, 1975.

#### Chapter 9 *Urban parks and their design problems*

- 214 Warnau, 1989, p. 47.

215 Indeed, Perk poeticized at the end of the nineteenth century, 'Limitation must sharpen ingenuity and invention'.

- 216 Heeling and Bekkering, 1981, p. 34.

217 The design by OMA does not lend itself to this purpose. It seems not to be interested in shape and image at all.

218 Before the Regency period the *patte d'oie* was used only for the entrances or in the woods situated behind the garden.

219 There is also an interesting link between the Jardin des Plantes in Paris (and its ambition to be a living encyclopaedia of animals, plants and minerals) and the organization of Tschumi's La Villette (Taverne, 1988, p. 112-19).

- 220 Graafland, 1986, p. 14.

- 221 Rasmussen, 1951, p. 35.

- 222 Girardin, 1777.

223 'Outdoor spaces are rarely created by complete enclosure. They are only partially bounded: their form is completed by the conformation of the floor and by smaller vertical elements that mark out imaginary aerial definitions [...] Level changes will define spaces; they can open views; and they can create effects of silhouette, truncation, or dynamic movement' (Lynch, 1971, p. 191).

- 224 Repton, 1806, p. 324.

225 For an example of a description of a walk in which the various aspects are well-articulated, see the *Rapport over de parken Sonsbeek, Zijpendaal en Gulden Bodem in Arnhem*, Department of Landscape Architecture, Landbouw Hogeschool, Wageningen, 1979, pp. 76-97.

- 226 Dijkstra, 1985, p. 11.

227 In this connection, moreover, either is seen as the absolute prerequisite for the creation of beauty.

228 'There are pleasures (and there is food for development) in puzzles, ambiguities and mysteries. We want definable elements rather than defined ones, complex connections, regions remaining to be explored, and some freedom to camouflage' (Lynch, 1981, p. 143).

229 '[...] a settlement should permit an unfolding creation of meaning, that is, a simple and patent first order structure which allows a more extensive ordering as it is more fully experienced, and which encourages the construction of new meanings, through which the inhabitant makes the world his own [...] a city which invites ordering is surely better than an orderly city' (Lynch, 1981, p. 144).

- 230 Coeterier, 1987.

- 231 Lemaire, 1970, p. 31.
- 232 A good attempt at acquiring a better grasp of architectural-spatial design tools on the basis of compositional concepts in music is the undergraduate dissertation by Jans, 1988.
- 233 Hussey, 1967, p. 106.
- 234 The Chinese poet Chang Ch'ao, cited in Clark, 1948, p. 3.
- 235 The programme was overfull; 'Because no one is sure what parks are for and whom they should serve, park planners favor a scattershot approach in the hope of covering most basics' (Cranz, 1982, p. 276).
- 236 Jacobs, 1961.
- 237 Hall, 1976, p. 5.
- 238 An advertisement for 'Great Adventure Park' in Florida read: 'If you can't afford to go to Kenya next year, it's waiting for you just outside of Tampa'.
- 239 Warnau, 1989, p. 32.
- 240 Lynch, 1981, p. 157.

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## Summary

**PARK DESIGNS** Parks are planted places in which vegetation, earth, water, and constructions are cultivated in such a way through composition that they acquire a meaning beyond the significance of the single plant. Without imagination a park is a mere dry décor for people who come and go; a meaningless façade. Parks are the most artistic products of landscape architecture. It is precisely for this reason that by means of analysis and examination this study seeks to identify the artistic aspects of park design.

**COMPARATIVE DESIGN ANALYSIS** Landscape architecture is a profession comprising craftsmanship, theory and artistic sense. Research enables these three mainstays of the profession to be consolidated and their mutual position and interaction clarified. The main objective of the present study is to contribute to the formation of theories of landscape design. This is done by means of a comparative design analysis, through the intellectual decomposition and examination of park designs. Park design is a subject of study eminently suited to this objective, for here the essence of landscape design is present in a concentrated form.

