the problems and science of
HUMAN SETTLEMENTS

THREE DOUBLE ISSUES:

1: **Reflections on Gottmann's thought**
   (no. 418/419, Jan./Feb.-Mar./Apr. 2003)

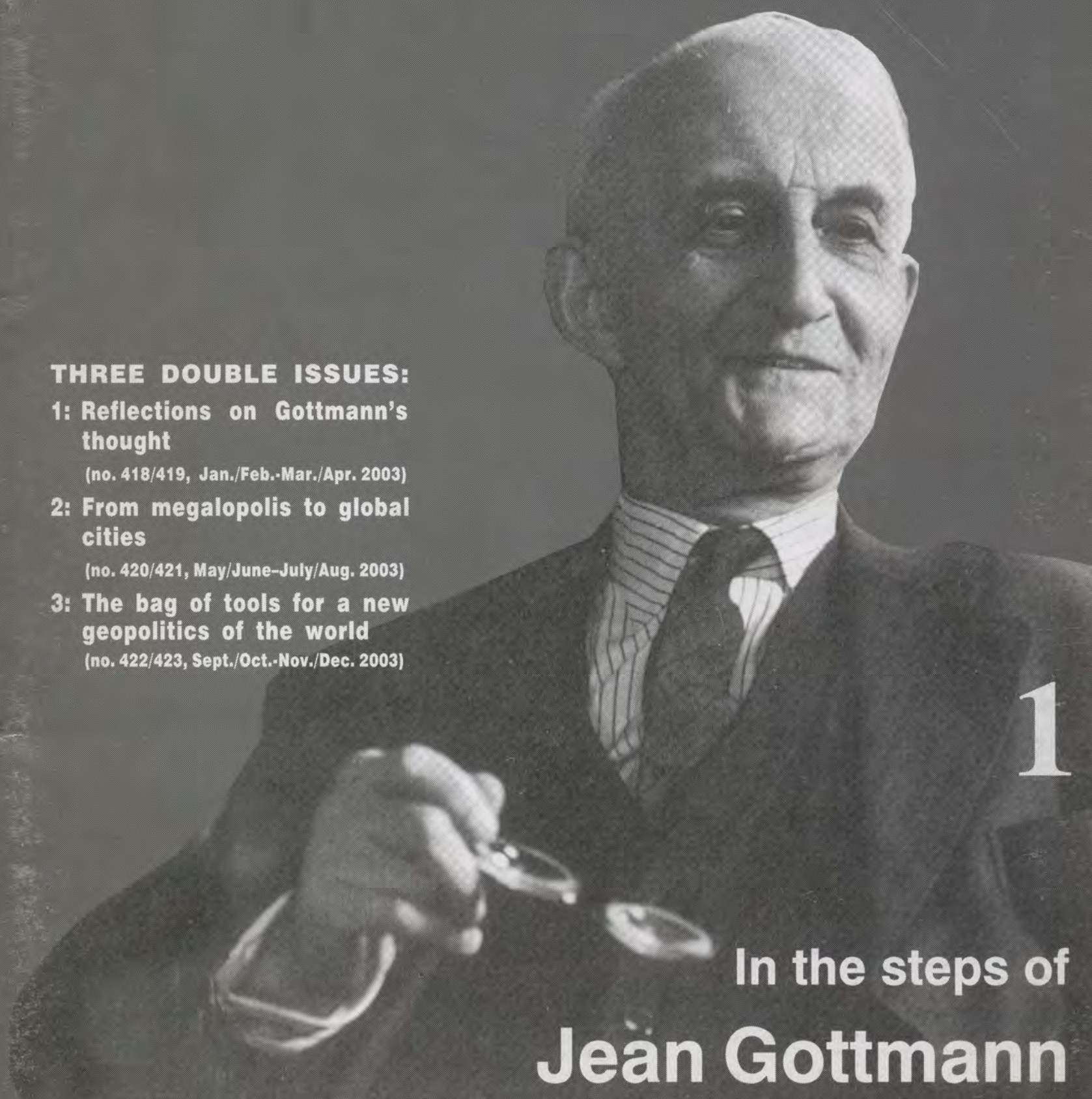2: **From megalopolis to global cities**
   (no. 420/421, May/June–July/Aug. 2003)

