

CLAUDE-NICOLAS LEDOUX

AND

RUSSIAN ARCHITECTURE

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4.10.-16.11.2001 EKATERINBURG

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RUSSIAN ARCHITECTURE»
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«CLAUDE-NICOLAS LEDOUX ET
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FOREWORD

By dedicating the first volume of his work «Architecture and Its Relation to Arts, Customs and Law» to Alexander I, the Emperor of All Russia, «Alexander of the North», Claude-Nicolas Ledoux renders his philosophical and architectural thought universal, establishing a direct link with the arts and social reforms then taking place in Russia.

By means of collaboration between the Ural State Academy of Architecture and Arts and the Institute of Claude-Nicolas Ledoux in the Royal Salt-Works and Arc-et-Senans, we aim at enhancing this historical link and making our own contribution to the process of international acknowledgement of the heritage of today's Russia.

The exhibition «Ledoux and Russian Architecture» testifies to the desire of many Russian and foreign architects to familiarize themselves with the architectural and literary works of Ledoux in the early 19th. The ideas of Ledoux are expected to have a particular influence on the town-planning ensembles of St. Petersburg in the period of power centralization and social reform, these very ideas will become the basic concepts in creating ideal settlements, and we expect to meet them everywhere.

Along with the Royal Salt-Works in Arc-et-Senans, formerly a salt-producing enterprise built by Ledoux between 1775-1779 and today acknowledged as part of the world heritage, the architect proposes a concept of an ideal «city of Chaux» named after the forest surrounding an enterprise in his neighborhood, where social and private programmes of development of a settlement found their implementation. It may be supposed however that what had been realized in Arc-et-Senans presents only a fraction of a construction still awaiting completion.

Looking into the prospects of an ideal or a newly built city, Ledoux wanted to change the city image. In his dream of a city, thinking of common good, he uses sketch and architectural project as a language to present public buildings: the Palace of Justice, temples, a church, plants, a theater, baths, a market, a library, as well as individual buildings: workshops, country houses, etc.

He also refers to the burning social and economic issues of the day, and to the problems of public hygiene and certain social principles. But even discarding the utopias, a salt-works alone may be looked upon as a town-planning object, an isolated fragment perfectly ordered, starting from which the designing of a new city, with prospects of a most harmoniously organized space and due hierarchical order, becomes possible. Indeed, such concept of Ledoux presents a dream city.

It seems that it was only with the will of the sovereign that this idea could have turned to reality and get implemented by means of a city-planning experiment, as was the case with St. Petersburg a few decades before under the supervision of Czar Peter the Great.

What would have happened if Ledoux had met with this educated person?

A sovereign will, being a component of History, manifested itself most intensively enough in Europe in the 17th-18th centuries under Louis XIV, Peter the Great or Friedrich II. The age of enlightenment - the age of extremes.

The stability of Russia of that period before the unrest of the early 19th century, serves a perfect illustration, through the plant cities like Ekaterinburg with their architecture, to the philosophical thought that reunited Europe in a historical encounter that will never be repeated again.

Jean Dedolin,
Director General, Institute of Claude-Nicolas Ledoux

PRÉFACE

En dédiant le premier tome de son ouvrage *L'Architecture considérée sous le rapport de l'art, des mœurs et de la législation* à Alexandre I^{er}, «empereur de toutes les Russies», «Alexandre du Nord», Claude-Nicolas Ledoux universalise sa pensée architecturale et philosophique et crée un lien direct avec les arts et les réformes sociales en œuvre à l'époque en Russie.

Par cette collaboration entre l'Académie d'État d'Architecture et des Arts de l'Oural à Ekaterinbourg et l'Institut Claude-Nicolas Ledoux en la Saline royale d'Arc-et-Senans, nous avons souhaité consolider cette relation historique et participer à la reconnaissance internationale du patrimoine de la Russie d'aujourd'hui.

L'exposition «Ledoux et l'Architecture de Russie» témoigne de l'attachement en ce pays de nombre d'architectes russes ou étrangers au début du XIX^e siècle, à l'œuvre architecturale et littéraire de Ledoux. Ces derniers construiront notamment les ensembles urbains de Saint-Pétersbourg lorsque concentration du pouvoir et réforme sociale, fondement des cités idéales, se rencontreront.