This study also considers contemporary park design and the sources influencing designers. It aims to discover and reveal the qualities and the potential of recent developments in park design.

The design analysis provides an overview of the means designers have at their disposal. The tradition of the profession offers the context for the analysis. We can learn from the history of garden design, but only with a criticism that is superior to it. A rational approach to tradition is necessary because meaningful creative activities are based on rules.

**THE COMPETITION FOR LA VILLETTE** The Concours International: Parc de la Villette, Paris, 1982-3 attracted considerable international attention and provided material suitable for our research. A competition is ideally suited to a design analysis. Qualitatively varied strategies in creating park (landscape) designs can be compared since they are applied to the same site and use the same programme.

Above all, the competition was chosen for this study because the complex brief constituted a particular challenge for participants. Designers were thus compelled to sharpen their ideas and to broaden their understanding and method of approach. They had to, as it were, enter into a battle with conventional concepts concerning parks, possibly even with their own familiar principles. A comparative analysis of design plans illustrates which strategies and themes have played a decisive role in the design and how these have been incorporated into the various designs.

**ANALYSIS** The analysis covers all of the stages of the design and touches on as many as possible of the considerations that have influenced the design. The analysis reasons proceeding from the product, via an interpretation of the process, towards the idea. Much of the analysis is done and recorded in drawings. Each stage is accompanied by a series of analytical drawings: abstractions that reveal the concept behind the design. By making use of these drawings, design specific characteristics can be considered more easily and the results are easier to conceptualize and transmit.

The analysis proceeds in four stages, from graphic abstraction via spatial reality towards compositional concepts and themes; from reaction to location and programme to traditions of form. In addition, the viewpoint in relation to the plan shifts, both literally and figuratively: from, for example, composition on the flat surface to the spatial scene, or from the practical functioning of the site to the character and meaning of the forms and materials used. The stages in the analysis are preceded by a description of the programme and the site: the conditions of the assignment (Chapter 2).

The first stage explores the graphic composition of the plan and results in a representation of points, lines and planes (Chapter 3). This analysis reveals a diversity of patterns. The designers responded to the geometry of the site and the surroundings, either following it or diverging from it.

In the second stage the following question is posed: 'What is the significance of the graphic composition for the spatial functioning of the park?' It considers thus how the many and various functional programmatic items are given a spatial coherence. These practical parameters of the park layout form 'the components of coherence'. These concepts are here termed access, organization, anchoring, openness, articulation, and character (Chapter 4). A comparison of the analytical drawings from the first stage with those from the second shows the use of a combination of alignments; the purpose of this is to seek a coherence in which there is space for tension and dynamism in the composition. Important qualities that result from coherence are orientation and scale.

The third stage considers which design principles direct the designers' approach to the conditions, potentials and meanings, both of the site and of the requirements of the programme. The following design strategies have been distinguished: firstly, strategies relating to use and time (historical continuity, functional relations, flexibility); and, secondly, strategies with regard to design and layout (wholeness, fragmentation). In the designs wholeness was rarely employed as a strategy. It is uncertain whether this is a consequence of the diversity demanded in the programme, or because the designers have no clear idea of the form

of the park in the future. In general designers employed a combination of design strategies; this can lead to multifacetedness, but also to complex composites that are difficult for the visitor to understand.

The fourth stage explores which concepts of form have been used in the design; how is styling used to concretize the spatial structure? It is an exploration of design tools and themes. The stylistic elements are based on a division into three archetypes of landscape architecture: classicism, landscape style and modernism (Chapter 6). By means of this characterization an attempt is made to comprehend the logic of the spatial forms and patterns. The adaptation can be inventive and spiritual (innovative), virtuosic and ingenious (mannerist), perfunctory and unimaginative (cliché'd), indolent and sensationalist (populist), austere and clinical (formal), or artless and unpretentious (informal or pragmatic). Pure styles are both out of fashion and were in any case emphatically rejected by the client. Mixed styles have been much tried in the solutions submitted, partly because of the requested pluralism and polysemy.