3: **The bag of tools for a new geopolitics of the world**
   (no. 422/423, Sept./Oct.-Nov./Dec. 2003)

1

In the steps of
Jean Gottmann

The Athens Technological Organization (ATO)

The Athens Technological Organization (ATO) is a non-profit organization established in 1958 to further technology and scientific research on any subject which can contribute to the improvement of human living conditions, technical and economic development and the training of people capable of pursuing these purposes.

Athens Center of Ekistics (ACE)

Upon its establishment in 1958, ATO started ekistic research and educational programs and later on in 1963 established the Athens Center of Ekistics (ACE) to foster a concerted program of research, education, documentation, and international cooperation related to the art and science concerned with the development of human settlements. In the domain of documentation in addition to its library, ACE publishes the following two journals:

• Ekistics, the Problems and Science of Human Settlements, and
• The Ekistic Index of Periodicals, as well as
• A series of research reports and monographs documenting its following four major research projects:
  – "The City of the Future"
  – "The Capital of Greece"
  – "The Human Community"
  – "The Ancient Greek Cities"

Since 1965 ATO-ACE have hosted on their premises the Headquarters and Secretariat of the World Society for Ekistics (WSE), an independent organization, whose goals and objectives are compatible with those of ACE.

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World Society for Ekistics (WSE)

The Society – an international nongovernmental organization (NGO) in consultative status with the United Nations (ECOSOC) – is a nonpolitical and nonreligious body with limited membership, formed to study man's patterns of living and their physical expression in the past, present, and future. The aims and objectives of the Society are:

• To promote the development of knowledge and ideas concerning human settlements by research and through publications, conferences, etc.;
• To encourage the development and expansion of education in ekistics;
• To educate public opinion concerning ekistics, thus stimulating worldwide interest and cooperation;
• To recognize the benefits and the necessity of an interdisciplinary approach to the needs of human settlements, and to promote and emphasize such an approach.

EKISTICS

ΟΙΚΙΣΤΙΚΗ

the problems and science of
HUMAN
SETTLEMENTS

In the steps of Jean Gottmann

Three parts in three double issues

- **Part 1: Reflections on Gottmann's thought**
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Guest - editor: Calogero Muscarà

Part 1: Reflections on Gottmann's thought

EKISTICS / ΟΙΚΙΣΤΙΚΗ: the problems and science of HUMAN SETTLEMENTS

In the steps of Jean Gottmann (three parts)

General introduction

Part 1: Reflections on Gottmann's thought (vol. 70, no. 418/419, January-April 2003)

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In the steps of Jean Gottmann – Part 1 of 3

General introduction

Part 1: Reflections on Gottmann's thought

Cover: Jean Gottmann, 1983. (*Source:* Photograph by Hazel Rossetti, Fellow of St. Anne's College, Oxford).

To the Reader

As is stated in the tables of contents (pages 2 and 3), the papers solicited and compiled by Calogero Muscarà, guest-editor, for the special volume of Ekistics (vol. 70) entitled "In the steps of Jean Gottmann," are organized in three parts, in three corresponding double issues of the journal with the following sub-topics:

Part 1: Reflections on Gottmann's thought
         (vol. 70, no. 418/419, January-April 2003);

Part 2: From megalopolis to global cities
         (vol. 70, no. 420/421, May-August 2003);

Part 3: The bag of tools for a new geopolitics of the world
         (vol. 70, no. 422/423, September-December 2003).

The present issue is Part 1.

The reader interested in the contents of the entire volume should refer to Parts 2 and 3 of which detailed tables of contents are given on the two pages that follow (pp. 121 and 122).