Le destin de la Saline royale d'Arc-et-Senans, ancienne manufacture de sel construite par C.-N. Ledoux entre 1775 et 1779, et aujourd'hui inscrite sur la Liste du patrimoine mondial, veut que son concepteur ait aussi inventé une ville idéale, «la ville de Chaux», du nom de la forêt limitrophe, organisée autour de la manufacture, en y développant tous les programmes publics et privés prêts à fonder une cité. Non sans laisser croire, d'ailleurs, que ce qui a été réalisé à Arc-et-Senans n'en était qu'une partie, qu'il s'agissait d'un édifice inachevé. Comme dans nombre de villes idéales ou de villes nouvelles de fondation, Ledoux souhaite changer l'image de la ville. Dans ce rêve de cité, posé en contribution au bien public, il utilise le dessin et le projet d'architecture comme langage, en présentant des bâtiments publics - palais de Justice, temples, église, usines, théâtre, bains, marché, bibliothèque - et des constructions privées: ateliers, maisons de campagne, etc. Il traite ainsi autant des questions sociales et économiques du moment, que des problèmes d'hygiène publique ou de certains principes civiques. Mais sans besoin d'utopie, la saline seule peut s'interpréter comme un projet urbain, un fragment isolé, parfaitement ordonnancé, à partir duquel il serait possible de composer une ville nouvelle, prometteuse d'espaces harmonieusement et hiérarchiquement disposés. Ledoux en ce sens a certainement conçu là un projet visionnaire.

Seule la volonté d'un prince aurait peut-être fait que cette idée devienne réalité et se concrétise par l'expérience de la fondation urbaine, comme ce fut le cas à Saint-Pétersbourg quelques décennies auparavant sous Pierre le Grand. Qu'eut-il advenu de Claude-Nicolas Ledoux s'il avait rencontré cet homme éclairé?

Cette volonté du prince, même si elle est une constante dans l'Histoire, eu en Europe au XVII^e et XVIII^e siècles, une forte intensité grâce à Louis XIV, Pierre le Grand et Frédéric II. Siècle des Lumières, siècle des extrêmes.

La stabilité de la Russie d'époque, avant les bouleversements du XIX^e siècle naissant, permit aux villes-usines, telles Ekaterinbourg, de donner au travers de l'architecture, une parfaite illustration de cette pensée philosophique qui unit l'Europe en un rendez-vous historique qui ne se reproduit plus.

Jean Dedolin

Directeur général de l'Institut Claude-Nicolas Ledoux

C.-N.LEDOUX AS A SOURCE OF «THE ALEXANDER CLASSICISM»

A.A.Barabanov

The exhibition «Claude-Nicolas Ledoux and Russian Architecture» to be opened on October 4, 2001, during celebrations of three hundred years of the Ural metallurgy, in the Museum of History of Architecture and Industrial Machinery» is arranged on the initiative of the Urals State Academy of Architecture and Arts and the C.-N. Ledoux Institute-Museum (the city of Arc-et-Senan, France). The exhibition will present the work of a genial French architect-innovator of the 18th century, an outstanding theorist and practical worker of the French classic architecture, Claude-Nicolas Ledoux, to wide circles of the Russian and French public. The exhibition will also present certain samples of Russian industrial and civil architecture of the 18th - the first half of the 19th centuries, influenced by this architect and called «the Alexander Classicism».

The work of Ledoux exerted a considerable influence upon the works of architects building up the Russian capitals - Saint-Petersburg and Moscow – in the first half of the 19th century: Thomas de Tomon, A.D.Zakharov, A.A.Mikhailov, O.I.Bove, A.K. Kavos, and others. It also influenced architects working in the Russian provinces, including the Urals, graduates of the Saint-Petersburg Academy of Arts, such as M.P.Malakhov, S.Y.Doudin, A.P.Chebotarev and others.

The exhibition also presents certain samples of the Russian town-planning art of the 18th century as well as a number of factory-towns had already been built in Central Russia in the 17th century and especially in the Urals from the beginning of the 18th century, in the period of its dynamic industrial development.

C.-N.Ledoux was not only widely known as a practising architect who had developed amazing architectural projects and had built a lot of different civil and industrial buildings, but also as an author of a partly realized project of the ideal city of Chaux. He was also a well-known theorist, whose philosophical and poetic, social and romantic ideas were based on discovering the sense of phenomena and characterised by an inclination to cosmism, and who gave new and amazing samples of architecture full of monumental power, nobility and beauty.

