

**Dr. Mario Ludovico**  
*Architect – Town & Country Planner*

CURRICULUM VITÆ IN A SHORT RESUMÉ

Born in Rome – Italy, on the 12<sup>th</sup> of August, 1936  
Resident in Poland since 2003.

Email contacts:

[mario.ludovico@tin.it](mailto:mario.ludovico@tin.it) - [mario.ludovico@consultant.com](mailto:mario.ludovico@consultant.com) - [world-planners@lycos.com](mailto:world-planners@lycos.com)

After the diploma from the State Scientific High-school of Bari, he attended the Physics-Mathematics Biennium at the Faculty of Engineering of the Bari State University.

From 1956 to 1958, eighteen-month military service in Italian Air Force.

From 1958 to 1959, he attended the Faculty of Architecture at the University of Florence.

From 1959 he moved to the Faculty of Architecture at University “La Sapienza” of Rome, where, in 1970, he got the “Diploma di Dottore in Architettura” with a thesis - carried out by means of an original mathematical approach - on urban analyses and projections concerning growth and development of the City’s Business Districts.

Post-graduate courses in transportation planning and in computerized simulation games.

In 1970 the National Council for Scientific Research (CNR) awarded him a scholarship for researches in mathematics applied to urban and regional analyses. In the same year, and until June 1972, he was an Associate Lecturer in Urban Studies at the Faculty of Architecture of Rome.

As an architect, he has taken part in the preparation of preliminary and final designs of residential compounds and/or individual houses, buildings and monuments in Italy as well as in Middle East and Africa.

As a town and regional planner, either as an individual professional or as a member of professional teams, he has participated in the preparation of specific urban studies and several urban or regional development plans in Italy and abroad, namely, in Australia, Ethiopia, Guyana, Indonesia, Libya, Morocco, Nigeria, Poland, Tanzania, Zimbabwe.

In 1988, the Italian Government awarded him the “Prize of Culture 1988”, for his book “*L’evoluzione sintropica dei sistemi urbani*” (Syntropy and Evolution in Urban Systems), published in Rome by Bulzoni Editore in 1988 (1<sup>st</sup> Edition) and in 1991 (2<sup>nd</sup> Edition). In about 370 pages, the book presents an original theory on the evolution of complex systems (such as, in particular, cities, regions, or economic systems) through a relatively simple probabilistic approach. The logic-mathematical paradigm proper to this theory may be applied to any self-organised system. See link <[Complex Self-Organised Systems](#)>, where a 13-page summary of the theory is available to the reader.

In 1991, still with Bulzoni Editore, he published the book “*Note sulla dinamica di popolazione e risorse*” (Dynamics of Population and Resources), in which a model of ecological system is presented, with the purpose of describing the large variety of possible evolution processes for different biological species according to various and/or variable environmental conditions. See link <[Dynamics of Population and Resources](#)>, where a few-page summary of the text relevant to this model can be found.

As for the architectural designs, for which no appropriate room is available in this web site, an essential mention of the major ones is made here below. A list follows regarding various publications, part of which reflects most of the other major works carried out on occasion of urban and regional development plans.

### ***Major Architectural Works***

- Residential estates in Rome
- Hotel delle Nazioni in Rome
- Hotel Villa Dina in Catania
- UNDP residential complex in Dar-es-Salam (Tanzania)
- Design for the State Parliament House in Lagos (Nigeria)
- Design for a new Business District in Tripoli (Libya)
- Design for a new City Centre in Addis Ababa (Ethiopia)
- Participation in the final design and work supervision for the new urban area of Kotebe in Addis Ababa
- Design for the Monument to the Italian Aviator.