In the steps of Jean Gottmann – Part 2 of 3

General introduction

Part 2: From megalopolis to global cities

Cover: Jean Gottmann, 1983. (*Source*: Photograph by Hazel Rossetti, Fellow of St. Anne's College, Oxford).

In the steps of Jean Gottmann – Part 3 of 3

General introduction

Part 3: The bag of tools for a new geopolitics of the world

Cover: Jean Gottmann, 1983. (*Source*: Photograph by Hazel Rossetti, Fellow of St. Anne's College, Oxford).

General introduction

Bernice and Jean Gottmann at a vacation hotel in Eilat, Israel during the summer of 1993.

The editor's page

● The completion of this volume of *Ekistics* makes the guest-editor, Professor Calogero Muscarà, and myself really proud and happy. We are also relieved for having fulfilled, albeit partially and belatedly, a longstanding commitment, and are deeply grateful to all those who have joined us in this tribute to Jean Gottmann who has marked our lives since we first came across some of his thoughts. I remember Calogero Muscarà telling me what a struggle he had to go through for many years obliged to work in universities and other research institutions, without real interest, in physical geography, when his main interests were history and social and political sciences which were "more appealing for the explanation of life." It was only in the mid-1950s when he discovered Gottmann's book *La politique des États et leur géographie,* that he began to understand how effectively geography could be connected to his real interests. The long period of close collaboration, both nationally and internationally, between Gottmann and Muscarà, which started 20 years later in 1977, only ended with Gottmann's death in 1994 but Muscarà's keen interest and personal involvement in promoting Gottmann's thought never ceased. I myself, an architect-planner, already fully engaged in ekistics,[1] and a close collaborator of Constantinos A. Doxiadis,[2] will never forget the day I first met Gottmann in the early 1960s and how avidly I absorbed the relevance of his remarks on the complexities involved when trying to apply the interdisciplinary approach needed in assessing conditions for planning action. And this continued during all the years and on all the occasions I had the good fortune to be with him.

● I think it is appropriate here to remind readers of Gottmann's long involvement with ekistics – with Doxiadis for the first 15 years and thereafter with the rest of us.

His first contact with Doxiadis was in 1960. Three years later, in 1963, an abstract of a paper by him appeared in *Ekistics* for the first time. He first joined the activities of ekistics in 1964, at the Delos Symposion (Delos Two) – the annual week-long conference held on board ship at the invitation of Doxiadis, focusing each year on the discussion of a major theme. Since then, further to his participation in several Delos Symposia (1964, 1968, 1969 and 1972) Gottmann was one of the founders of the World Society for Ekistics[3] of which he became the third President from 1971 to 1973, and never stopped being actively involved in ekistics until the end of his life.

Referring to the mutually gratifying relation between him and Doxiadis, Gottmann[4] writes that his "colleague in the study of settlements and of the modern urban evolution, and a personal friend" – who also "knew and valued the power and lasting quality of ideas expressed in written words and symbols that outlive stone and style" – had in his overall effort two priorities:

• "to search for a widely publicized consensus on the present needs of human settlements, established by free and thorough discussion on an international and pluridisciplinary basis: the universality and complexity of the problems called for a broad spectrum of participants in the debate and in the agreement; this was attempted and largely achieved by the Delos Symposia and their Declarations from 1963 on"; and,

• "to further settlement analysis and planning on the necessary scale," develop ekistics – "a general body of theory, again on an interdisciplinary and worldwide basis ... a permanent, evolving and spreading scientific approach to the study of and action for human settlements."