In 1780, at the age of 44, C.-N.Ledoux intended to publish a catalogue of his architectural constructions and projects in the form of a four-volume album of engravings; 20 years later this work turned into a big and wonderfully illustrated treatise «Architecture Considered In Regard to Art, Customs and Legislation», the first volume of which, published in 1804, was mainly dedicated to the architecture of an ideal town called Chaux¹. In his book, C.-N.Ledoux showed himself to be an outstanding theorist of architecture and urbanism who discovered new principles and approaches to the architectural and town-planning art². For him, initiative, creative approach, inventiveness and striving for the new, for diversity and beauty took first place: «The diversity of form will not contradict to the unity of thought and opinions, to the laws of conformity, decorum, and economy. A typical unity of beauty is found in the relation of the mass and the details or ornaments in non-stopping lines which do not allow the eye to be distracted by needless accessories. Diversity gives every building a physiognomy which suits it. It multiplies, changes that physiognomy in accordance with different situations and plans leading to the horizon, and, satisfying one desire, in fact, gives rise to many others.

Conformity which stresses wealth and parodies failure, will subject ideas to local peculiar features, will combine different needs under relatively alien and inexpensive things. Decorum will present us with the analogy of proportions and ornaments. It will point in the first place to the motive of constructions and their purpose <...>. Let us not forget symmetry found in nature. It leads to strength and sets up parallel relations which do not exclude the picturesque, I would say, more unusual, which should have been eliminated»³.

Being a royal architect at the court of Louis XV, then during the reign of Louis XVI, and developing his projects, C.-N.Ledoux thought about how architectural means could provide for the well-being and an adequate life for all the people. «If an architect eases grief, if he decorates the hut of the poor, if he improves the life of the common people, increases the pleasure of members of high society, if all the surfaces he decorates are true mirrors and reflect his soul – then you will see what mankind can gain»⁴.

Basing on that, C.-N.Ledoux comes to the conclusion: architecture for all could contribute to the existence created by all. C.-N.Ledoux understood architecture for all as a transition to solving problems which arise while building a new society where morals and justice govern the people who had got rid of evil propensities and who use the space which the architect arranges for a happy life. «The aim of this establishment is to improve social order by showing the attractiveness of well-being, to change evil propensities through examples of good labour, and to use laws to subordinate wilfulness»⁵.

Being aware of the spirit of the times and relating it to the industrial revolution and hence, to new town-planning, C.-N.Ledoux states: «Before the night covers with its dark veil a vast field where I placed all the types of buildings urgently required by the social order, we shall see big plants – daughters and mothers of industry which give rise to big communities of people»⁶. Those are nothing but places of happiness and peace, where everything is intended for the common weal: «I will not tell you about those doubtful buildings which gather a great number of people to discuss public affairs. I will not tell you about that architectural splendour which is characteristic of areas populated for a long time. Here we have a rising city which requires what the needs dictate and desires to have on the street corner, in contrast to all that splendour, houses with modest porticos where a townsman, under a cloud of irritation, is looking for a way to continue his beneficial efforts. It is under those arches, covered in the center, which protect from the midday heat, and are left open to the north to have fresh air, that the people inside would be able to improve their health and lungs»⁷.

C.-N.Ledoux a royal architect, states that moral principles are effective only when they consider and use the proper opinion of the people, and, to succeed in his work, the architect should resort to such a really social moral.

An architect and a philosopher, C.-N.Ledoux considers architecture to be a multidisciplinary science «where nothing should be alien», and which can survive only by combining economics and the needed political «city and village» balance in the problem of forming space.

The study of projects, realised constructions, as well as theoretical works by C.-N.Ledoux leads us to the thought that it is action that gives rise to ideas, and that in the process of their development one should consider the social and political realities of an epoch. It is by creating and inventing within the framework of real orders and not only by sophisticated deductions that architect C.-N.Ledoux formulates his new ideas, leaving us visible traces of his insights and his «amazing premonitions and discoveries».

In one of his works, a prominent Russian scientist, an architecture and art historian, academician I.E.Grabar, analysed the work of C.-N.Ledoux and showed his great influence upon the development of world architecture at the end of 18th-beginning of the 19th century.

It is known that a major work by C.-N.Ledoux on architecture dedicated to the Russian emperor Alexander I has become the property of the library at the Saint-Petersburg Academy of Arts where they taught architects for all Russia, and which was a starting point of a triumphal march of French classicism - called «the Alexander Classicism» – through many cities of Russia, including the Urals, in the first half of the 19th century⁸.