The method of analysis presented here can be deployed in many cases, particularly in complex situations. Its step-by-step structure is directly and universally utilizable. The concepts will need adapting or expanding in some cases though; they have, after all, been chosen and defined on the basis of what was encountered in the plans considered in this study, namely principally those for La Villette (Chapter 7).

**CONCLUSIONS** Part 3 of this study tries to draw together the results of our analysis of La Villette in particular, and of park design in general. It presents a series of conclusions relating to the plans for La Villette, and especially to what is reflected in the designs, the 'literary' in the designs: signs, images and references. This is something one tends to lose sight of during the analysis itself (Chapter 8). By tradition, symbolism is an important phenomenon in garden and park. The appreciation and utilization of the possibilities offered by symbolism is not always a matter of course however. The superficiality of meaning in many plans arises as a result of designing without considering meaning. The symbolization can result from the character of landscape architecture: the relationship to nature. And the symbols can be derived from the programme of requirements: the representation of cultural pluralism and innovation in park design (La Villette is to be the park of the twenty-first century).

The study concludes with a series of reflections on composing in landscape architecture: the form and content of the urban park in general, and the idiosyncratic in the Parc de la Villette in particular (Chapter 9). Here a number of aspects relating to the architectural principles of park design are dealt with (the effects and meanings of the interplay between components) under the headings spatial illusion, order, unity, line patterns, literary figures, musical compositional figures.

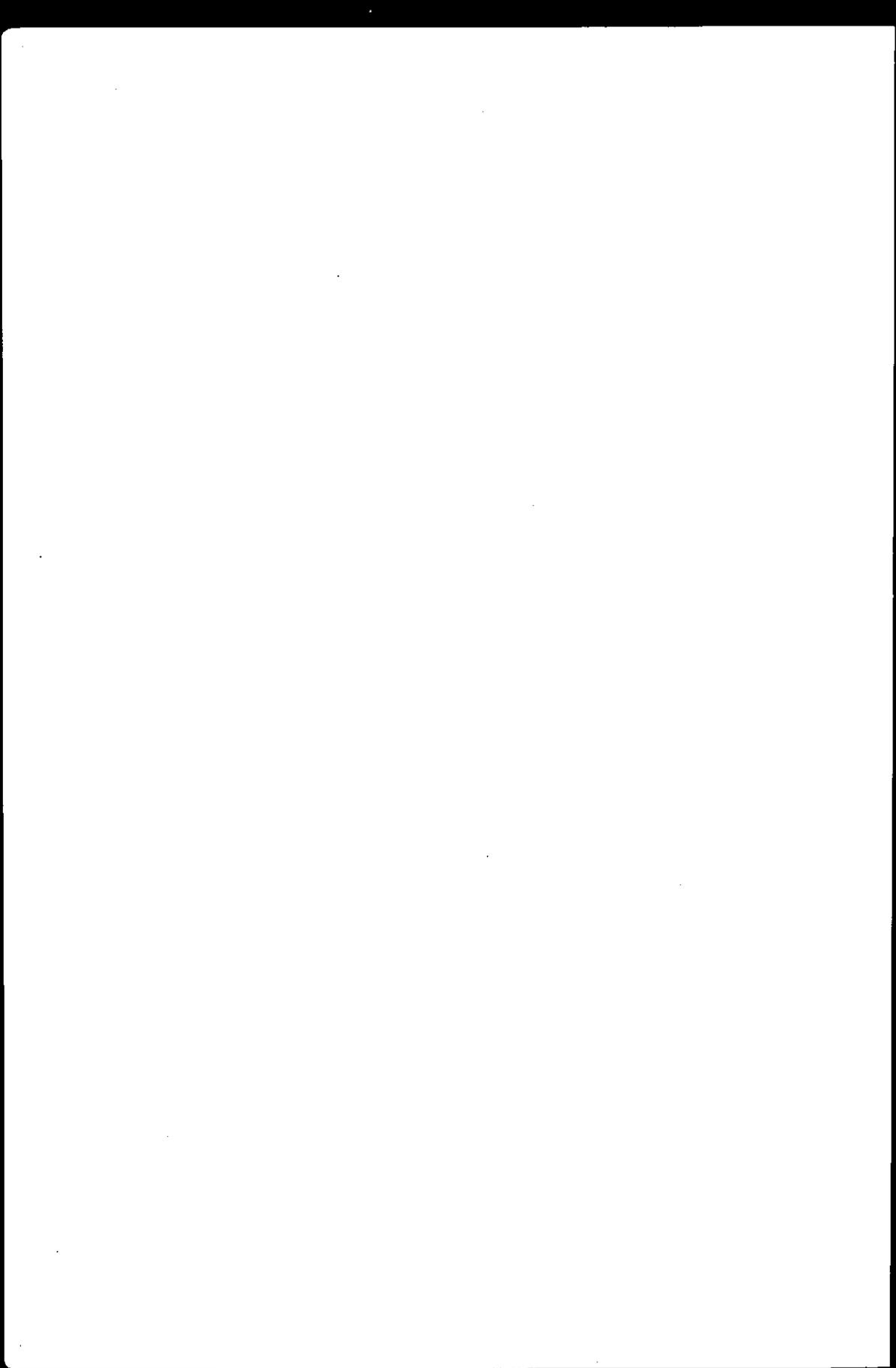
In view of La Villette's exemplary function, both with regard to the programme and the design, we conclude by sketching a vision of what is just as important for the city's future: the 'ordinary' park. The openness of a grassy or scintillating space is the most important quality for the ordinary park: long sight lines to dream away in, the tranquillity of simple spaces in which to entertain one's thoughts, and