The association of these two men, both so much ahead of their time, was profound, mutually enriching, and inspiring.
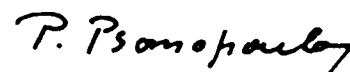
Naturally, the *Ekistics* journal was always an open forum for Gottmann and his thought. We have published many articles by him[5] on a wide variety of themes, and also reports on and abstracts of his contributions to discussions in the international meetings or other programs of the Athens Center of Ekistics, such as the Delos Symposia. Furthermore he acted as guest-editor for three issues of the journal, the last being in 1990.[6]

● But we have never had the opportunity for such a comprehensive – though not exhaustive – presentation of his life and thought as in the present case where we have the privilege to host again and walk in the steps of this unquestionable authority together with so many distinguished scholars, having as a guide in this itinerary Calogero Muscarà,[7] a very dear friend and colleague, and a real admirer and "disciple" of Gottmann. Muscarà, our world expert on Venice, further to being known for his exceptional contribution through research, teaching and writings to the wide field of geography and its relation to human settlements planning, became a member of the World Society for Ekistics many years ago on the strong recommendation of the great Master, and he is a participant in its meetings, and a regular contributor to *Ekistics*. Who could be better qualified to act as guest-editor for such an endeavor?

I will not expand here on the contents or the structure of the present volume of *Ekistics*. This task is so brilliantly fulfilled by the guest-editor in his introductory statement and his notes preceding each of the three parts into which the papers are divided. In this respect, the reader may also refer to the Ekistic Grid for each individual paper, and the Anthropocosmos Model on p. 391.

I would like, though, to stress how rewarding it is to know that whatever this effort represents it is only a step in a long process with a really substantial past and promising future. The agenda proposed for further action and the involvement of the younger generation in this process give us grounds for hope.

● In closing, let me be personal and appeal for the kind understanding of Mrs Bernice Gottmann for my initiative in using, without her permission, the photograph opposite this note. After all, on every occasion since we first met, whether as their guest or their host or simply a participant with them at meetings, not only in Athens, Oxford or Italy but the world over, Jean and Bernice were always together. So why shouldn't we feel that we are all together on this occasion as well?

P. Psomopoulos

From the global network of megalopolises to the political partitioning of the world

The guest-editor's introductory statement

Calogero Muscarà

The author, guest-editor for the three double issues of this special volume of Ekistics, is Professor of Urban Geography at the University of Rome La Sapienza. He has been a member of the Commission Permanente de Géographie Politique chaired by Professor Jean Gottmann. He chaired the Working Group on Geography of Transport of the International Geographical Union from 1980-1988. Professor Muscarà's scientific interests have always focused on the epistemology of geography. He has researched issues on the geography of development and on regionalization, especially regarding its relationships to the dynamics of urbanization. Of his numerous publications, his latest book is on the paradox of federalism in Italy. He is a member of the World Society for Ekistics.

● **From Paris to Ekistics: The validity of a great geographical theory**

This special volume of *Ekistics* began in a very simple way. In 1996 an important symposion devoted to the thought of Jean Gottmann was organized at the Sorbonne by Paul Claval, George Prevelakis and André-Louis Sanguin. Jean Gottmann was one of the greatest geographers of the 20th century. The title of this meeting made explicit reference to the Gottmannian concept of "iconography" and to the way in which it could apply to the identity of Europe after the fall of the Berlin wall and the collapse of the Soviet Union. The conference attracted many researchers to Paris, not just experts and admirers of Gottmann's thought. There were also numerous young scholars, who discovered the thought of the great geographer evoked by the political events of the time.

In truth, as George Prevelakis writes for this special volume, the outcome of the Paris conference on current European issues was not entirely convincing. Although dedicated to Gottmann and his thought, the Paris conference focused more on research concerning single European cases after the recent political events. There was at least one exception though; the

quest for a unified European iconography – an issue that Gottmann would have attributed to a need for security, as opposed to the possibility of maintaining a variety of European iconographies – in Gottmann's perspective could have been an indicator of Europe's strength.