It should be mentioned that C.-N.Ledoux exerted a great creative influence upon his countrymen – young architects. Competitive projects of the Paris Academy of Arts students, such as P.Bernard, Tardieu, Larsonner, Moreau, Sobre, Moitte and others, convincingly testify to that. In about 1800 a collection of the best designs of the Paris Academy, prize-winners of 1780s, began to be published in parts. It has become a reference book for every architect. It was brought to Russia and «this is how the ideas of a new classicism have been widely disseminated and have won general recognition»⁹. In the opinion of I.E.Grabar, creative methods and ideas of C.-N.Ledoux produced an indelible impression and influenced not only French, but also Italian and German architects at the end of 18- beginning of 19th century. They were also brought to Russia in the «Italian» form by Italian architects who worked here¹⁰. Being fully aware of all this, it is difficult to agree with our prominent scientist who said that «Ledoux's architecture resembles a florid style of his literature», that it is «pompous», «illogical» and «often rather empty». True to say, he corrects himself and acknowledges that «it is infinitely talented»¹¹. I.E.Grabar also points out a characteristic feature of architects working in France in the time of Louis XVI: a passion for all that is gigantic, for colossal dimensions which he calls «megalomania»¹². Evident is Ledoux's universal,

metaphorical and figurative, innovative way of thought. It leads to creative impulses and helps to generate, again and again, new forms. Thus, developing the design of salt-works of the town of Chaux, he deviates from his original version of the project which had presented a square with a 45 degree turn in regard to the external static square; with all the statics and the feeling of a motionless form, he seemed to have already achieved great dynamics in that version. C.-N.Ledoux chooses as the final version of the city plan a rounded form because it repeats «the rotation of the sun». The architecture itself begins to «talk» in the hands of the master. Conflicting appraisals of C.-N.Ledoux's work, the work of an architect and philosopher, by I.E.Grabar can be explained by an inadequate knowledge of the object of his research, which I.E.Grabar mentions in his work, as well as by his ideological principles characteristic of that time and based on the priority of the material, of the functional over the spiritual in architecture.

C.-N.Ledoux was one of the first who compared an architect-creator with the God. Hence the strive for a universal scope of his architectural and town-planning ideas. Hence his strive for the realisation of a dynamic balance between the microcosm and macrocosm, between man and the Universe. C.-N.Ledoux's solution of this difficult task is surprisingly refined and genially simple. He compares the world of architectural ideas with the Universe and boldly includes Man into that world, not as a detached observer, but as a «living measure of architecture», as a gem, the setting of which is architecture itself. The majority of projects and constructions of C.-N.Ledoux have a comparatively small, almost invisible socle with a pronounced monumentality of the architecture itself. Looking at C.-N.Ledoux's structures, an observer often feels that the monumentality of his architecture does not depress, but elevates Man.

This is when we begin to understand C.-N.Ledoux's words about his strive for providing, with the help of the best qualities of architecture, a better organisation of people's society and through this – a better life and happiness of mankind. One can say that C.-N.Ledoux creates an ideal architectural and spatial medium and wants the people inhabiting it to be ideal and happy. The architect is given a leading role in this: «An architect - isn't his power huge? He can create within the nature with which he competes, a different nature. His thoughts are not limited to the tiny area at his disposal, they are great. All the heavens and the earth - this is his area. He creates, he improves, he sets into motion. He can conquer a whole world by striving for something new which leads to the highest excitement of imagination»¹³.

With all his work, C.-N.Ledoux proves the right to create something new on the part of a creator and innovator, of an architect, of a pioneer exceeding in his mastership nature itself. Even today, he leads us to the world of justice, harmony and beauty.

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¹ C.-N.Ledoux. *L'architecture considérée sous le rapport de l'art, des moeurs et la législation*, Tome I. Paris, 1804 (second edition, Verlag ; Dr. Alfons Uhl, Nördlingen, R.F.A., 1994).

² Bernard Stoloff. «L'affaire Claude Nicolas Ledoux : autopsie d'un mythe. Bruxelles : Pierre Margada, 1999.

³ C.-N.Ledoux, the above work, p.10.

⁴ The same, p.121.

⁵ The same, p.64.

⁶ The same, p.1.

⁷ The same, p.101-102.

⁸ I.E.Grabar. *Early Alexander Classicism and its French Sources*. In the book «On Russian Architecture». Moscow: Science, 1969.

⁹ The same, p.296.