the enchanting rhythms of the regularity and repetition of interconnected trees and hedges. Deserted and empty on a rainy morning and animated and shining on a sunny day. It is a field of sensual experiences that are complementary to work and consumption; that is, the voluntary, primary and sensual, versus the controlled, organized and useful. This requires a relaxed, reserved and natural design, rather than one that is forced, insistent and affected. The design of the ordinary park gives rise to careful observation, an observation in which the eye grows restful and contemplative. Slow and serious perhaps for the rhythm of this age, but because of the quality of intimacy and, at the same time, unemotionality, a unique moment of beauty.

The first part of the document discusses the importance of maintaining accurate records of all transactions. It emphasizes that every entry, no matter how small, should be recorded to ensure the integrity of the financial data. This includes not only sales and purchases but also expenses and income. The document provides a detailed list of items that should be tracked, such as inventory levels, accounts payable, and accounts receivable. It also outlines the procedures for recording these transactions, including the use of double-entry bookkeeping and the importance of regular reconciliations.

The second part of the document focuses on the analysis of the recorded data. It explains how to calculate key financial ratios and metrics, such as the gross profit margin, operating profit, and return on investment. These calculations are essential for understanding the company's financial performance and identifying areas for improvement. The document also discusses the importance of comparing the company's performance against industry benchmarks and providing a clear explanation of any variances.

Finally, the document addresses the reporting requirements for the financial data. It outlines the format and content of the financial statements, including the balance sheet, income statement, and cash flow statement. It also discusses the importance of providing clear and concise explanations of the data and any significant changes. The document concludes by emphasizing the need for transparency and accuracy in all financial reporting.



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## Curriculum vitae

J. Lodewijk Baljon werd geboren op 15 augustus 1956 te 's-Gravenhage. Aan het Stedelijk Gymnasium in Haarlem behaalde hij in 1975 het eindexamen  $\beta$ . De opleiding werd vervolgd aan de Landbouw Universiteit Wageningen in de richting tuin- en landschapsarchitectuur. In 1983 studeerde hij met lof af op een plan voor de landschappelijke en stedenbouwkundige ontwikkeling van Almere-Oost en op een kunsthistorisch onderzoek naar de invloed van de tuinkunst op het landschap. Gedurende de studie werd stage doorlopen bij de Rijksdienst voor de IJsselmeerpolders en een studiereis ondernomen naar de Verenigde Staten en Canada.

