A study on Space and Language: Relationships between Ideograms, the Roman Alphabet, and Urban Space in the East and the West

Reporting

Final Report Summary - EASTWEST (A study on Space and Language: Relationships between Ideograms, the Roman Alphabet, and Urban Space in the East and the West)

The project has achieved most of its objectives and technical goals for the mid-term period with relatively minor deviations. So far the researcher have collected, digitized and organized historical and topological maps of Rome, Paris, London, Beijing, Kyoto, and Tokyo.

The researcher has organized a series of information concerning the development of the selected cases...
studies into a digital maps catalog. After a selection of a sufficient number of historical maps to be used as a basis for extracting data new maps have been redrawn of the selected case studies. After necessary preparation for work, maps have been digitized and data have been analytically organized. After an analysis of the relationship between language patterns, and the spatiality of Western and Eastern cities, the researchers have improved awareness of the existence of linkages between the syntax of languages and the syntax of spaces, and of the influence that languages have in shaping the cities. The maps have been connected with lists of past and present data by which the authors will study the changes in urban forms, streets network, and the structural principles of urban growth in the East and the West. At the end of the two years, the researcher has drawn several diagrams of the structural principles of creation of space and language, he has compared and analyzed them to give evidence of the existence of linkages between the syntax of languages and the syntax of spaces. The consistency of preliminary result across a whole range of urban phenomena suggest that space may indeed offer something like the existence of common models for creating the language of cities. Many relations between the shape of selected cities and the way they function seem to involve the space-language relation. The fact that the most important of our results are about the peculiarity of the urban structure are also suggestive. Whatever functional phenomenon we pursue, the use of syntactic techniques seem to make some kind of sense out of apparently disorderly urban patterns, and shows they have functional sensitive structures. It is, it seems, these spatial structures that characterize the cities, and it is these that the form of the city to its function. The main results achieved are the collection, analysis, elaboration, extraction, and vectorization of data from historical and topological maps. These actions have created the required conditions for the researcher to create a list of elements of the space, the language and the architecture of selected case studies. This has lead to the creation of diagrams that help to understand the spatiality of cities, streets network, the structure of language and space syntax. Already historical topographic maps, census data, administrative documents, and other data have been collected and they have been used to form a cluster of data that includes: the process of urbanization as represented by annexations, mergers, and upgrading of administrative areas from village to town, or city ward. The analysis of collected data allows the researcher to affirm the existence of linkages between the syntax of languages and the syntax of spaces that has lead to the following results:

A first result have been translated into a paper published in “De la Trace à la Trame”, a book edited by Clement-Noel Douady, a research associate of CNRS-UMR 7218 LAVUE-AUS. The book—which has been funded by CNRS—is a collection of papers written by professors, scholars and researchers belonging to Morphocity, an interdisciplinary team directed by Philippe Bonnin, the host, and Stephane Douady, researcher at Paris Diderot University, and financed by the French National Agence for Research(ANR).

A second result has been translated into the publication of a lengthy scientific paper on “East West- A study on Space and Language: Relationships between Ideograms, the Roman Alphabet, and Urban Space in the East and the West”. The paper has been included in “Cronache del Tecno-Medio-Evo. Ipertesti, labirinti, tecno-mondi, realtà virtuali, architetture digitali nel sapere pre-scientifico del mondo antico”, an essay on new languages and technologies edited by Marcello Pecchioli and published by Edizioni Mimesis, Milan, in May 2015.
A third result is the signature of a contract for publishing a book or the creation of a website about “East West- A study on Space and Language: Relationships between Ideograms, the Roman Alphabet, and Urban Space in the East and the West” that is planned to be delivered within May 2017.

Description of the modifications from the original plan:

The project has achieved parts of the foreseen project objectives and technical goals. Overall the management arrangements and the program of research work, visits and activities have worked out very well. One modification has occurred, which responds to technological innovation and ensures a stronger relevance of the project during after the project lifetime. The maps and diagrams used for illustrating the elements of the spatiality of the cities were designed through a CAD software instead of GIS system. The filling of catalogue with elements belonging to spatiality of the East and of the West that shows the difference of structure of cities in the West and the East and the structure of language in the East and in the West has been preferred to the creation of maps. This has ensured a better management of models but has slowed down the creation of a database and its publication on line.