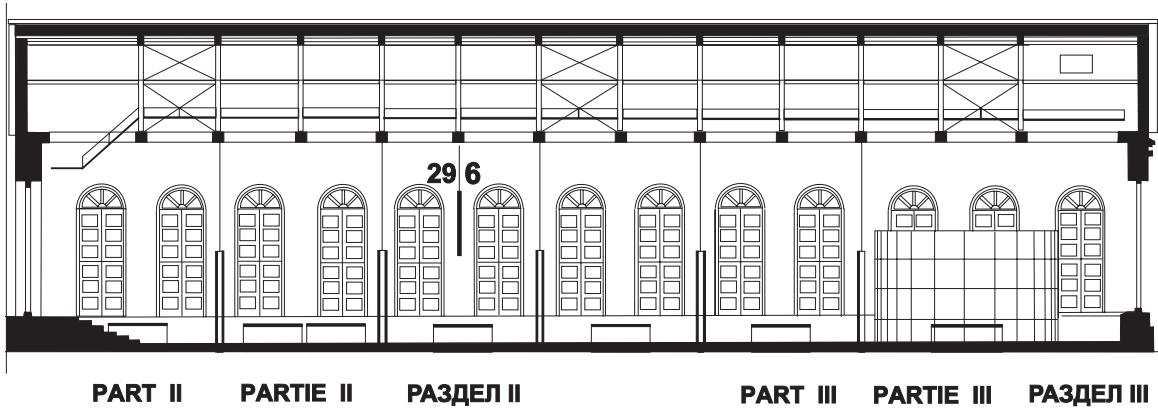
¹⁰ The same, p.298.

¹¹ The same, p.292.

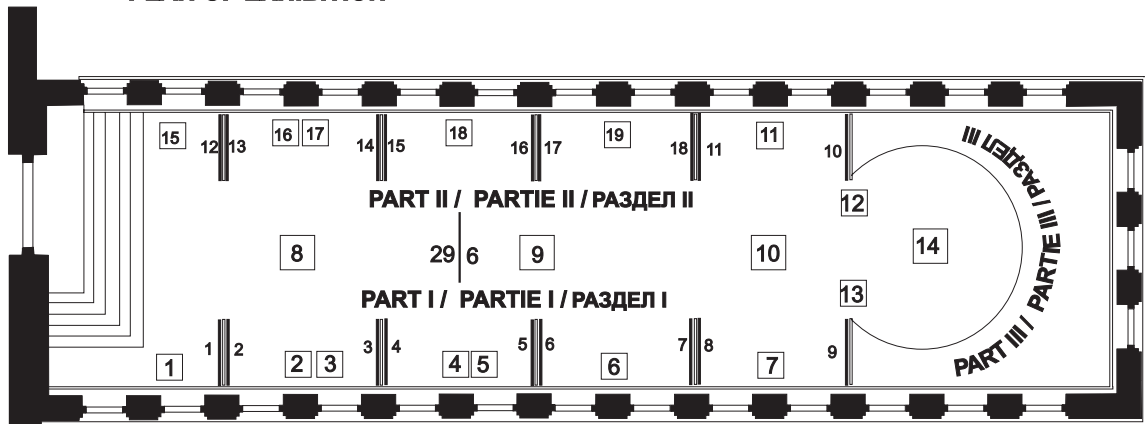
¹² The same, p.287.

¹³ C.-N.Ledoux, the above work, p.28-29.

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CONTENT OF THE EXPOSITION

The exhibition dedicated to C.-N. Ledoux and Russian architecture displayed at the Museum of Architecture and Industrial Machinery of the Urals in Ekaterinburg has three sections:

Part 1 dedicated to C.-N. Ledoux includes 14 large scale models, 22 photographs and 44 boards demonstrating 45 building and ensemble projects including civil and industrial buildings of an ideal city of Chaux, fantastic and utopian buildings, Paris gates («La Barrière»), big public buildings and mansions, 2 large prints 190×140 cm on special «TYVEC» paper showing a view of Chaux and a «gaze» with reflection of the interior of a theater in Besançon – the first parterre theater in Europe.

Part 2 dedicated to the Russian Architecture includes 5 big scale models, 14 big prints and 28 boards presenting plant cities and industrial architecture of old plants in Russia, town-planning in Russia in the 18th century and architecture of prominent public buildings of the 19th century in St.Petersburg and Moscow.

Part 3 organized in a big cylindrical volume includes 21 one-meter boards submitted to the contest «An Ideal City of the Future». This is the crowning part of the exhibition presenting architectural and artistic search of students of the Ural State Academy of Architecture and Arts, and pupils of architecture and art classes and art studios of Ekaterinburg who ventured a quest into the near and distant future of mankind and expressed their concepts of «an ideal city of the future», being inspired by the innovative architectural-artistic and philosophical and aesthetic ideas of C.-N. Ledoux.