Daarna startte hij bij Bureau Bakker en Bleeker te Amsterdam, waar zijn eerste project de prijsvraag voor het Parc de la Villette was. Twee jaar later werd het onderzoek bij de vakgroep tuin- en landschapsarchitectuur in Wageningen aangevat, dat uiteindelijk resulteerde in dit proefschrift.

Als zelfstandig landschapsarchitect zijn projecten gerealiseerd, zoals terreininrichting bij kantoren en instellingen, ontwerp van particuliere tuinen en historische buitenplaatsen en supervisie van de stadsuitbreiding Tuinstad Sloten in Amsterdam. Sinds 1987 is hij gastdocent aan de Academie van Bouwkunst Amsterdam.

Regelmatig werd aan prijsvragen deelgenomen, meestal in samenwerking, waarbij de volgende prijzen werden behaald: Student competition International Federation of Landscape Architects 1981 – tweede

prijs; Recreatiegebied Spaarnwoude/Houtrak prijsvraag BNT 1981 – eervolle vermelding; Parc de la Villette, Parijs 1982 – eerste prijs ex-aequo; Parkprijsvraag BNT 1984 – eerste prijs ex-aequo; Tuinenprijs 1986 – eerste prijs.

Sinds 1983 is hij gehuwd met Ineke Hellingman, kunsthandelaar te Amsterdam.

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## Samenvatting

Parken zijn beplante plekken, waarvan begroeiing, grond, water en het gebouwde zodanig zijn gecultiveerd door compositie, dat zij een zin krijgen die de betekenis van de enkele plant te boven gaat. Zonder die kunstzinnige verbeelding is een park slechts een droog decor voor komende en gaande mensen; een zinloze façade. Het park is in aanleg het meest kunstzinnige produkt van de landschapsarchitectuur. Omdat die abstracte betekenis wezenlijk is voor het park, wil deze studie juist de muzische aspecten van het parkontwerp door analyse en beschouwing naar voren halen.

De landschapsarchitectuur is een uit ambacht, theorie en kunstzin opgebouwd vak. Door wetenschappelijk onderzoek kunnen deze drie pijlers van het vak worden verstevigd. Hoofddoel van dit onderzoek is het bijdragen aan de theorievorming van het landschapsarchitectonisch ontwerpen. Dit geschiedt door middel van een vergelijkende ontwerpanalyse: door het verstandelijk ontleden en het beschouwen van parkontwerpen. Voor dit doel is het parkontwerp bij uitstek een geschikt studieobject, omdat hierin de kern van het landschapsarchitectonisch vormgeven op geconcentreerde wijze aanwezig is.

Dit onderzoek is tevens een beschouwing over hedendaagse parkarchitectuur en haar bronnen. Het beoogt de kwaliteiten en de mogelijkheden in de recente ontwikkelingen van het parkontwerpen op te sporen en te tonen.

De ontwerpanalyse geeft een overzicht van de middelen die de ontwerper tot zijn beschikking heeft. De vaktraditie biedt daarom de context voor de analyse. We kunnen van de tuinkunsthistorie leren,

maar alleen met een kritiek die daar boven staat. Een rationele benadering van de vaktraditie is noodzakelijk, omdat zinvolle creatieve activiteiten zijn gebaseerd op regels.

Het Concours International: Parc de la Villette, Paris, 1982-3 genoot grote internationale belangstelling en leverde geschikt onderzoeksmateriaal. Juist een prijsvraag biedt gunstige voorwaarden voor de ontwerpanalyse. Zeer verschillende uitgangspunten uit de landschaps-architectonische planvorming worden door de bewerking van het zelfde programma en de toepassing op het zelfde terrein vergelijkbaar.