But there is no doubt that the greatest appeal of the conference for researchers interested in the distribution of humans in space had been the opportunity to verify in the light of recent events in the political geography of Europe the validity of a modern theory of the relationships of human communities with territory. That important studies on the matter would be published for a wider readership than that of the Paris conference seemed thus a good reason to propose to the Editor of this journal to host them in *Ekistics*, although some of the papers in English had already been published.

Therefore it seemed to me that it would be of interest to return to the initial proposition of the Paris conference, emphasizing not so much the single cases of Europe in the light of Gottmann's political thought, but on the contrary the validity of the ideas of Gottmann in the light of European events, without concerns of a geo-political nature having to resolve single cases. The initial interest of the Paris conference regained importance by showing that it was necessary to read again the work of Gottmann to measure its validity in terms of the contribution it could make to the explanation of the European concerns that emerged after the collapse of the Berlin wall.

Many papers, especially those presented in the first part of the Paris conference, would certainly have been of great interest to a Society such as the World Society for Ekistics (WSE) and to a journal such as *Ekistics* devoted to the theories of the human occupation of inhabited space. It would also have been a way to remember that Jean Gottmann had been President of the World Society for Ekistics and had collaborated assiduously with the journal since the 1960s. The publication of the papers of the Paris conference turned then into an occasion to measure the validity in time of this theory and to verify to what degree and in what way it had kept on developing. The request to the authors was to publish the studies presented in Paris or to write new studies on the same matter, but expressly focusing

on illustrating the thought of Gottmann became the new spirit of the special issue. At the same time it also became legitimate to address the same request to all the partners of *Ekistics*. And the result was that all the contributions are new.

● **A second impulse**
The second impulse for a publication on the thought of Jean Gottmann came from the consideration of what had happened above all in Anglo-Saxon geography after the disorientation produced by the collapse of the so-called *new geography*. The whole validity and modernity of the thought of the great master consists in the fact that, in those same years in which American geography denounced the *"exceptionalism"* of French geography, Gottmann too was aware of the necessity to overcome the *"exceptionalism"* proposed by French geography, and this was confirmed by the important considerations of Maurice Le Lannou. For the *"exceptionalism"* the interest of geography is in the specific cases and not in theories. But the differences between the thought of Gottmann and that of the *"new geography"* were very relevant. Perhaps for excess of abstraction the *"new geography"* proposed, as other sciences, a widespread use of statistics and, above all, mathematics. But, not long after 1953, the year in which this American experience began, numerous scholars of the *"new geography"* started to recognize its limits. And sooner or later the *"new geography"* was abandoned.

Unlike the American experience that, for excess of abstraction, would quickly be shown inadequate, Gottmann completed the paradigmatic turn by reapproaching the geography of the French school. Indeed he succeeded in bringing geography – a discipline whose existence is justified by the need to explain the variety of the inhabited world – close to the epistemological way with which historians have brought history closer to the other human and social sciences. This is testified by the interesting interview that Gottmann granted to the historian Miloš Perović. In this interview it emerges how much for the Oxonian master human geography remains a discipline that is not epistemologically different from all other forms of knowledge in the intent, confirmed in the conclusions, to provide some references of a practical nature. But geography is methodologically different; first of all because it draws the proof of its statements from the historical reality of territories; and secondly for the attention, similar to that of history, that combines the rigor in the documentation of facts and circumstances with the caution towards conclusions that are too simple and easy.

A few essays of this volume help us to understand this contribution of Gottmann. This is an aspect that Pavlos Tzermias, a historian interested in the relationships between history and geography, reflects well in its articulations and references. And it is also noticed in the articles of John Agnew or Luca Muscarà, who underline the connections that intervene between the various parts of the thought of Jean Gottmann. In other words we are in the presence of a real new theory that justifies the judgment that Gottmann deals with a new anthropocosmos and ekistic model parallel to the one proposed by Constantinos Doxiadis.