LIST OF EXHIBITS

PART I. WORKS OF C.-N. LEDOUX. DESIGNS AND BUILDINGS PUBLIC AND DWELLING HOUSES

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| *1. House and Theater of Mlle Guimard | 2 | 2 |
| 2. Grand Palace Louvecienne | 3 | |
| 3. Mansion Mannery | 2 | |
| *4. Palace of Justice and Prison in the City of Aix | 7 | 9 |
| 5. Theater in Besançon | 1 | |
| 6. Print of “gaze” with reflection of the interior of a theater in Besançon | 1 | |
| *7. Theater in Marseille | 1 | 1 |
| 8. Project of the Capuchin Theater | 3 | |
| **9. Castle Benouville | | 5 |
| **10. Mansion of Prince of Montmorency | | 3 |
| *11. Foundling Hospital | 4 | 4 |

PARIS GATES («LES BARRIÈRES»)

| | | |
|---|---|---|
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| *13. La Villette | 6 | 6 |
| 14. Square Etoile, the so-called Neily or the Elysee Fields | 6 | |
| 15. Maine | 6 | |
| 16. Reservoir (Eau de Chateau or Bassin) | 6 | |
| 17. Courseile | 6 | |
| 18. Monseau (Chartre) | 6 | |
| 19. Roule (the old Neily road) | 6 | |
| 20. Gates Behind the Garden of Duke of the Orleans | 6 | |

| | |
|--|---|
| 21. St. Louis (the old Pantin or Combe road) | 6 |
| 22. Bass Courty (Belville, Fobur, Temple) | 6 |
| 23. Chopinet (St.Lorraine) | |

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| | |
|---------------------|---|
| 24. Country House | 3 |
| 25. Country House | 4 |
| 26. Country House | 4 |
| 27. Country House | 5 |
| 28. Hunter's Castle | 4 |

THE IDEAL TOWN OF CHAUX

| | | |
|--|----|----|
| *29. General View of Chaux | | 14 |
| *32. Salt-Works in Chaux, first project | 10 | 11 |
| 31. City of Chaux Plan View, second project | 10 | |
| *32. Salt-Works in Chaux, implemented project | 10 | 8 |
| 33. Pavilion «Entrance Gate of Salt-Works of the City of Chaux» | 11 | |
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| 35. Building for Workers Encircling a Big Yard | 12 | |
| 36. House of Director of Salt-Works | 8 | |
| *37. Cannon Works | 8 | 10 |
| *38. Cemetery in the City of Chaux | 9 | 7 |
| *39. Hoop-Making Workshop | 9 | 12 |
| *40. House of Agriculture Guards | 9 | 13 |

References:

1. Marked with an asterisk * are the materials shown in both graphic and scale model presentation.
2. Marked with a double asterisk ** are the materials shown in scale model presentation.
3. Photographs from life in Section I «Works of C.-N. Ledoux» are made by the French photographers: Gilles Abegg, Denis Chandon, Georges Fessy and Pascal Paul.
4. In preparing Part I «Works of C.-N. Ledoux» the following literature sources were used:
 1. C.-N.Ledoux. *L'architecture considérée sous le rapport de l'art, des moeurs et de la législation*, t.1. Deuxième édition. Verlag Dr. Alfons Uhl, Nördlingen, R.F.A., 1994.
 2. Claude- Nicolas Ledoux. *L'architecture considérée sous le rapport de l'art, des moeurs et de la législation*. Second volume. Verlag Dr. Alfons Uhl. Nördlingen, 1990.
 3. *Architecture de Ledoux*. Inédits pour un tome III. Précédés d'un texte de Michel Gallet. Paris : Les Editions du Demi-Cercle, 1991.
 4. D. Ramée. *Architecture de Ledoux*. Collection qui rassemble tous les genres de bâtiments employés dans l'ordre social. Paris : Lenoir, Editeur, 1847. (Réédition. Princeton Architectural Press. New-York-Canada, 1983).
 5. Pierre Lavedan et Simon Goubet. *Pour connaître les monuments de France*. Bellegarde-Lyon-Strasbourg: Ed. Arthaud, 1971.