Deze competitie is bovenal voor dit onderzoek uitgezocht, omdat de complexe opgave bijzonder uitdagend was gesteld. Zo werden ontwerpers gedwongen hun ideeën aan te scherpen en moesten ze als het ware de strijd aangaan met conventionele opvattingen over parken, mogelijk zelfs met hun eigen vertrouwde uitgangspunten. De vergelijkende plananalyse maakt duidelijk welke uitgangspunten en thema's in het ontwerpvragestuk een beslissende rol hebben gespeeld en hoe die in de verschillende ontwerpen zijn verwerkt.

De analyse doorloopt alle stadia van het ontwerpen en raakt aan zoveel mogelijk overwegingen die het ontwerp beïnvloedden. Vanuit het product redeneert de analyse, via een interpretatie van het ontwerpproces, naar het idee toe. Veel van de analyse is uitgevoerd en vastgelegd in tekeningen. Elke stap gaat gepaard met een serie analysetekeningen: abstracties die de ideeën van het ontwerp aan het licht brengen. Door de tekentaal te benutten kunnen ontwerpspecifieke zaken beter aan de orde worden gesteld en is het resultaat voorstelbaar en overdraagbaar.

De analyse verloopt in vier stappen, van grafische abstractie via ruimtelijke werkelijkheid naar compositie concepten en thema's; van reactie op de situatie en het programma tot vorm tradities. Bovendien verschuift het standpunt in verhouding tot de plannen, zowel letterlijk als figuurlijk: van, bijvoorbeeld, de compositie in het platte vlak naar het ruimtelijke beeld, of van het praktisch functioneren van het terrein naar het karakter en de betekenis van de toegepaste vormen en materialen. De analyse stappen worden voorafgegaan door een beschrijving van het programma en de situatie: de condities van de opgave (hoofdstuk 2).

De eerste stap verkent de grafische compositie van het plan en resulteert in een voorstelling van punten, lijnen en vlakken (hoofdstuk 3). Deze ontleding toont een verscheidenheid aan patronen. De ontwer-

pers gingen of op de geometrie van het terrein en de omgeving door of men zette zich juist af tegen de context.

De tweede stap stelt de vraag: Wat is de betekenis van de grafische compositie voor het ruimtelijk functioneren van het park? Zo wordt onderzocht door welke ordening en met welke middelen een samenhangende organisatie van het plan wordt bereikt. Deze praktische parameters van het parkplan vormen 'de componenten van samenhang'. In dit onderzoek zijn dat de begrippen: Ontsluiting, Organisatie, Verankering, Openheid, Geleding en Karakter (hoofdstuk 4). Een vergelijking van de analyse tekeningen van de eerste en tweede stap laat een samenspel van richtingen zien, met het doel een samenhang te componeren waarbinnen ruimte is voor spanning en dynamiek. Belangrijke kwaliteiten, die het resultaat zijn van samenhang, zijn oriëntatie en schaal.

De derde stap beziet welke ontwerppunten men stelt tegenover potenties en betekenissen van zowel de plek als het programma. De volgende ontwerppunten zijn onderscheiden: ten eerste, uitgangspunten ten aanzien van gebruik en tijd (historische continuïteit, functionele relaties, flexibiliteit); en, ten tweede, uitgangspunten ten aanzien van vormgeving en inrichting (heelheid, fragmentatie, hoofdstuk 5). In de ontwerpen is heelheid weinig als uitgangspunt gekozen. Het is onzeker of dit een gevolg is van de door het programma gevraagde verscheidenheid, of omdat de ontwerpers geen duidelijk idee van het park in de toekomst hebben. In het algemeen combineert men meerdere ontwerppunten, hetgeen kan leiden tot meerwaarde, maar ook tot een ingewikkelde samengesteldheid die voor de bezoeker moeilijk is te vatten.