Milestones, Delivery date and Description

1.1 Setting and Collection of historical maps, Oct 2013 Achieved on time, Completion of necessary ground work for the production of digital models, and formation of digital maps catalog.
1.2 Workshop Dec 2010 4-day workshops and conference held Nov 2010
1.4 Scientific paper (30 pages) titled “East West- A study on Space and Language: Relationships between Ideograms, the Roman Alphabet, and Urban Space in the East and the West”. The paper has been included in “Cronache del Tecno-Medio-Evo. Ipertesti, labirinti, tecno-mondi, realtà virtuali, architetture digitali nel sapere pre-scientifico del mondo antico”, an essay on new languages, hypertext and new technologies edited by Marcello Pecchioli and published by Edizioni Mimesis, Milan, in May 2015.

Deliverables

D1.1 Initial seminar at Paris, Public Symposium “Urban Morphogenesis” held on 17 June 2013, 09.30-17.30. Attended by 20 people from the Materials and Complex System Lab (LMSC) of Paris 7 University, the French Institute of Theoretical Physics (IPhT-CEA), the French National School of Geographical Science (IGN), the Architecture, City, Urbanism, Environment Lab (CNRS-UMR7218, LAVUE). Definition of research dictionary, reports, methodology transfer to the host.
D1.2 Conference “Patterns and Layering: space, language and architecture” at the Doctoral School of Architecture School of La Villette, Prof. Alessia De Biase, attended by 25 Phd candidates, held on 13 Jan 2013.
D1.3 5 Day Workshop and Conference “Patterns and Layering: space, language and architecture” held on 3 Mar-8 Mar 2014 at the National Institute of Architecture in Rome, Italy. Attended by 12 participants from different countries.
D1.4 Scientific working paper on “EastWest—A study on Space and Language: Relationships between
Ideograms, the Roman Alphabet, and Urban Space in the East and the West. The paper has been included in a book titled “De la Trace à la Trame” edited by Clement Noel Douady, Research Associate, published by Editions Harmattan, Paris.

D1.5 Use of this work to develop the conceptual framework for the research second part. Three sessions (at Paris on 17 April, 22 May, and Jun18 2014) have focused on how to translate the theoretical and conceptual approaches developed in the first year into methodological developments in second year, as a basis for future research.

D1.6 Presentation of results to end of year seminar workshop. Held on 10 July 2014 at CNRS, UMR 7218, Paris.

D1.7 Research grant application by Prof. Philippe Bonnin and Dr. Salvator-John A. Liotta arising out of research knowledge exchange, submitted to the National Research Agency of France (ANR) July 2013.

D1.8 Workshop and Conference about “Space, Language and Architecture” held on 3 Mar-12 Mar 2015 at the National Institut of Architecture in Rome, Italy. The workshop was attended by 2nd year master students.

D1.9 Presentation of results on May 7th 2015 at the University of Tokyo, Tokyo within the activities of the International Symposium “Japanese Architecture: What it is, what it ain’t (and why it matters)” organized by professors Kengo Kuma (Uni Tokyo) and Dana Buntrock (Berkley University).

D1.10 Signature of a contract for publishing a book with the working title “East West—A study on Space and Language” to be delivered by May 2017.

Additional deliverables*

Research workshop (at University of Paris 7 Diderot on 18 May 2014 attended by 16 people) framed the key issues and problems to be addressed in the second term.

*Meeting to plan contributions at University of Tokyo, at Tokyo 13 Nov 2013 attended by 8 people including Prof. Kengo Kuma, advisor of the research.

*Seminar “East West A study on Space and Language” held at Keio University, in Tokyo on 15 November 2013 attended by 50 people from 24 Universities and 32 nationalities. The seminar was part of Measuring the nonMeasurable, international symposium organised by Professor Darko Radovic. The seminar introduced the research aims, objectives, methodology, and the key issues and problems to be addressed in the research.

*Seminar “EastWest—A study on Space and Language” held at Beijing University, on 23 November 2013 attended by master students of the Urban Design School. The seminar introduced the research aims, objectives, methodology, and the key issues and problems to be addressed in the research.

*Individual meetings by Salvator-John A. Liotta during his visit to Beijing with Professor Bin Lu, director of Urban Design School, Beijing University, with Weixin Wang, professor at Tsinghua University, with Liu Hui, professor at Xi’an University of Architecture and Technology; during his visit to Kyoto Liotta met with Silvio Vita, director of Japanese Studies in Kyoto, and Benoit Jacquet director of EFEO, Ecole Française Etudes orientaux. All these meetings were very useful to share knowledge on framing and implementing the research agenda and for collecting data.
*Conference “Patterns and Layering: language and architecture” at IUAV, Architecture School of Venice, Italy, invited by Prof. Marco Pogacnik, attended by more than 100 architecture students, held on 5 May 2014.

*Conference “Language Patterns as 3D generator” at Polytechnic of Milano, Italy, invited by Prof. Marco Imperadori, attended by more than 60 architecture students, held on 2 March 2015.

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