### ***List of Publications***

Note : *acronym CSDPT stands for "Centre for Regional Studies and Planning";  
acronym AIRO stands for "Italian Association for Operational Research";  
acronym AAMPPO stands for "Addis Ababa Master Plan Projects Office";  
acronym KIMPRASWIL stands for the Indonesian Ministry of Infrastructure  
and settlements  
acronym BAPPEDA stands for "Governmental Planning Board" (at various  
Indonesian Governmental levels)*

*(\*) University Publications*

*(\*\*) Published by Specialized Magazines*

*(\*\*\*) Published by Essay-collection Books*

*(cp) Conference Papers*

*(#) Books*

*® Studies Issued Upon Governmental Requests*

**"The Definition of Region"**, CSDPT, Rome, 1968 (\*)

**"Urban Studies and Interdisciplinary Aspects"**, in Journal *DIBATTITO URBANISTICO*, No. 26, Milan, 1969.(\*\*)

**"Spatial Interdependencies"**, CSDPT, Rome 1970 (\*)

**"Community Land Use Game : A Simulation Model"**, CSDPT, Rome, 1971 (\*)

**"The Concept of Informational Entropy in the Construction of a Model of Interactions in an Inhabited Space"**, CSDPT, Rome, 1971 (\*)

**"Role of Models"**, in the book *ARCHITETTURA E COMPUTER*, Bulzoni, Rome, 1972 (\*\*\*)

**"A Model for Town & Country Planners"**, in the book **ARCHITETTURA E COMPUTER**, Bulzoni, Rome, 1972 (\*\*\*)

**"A Model of Urban System"**, paper delivered at the AIRO Conference, Rome, November 6 - 8, 1972. (cp)

**"Gravitation and Entropy in Urban Planning Models"**, paper delivered at AIRO Conference, Taranto, September 27 - 29, 1976 (cp)

**"Traffic Flow System and Development Hypotheses for the Urban Area of Tripoli"**, Sviluppo Technica SpA, Rome, 1984 ®

**"MEDIAR Method: Theory and Application"** (*A Mathematical Approach to the Problem of Simulating the Dynamics of Urban Systems, as applied to Addis Ababa*), AAMPPO - Addis Ababa, 1985 ®

**"A City Centre for Addis Ababa"**, AAMPPO - Addis Ababa, 1985 ®

**"Key Project for the Building & Construction Industries in Addis Ababa"**, FOSWECO SpA, Rome, 1986, on behalf of AAMPPO ®

**"L'evoluzione sintropica dei sistemi urbani"** (*Evolution and Syntropy in Urban Systems*), Bulzoni, Rome, 1988 and 1991 (this book was awarded the **Prize of Culture for Year 1988** by the Italian Government) (#) [See link [<A Theory on Complex Systems >](#), for a substantial summary of the book's contents].

**"Note sulla dinamica di popolazione e risorse"** (*Notes on the Dynamics of Population and Resources*), Bulzoni, Rome, 1991 (#).[See link [<Dynamics of Population and Resources>](#), where an essential short summary of the book's hypotheses and theses can be found]

**"Simulation of Malang Physical Growth"**, in co-operation with computer programmer Silvano Pellicchia (*within the preparation of the Malang Urban Development Programme*), C.Lotti & Ass., on behalf of BAPPEDA Malang, 1995 ®

**"A Study on Privatisation"**, 2 Volumes, C. Lotti & Ass., Bogor-Palembang, 1996-97, on behalf of the Indonesian Ministry of Home Affairs (MOHA) ®

**"Se sovrano è il popolo"** (*If the People are the Sovereign*), in collaboration with Guido Branca (*an essay on deceptions from erroneous implementations of democracy, and proposal for a viable alternative implementation*), Bulzoni, Rome, 1997 (#)

**"Suggestions for Future Land Acquisition Policies"**, BCEOM Consultants at the UMU-BAPPEDA, Surabaya, 1997 ®

**"Issues of Population Projections and Production Dynamics"**, BCEOM Consultants at the UMU-BAPPEDA, Surabaya, 1997 ®

**"Towards a Policy for the Regional Development"**, BCEOM Consultants at the UMU-BAPPEDA, Surabaya, 1998 ®

**"Suggestions for Anti-crisis Initiatives (The Socioeconomic Promotion Role of Urban Primary Activities and Services)"**, BCEOM Consultants at the UMU-BAPPEDA, Surabaya 1998 ®