De vierde stap ontleedt welke vormconcepten in het ontwerp doorwerken; hoe wordt de ruimtelijke opbouw geconcretiseerd door stileren? Het is een verkenning van vormthema's en vormmiddelen. De stilistische elementen zijn gegroepeerd in drie archetypische parkstijlen: Classicisme, Landschapstijl en Modernisme (hoofdstuk 6). Door middel van de typering proberen we de logica van ruimtelijke vormen en patronen. De bewerking van de stileren kan inventief en spiritueel zijn (vernieuwend), virtuoos en vernuftig (maniëristisch), plichtmatig en fantasieloos (clichématig), gemakzuchtig en effectbejagend (populistisch), gestreng en clean (formeel), of ongeunsteld en pretentieloos (informeel of pragmatisch). Zuivere stijlen zijn zowel uit de mode, als uitdrukkelijk afgewezen door de prijsvraagschrijver. Gemengde stijlen zijn bij deze opgave veel beproefd, mede ten dienste van het gevraagde pluralisme en meerduidigheid.

De hier gepresenteerde analysemethode kan in meerdere gevallen worden toegepast, met name in complexe situaties. De stap voor stap opbouw is direct en universeel bruikbaar. De begrippen zullen in sommige gevallen aanpassing of uitbreiding behoeven; ze zijn immers gekozen en gedefinieerd op basis van hetgeen we voornamelijk in de plannen voor La Villette tegen kwamen (hoofdstuk 7).

Het slotakkoord van deze studie brengt het resultaat van de La Villette-analyse in verband met het parkontwerpen in het algemeen. Het zijn beschouwingen, van zowel zakelijk als persoonlijk aard, over het 'litteraire' in de plannen voor het Parc de la Villette, over tekens, verbeeldingen en verwijzingen; een werkelijkheid die in de analyse, als het ware, tussen de stappen verloren gaat (hoofdstuk 8). Traditioneel is symbolisering een belangrijk fenomeen in tuin en park. Het gebruik en de waardering zijn echter niet altijd vanzelfsprekend. De oppervlaktigheid van betekenissen in veel plannen is een gevolg van het ontwerpen zonder aandacht voor betekenis. De symbolisering kan voortkomen uit het karakter van de landschapsarchitectuur: de omgang met de natuur. En de symbolen kunnen afgeleid worden uit het prijsvraagprogramma: de verbeelding van het pluralisme van de metropolitane cultuur en de vernieuwing van het parkontwerp voor de eenentwintigste eeuw.

Een serie van reflecties op het componeren in de parkarchitectuur sluit het verhaal af: over de vorm en inhoud van het stadspark in het algemeen en het eigenaardige van het Parc de la Villette (hoofdstuk 9). Een aantal aspecten van compositie in landschapsarchitectuur (effecten en betekenissen van het samenspel der componenten) zijn hier beschreven onder de noties: ruimtelijke illusie, orde, eenheid, lijnenspel, litteraire en muzikale compositie figuren.

In verband met de voorbeeld functie van de La Villette-prijsvraag, zowel met betrekking tot het uitvoerige programma als de uitbundige ontwerpen, wordt ten slotte een zeker tegenwicht gegeven door een beeld te schetsen van een voor de toekomst van de stad evenzeer belangrijke plek: het alledaagse park. De openheid van een grazige of sprankelende ruimte is de voornaamste kwaliteit van het alledaagse park: lange zichtlijnen om in weg te dromen, de rust van eenvoudige ruimten om de eigen gedachte te koesteren en betoverende ritmen opgewekt door de regelmaat en herhaling van in verband geplante bomen en hagen. Verlaten en leeg op een regenachtige ochtend en levendig en tintelend op een zonnige dag. Het is een veld van sensuele

ervaringen die complementair zijn aan werk en consumptie; dat wil zeggen het onverplichte, primaire en zinnelijke versus het geleide, georganiseerde en nuttige. Dat vraagt om een ontspannen, terughoudende en vanzelfsprekende vormgeving in tegenstelling tot een krampachtige en gewilde. De vormgeving van het alledaagse park geeft aanleiding tot behoedzaam kijken; een kijken waarbij het oog rustig wordt en bespiegelend. Langzaam en ernstig misschien voor het ritme van deze tijd, maar door de kwaliteit van intiem en tegelijk onderkoeld, een bijzonder moment van schoonheid.