PART II. RUSSIAN ARCHITECTURE AND TOWN-PLANNING INDUSTRIAL ARCHITECTURE

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|--|-----------|-----------------|
| *1. Plant City Ekaterinburg | 12 | 15 |
| *2. Nevyansk Metallurgical Plant | 13 | 16 |
| *3. Izhevsk Arms Factory | 13 | 17 |
| 4. Kasli Metallurgical Plant | 13 | |
| 5. Kyshtym Metallurgical Plant | 13 | |
| *6. Sestroretsk Arms Factory | 14 | 18 |
| 7. Petrovsky Metallurgical Plant (Petrozavodsk) | 14 | |
| 8. Aleksandrovsky Arms Factory | 14 | |
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Notes:

1. Marked with an asterisk* are the materials shown in both graphic and scale model presentation.
2. All photographs from life in Section II «Russian Architecture» contributed by E.L. Lykov.
3. In preparing Section II «Russian Architecture and Town-Planning» use was made of the materials of State Archives: TsGADA-TsGVIA SSSR, TsGIA SSSR, Museums: A.V. Shchusev GNIMA and Tula Arms Factory, and the following literature sources:
 1. N.F. Gulyanitsky (Ed.). Petersburg and Other New Russian Cities of the 18th-First Half of the 19th Centuries. M.: Stroiizdat, 1995.
 2. G.P. Balog et al. A.S. Pushkin and His Time in Fine Artsofthe First Half of the 19th Century. Leningrad: «Khudozhnik RSFSR» Publishing House, 1985.
 3. A.V. Bunin. History of Town-Planning Art. Vol. 1. Slave-Owning System, Feudalism, Capitalism. M.: Literature on Construction and Architecture State Publishing House, 1953.
 4. A.V. Bunin, T.F. Savarevskaya. History of Town-Planning Art in Two

Volumes. V. 1. (Second Edition). M.: Stroiizdat, 1979.

5. P.N. Maksimov (Editor-in-Chief). General History of Architecture in 12 Volumes. V. 6. Architecture of Russia, Ukraine and Byelorussia. The 14th -First Half of the 19th centuries. M.: Stroiizdat, 1968.

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7. V.I. Pilyavsky. Masters of Russian Architecture. Architect Rossi. M.-L.: Literature on Construction and Architecture State Publishing House, 1951.

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10. A.Ya. Aleksandrov (Ed.). Problems of Architecture. Collection of Materials. V. I, book 2. M.: All-Union Academy of Architecture Publishing House. 1936.

11. R.M. Lotareva. Plant Cities of Russia of the 18th - First Half of the 19th Centuries. Ekaterinburg: Ural University Publishers, Ural Institute of Architecture and Arts, 1993.

12. Shlatter I. Detailed description of ore melting business, v.1. St. Petersburg, 1763.

PART III. «THE IDEAL CITY OF THE FUTURE». MATERIALS OF THE OPEN COMPETITION FOR SCHOOL AND COLLEGE STUDENTS SPECIALIZING IN ARCHITECTURE AND ARTS

1. City – the Energy of Emotions
2. An Ideal City for an Ideal Man
3. City of Happiness
4. An Ideal City «Ship of the Future»
5. City – the Megastructure
6. City of the Winds
7. Flower City
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14. An Ideal City of the Future «Axis of the Universe»
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18. Mandala – City of Dream and Harmony
19. City of the Future «Between the Sky and the Earth»
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LE CONTENU DE L'EXPOSITION

L'exposition «Claude-Nicolas Ledoux et l'Architecture de Russie» accueillie par le Musée de l'architecture et de la technique industrielle de l'Oural à Ekaterinbourg comporte trois parties essentielles:

Partie I : elle est consacrée à C.-N. Ledoux, montre 14 grandes maquettes, 22 photos et 44 planches représentant 45 projets de bâtiments et d'ensembles, y compris les bâtiments résidentiels et industriels de la ville idéale de Chaux, les maisons-utopies et fantaisies, les barrières de Paris, les grands bâtiments publics et les palais, 2 grandes gravures (200 x 150 cm) réimprimées sur papier *TYVEC* représentent la vue en perspective de la ville de Chaux et «le coup d'œil» se reflétant à l'intérieur du théâtre de Besançon, premier théâtre européen avec parterre.

Partie II : elle est consacrée à l'architecture de Russie et comporte 5 grandes maquettes, 14 grandes photos et 28 planches représentant les villes-usines et les anciennes usines russes, l'urbanisme de Russie au XVIIIe siècle ainsi que les édifices publics du XIXe siècle à Saint-Pétersbourg et à Moscou.