**"A Probabilistic Econometric Model for East Java Province "** (*Forecast and Planning Instruments for the Economy in a Time of Crisis*), BCEOM Consultants at the UMU-BAPPEDA, Surabaya 1998 ®

**"Collection of Memos and Papers"** (amongst which *Padat Karya: A Strategic Labor Intensive Program*, and *Measures to Check Further Unemployment*, during crisis years 1998-199 in Indonesia), BCEOM Consultants at the UMU-BAPPEDA, Surabaya 1999 ®

**"Collection of Papers on Financial and Monetary Issues"** (*Analyses and Projections on Regional [PEMDA] Revenues-Expenditures in the emerging monetary crisis, with ad hoc Projection Models on Rupiah/US Dollar and Rupiah/Yen Exchange Rates*), BCEOM Consultants at the UMU-BAPPEDA, Surabaya 1998-1999, ®

**"The Problem of the Coastal Zone"**, in collaboration with Eng. Sugyartini (*Analyses and Proposals for an Appropriate Sustainable Use and Development of Coastal Resources*), BCEOM Consultants at the UMU-BAPPEDA, Surabaya 1999 ®

**"Urban Development and Regional Socio-economic Prospects"**, BCEOM Consultants, on behalf of KIMPRASWIL for the preparation of the **Second National Urban Development Strategy (NUDS-II Interim Report)**, Jakarta, July 2000 ®

**"Features of Secondary Urban Roads + Assessing the Impact of Transportation Projects on Urban Systems"**, BCEOM Consultants at SURIP-1b, Jakarta, October-November 2000 ®

**"Benefit Monitoring and Evaluation for Sumatra Urban Development Sector Project (SUDSP) "** (*an ad hoc methodology prepared for evaluating the project impact in about 70 cities and towns of Sumatra*), GKW Consultants on behalf of KIMPRASWIL, Jakarta 2002 ®

**"Project Impact Monitoring and Evaluation"**, (*an original and innovative general methodology, with relevant manual, guidelines, and the report on an application to Medan Urban Development Project, prepared upon direct request from the Asian Development Bank*), GKW Consultants on behalf of KIMPRASWIL, Jakarta 2003 ®

**"A Study on Privatisation Issues"**, Kota Palembang, 2004 (*a study on conditions and potentials for partial or full privatisation of public services in the Indonesian city of Palembang, carried out under a European Union Grant*) ®

**"A Model for Traffic Assignment on a Multimode Transport Network"** , in collaboration with Gianfranco Antonini and computer programmer Sergio Sirgi (*The Theoretical Problem of Multi-mode Transportation Demand and Actual Flow Distribution on a Regional Network*), "ONDA VERDE" Magazine, Rome 2005. (\*\*)

**"Transportation Modelling for Regional Planners"**, EU-ART&SCIENCE, Poznań 2007. [See link [<Modelling for Regional Planners>](#), where the text of the model's theoretical framework can be found]. (#)

**"Vacuum, Vortices and Gravitation"**, 1<sup>st</sup> Ed. Bracciano-Rome 2004; EU-ART&SCIENCE, Poznań 2006-2008-2009-2010 [See link [<Vacuum, Vortices & Gravitation>](#), where the texts of the book's sections can be read] .<sup>1</sup> (#)

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<sup>1</sup> From 1963 to 1966, he took also an active part in the researches carried out at the *Centre Européen pour le Recherches sur la Gravitation* (CERG), established in Rome under the High Patronage of the President of the Republic.

**“Syntropy: Definition and Use”**, online magazine [www.syntropy.org](http://www.syntropy.org), 2008.(\*\*)