Partie III : elle est organisée dans un grand volume cylindrique qui contient 20 planches (1m x 1m) présentées au concours «La ville idéale du futur». Cette partie achève l'exposition et montre les recherches architecturales des étudiants de l'Académie d'État d'Architecture et des Arts de l'Oural et des élèves des écoles secondaires à Ekaterinbourg qui ont essayé de jeter un coup d'œil dans l'avenir prochain et lointain de l'humanité et d'exprimer leurs idées sur «la ville idéale du futur» inspirées par les conceptions architecturales, philosophiques et esthétiques de C.-N. Ledoux.

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| 7.*Théâtre de Marseille | 1 | 1 |
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Notes :

1. Le signe * marque les matériaux présentés en graphique et en maquette.
2. Le signe ** marque les matériaux présentés seulement en maquette.
3. Les photos de la partie III sont faites par photographes français Gilles Abegg, Denis Chandon, Georges Fessy et Pascal Paul.
4. Dans la partie II on a utilisé les livres suivants:
 1. C.-N.Ledoux. *L'architecture considérée sous le rapport de l'art, des moeurs et de la législation*, t.1. Deuxième édition. Verlag Dr. Alfons Uhl, Nördlingen, R.F.A., 1994.
 2. Claude Nicolas Ledoux. *L'architecture considérée sous le rapport de l'art, des moeurs et de la législation*. Second volume. Verlag Dr. Alfons Uhl. Nördlingen, 1990.
 3. *Architecture de Ledoux*. Inédits pour un tome III. Précédés d'un texte de Michel Gallet. Paris: Les Editions du Demi-Cercle, 1991.
 4. D. Ramée. *Architecture de Ledoux*. Collection qui rassemble tous les genres de bâtiments employés dans l'ordre social. Paris : Lenoir, Editeur, 1847. (Réédition. Princeton Architectural Press. New-York- Canada, 1983).
 5. Pierre Lavedan et Simon Goubet. *Pour connaître les monuments de France*. Bellegarde-Lyon-Strasbourg: Ed. Arthaud, 1971.

PARTIE II. L'ARCHITECTURE ET L'URBANISME DE RUSSIE

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Notes :

1. Le signe * marque les matériaux présentés en graphique et en maquette.
 2. Les photos de la partie III sont faites par M. E.L. Lykov
 3. Dans la partie II on a utilisé les matériaux des archives: Archives Centrales d'Etat des Actes Anciens, Archives Centrales d'État de l'Histoire Militaire de l'URSS, Archives Centrales d'État de l'Histoire de l'URSS, Musée d'Etat d'Architecture de l'Histoire Scientifique A.V. Chtchussev, Musée d'armurerie de Toula, ainsi que la littérature suivante:

1. N.F. Gouljanitsky (réd.). Péterbourg i drouguié novyé rossiyskié goroda. XVIII- pervoi poloviny XIX vekov. Moscou: Stroïizdat, 1995 (Pétersbourg et d'autres nouvelles villes russes de XVIIIe et de première moitié de XIXe siècles).

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7. V.I. Piliavsky. Mastéra rousskoï architectoury. Zodtchy Rossi. Moscou-Léningrad : Edition d'Etat d'Architecture et d'Urbanisme, 1951 (Maîtres de l'architecture russe. L'architecte Rossi).
8. V. Ia. Libson, A.I. Kouznetsova. Bolchoï théâtre SSSR. Historia sooroujenia i rekonstrouktsii zdania. Moscou: Stroïizdat, 1982 (Bolchoï théâtre de l'URSS. L'histoire de la construction et de reconstruction du bâtiment).
9. N.B. Baklanov et alii (réd.). Pamiatniki rousskoï arkhitektoury. Obméryi isslédovania. Arkhitektor T. Thomon. Zdanié tsentralnogo voénno-morskogo mouzéïa (byvchaïa birja) v Léningradé. Léningrad: Edition d'Etat de la littérature sur la construction et l'architecture, 1957 (Monuments de l'architecture russe. Mesurages et recherches. L'architecte T. Thomon. Le bâtiment du musée central militaire-maritime (ancienne bourse) à Léningrad).
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11. R.M.Lotareva. Les villes-usines de la Russie. Le XVIIIe- la première moitié de XIX e siècle. Ekatéribourg : Edition de l'Université de l'Oural, l'Institut d'Architecture et des Arts de l'Oural, 1993.
12. J.Chlatter. La description du métier des mines et de la fonderie. Saint-Petersbourg. V.1, 1763.

PARTIE III. «LA VILLE IDÉALE DU FUTUR». LES MATÉRIAUX DU CONCOURS POUR LES ÉTUDIANTS EN ARCHITECTURE ET LES ÉLÈVES DES ÉCOLES SECONDAIRES

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