● **The geographical theory of Jean Gottmann**
In the context of these considerations, the commemoration of the 10th anniversary of the death of Jean Gottmann – the third motivation for the preparation of the present volume of *Ekistics* – is a duty and homage to his thought and the continuous flowering of the studies that he initiated. But it is also an opportunity to recognize in an appropriate way the remarkable place of Gottmann in the history of the geographical thought of the second half of the last century, which is the fruit of his work on *Megalopolis* or of his contribution to the solution of the epistemological problems of geography.

First of all it is important to consider the theory he elaborated to explain the relationships of man with geographical space, a theory he formulated in a famous essay of 1948 *(De la méthode d'analyse en Géographie humaine)* and in the chapters on geography (1) and on regional geography (8) of his book *La politique des États et leur géographie* (1952). But it is necessary to clear the field from a possible misunderstanding, i.e. the conviction that this theory is just a political theory. If someone thinks that the geographical theory of Jean Gottmann is political because it is proposed and formulated in a book on political geography, the reading of the book helps to clarify this point. The tendency to the *compartimentation* (partitioning) of space is as diffused as the tendency to the *centralisation* and to the creation of *"carrefours"* (crossroads). It is in the *carrefours* that we find the temple, the castle and the market, i.e. the points of departure of the city since antiquity (religion, politics and economy). But *centralisation*, i.e. the tendency to serve parts of the space starting from a center, lives together with a tendency to divide the space for services or to give identity to a territory which a people considers its own. This *"service partitioning"* lives always together with *circulation* (movement), the first great strength working on the world surface to deplace raw materials, products, men and ideas. The *"political compartimentation"* (partitioning) (states, regions but also empires or federations) is the answer to that other big strength working on the Earth, i.e. that coming from the world of ideas, values *(iconographies)* and myths, rites and liturgies to restrain the tendency to the *"service compartimentation"* (service partitioning) that is perpetually moving.

That is not just a political theory but a general theory of the human occupation of the Earth's surface. And, since the human activity that Jean Gottmann confides to geography is to live together – in the accessible and humanized space – with other men and nature, this theory appears to me a true ekistic theory or even a new anthropocosmic model after the model of Doxiadis.

From a casual encounter with a great geographer interested in society and geography, this volume became an occasion to revisit this scientific theory measuring its congruence with the problems of the following years, that is with subjects in which both the World Society for Ekistics and this journal have always been interested.

● **The three parts**
However the subdivision of this volume of *Ekistics* into three parts does not correspond to the above theories. Although more than one article was eligible to be included in more than one part, I made an effort to bring together:

● in the first part (vol. 70, no. 418/419, January-April 2003), the studies that directly or indirectly contribute to the explanation of the thought of the great master; this part is concluded by Jean Gottmann's complete bibliography first compiled by Lord Patten and subsequently updated by Luca Muscarà;

● in the second part (vol. 70, no. 420/421, May-August 2003), the studies on the particular form of regionalism that Gottmann attributed to contemporary urbanization that speak of "megalopolis"; this part also contains those articles that investigate the political dimension of the city and concludes with a revisitation of contemporary urbanization in an attempt to evaluate the forecasts of both Gottmann and Doxiadis;

● in the third part (vol. 70, no. 422/423, September-December 2003), a collection of papers in which the authors question whether and how the cognitive tools proposed by Gottmann facilitate the understanding of the evolution in contemporary geography in terms of change, partitioning and centrality.

Acknowledgements

Fig. 1: Jean Gottmann with Calogero Muscarà in Rio de Janeiro, August 1982.

In the steps of Jean Gottmann

Guest-editor: Calogero Muscarà

Part 1

Reflections on Gottmann's thought

Fig. 2: Jean Gottmann at home in Oxford, during one of Calogero Muscarà's visits in the early 1990s.

Reflections on Gottmann's thought

Introduction by the Guest-Editor

Calogero Muscarà

The text on these pages is a brief introductory note by the guest-editor on the contents of Part 1 of the present issue.

Of the three parts of this special number of *Ekistics,* the first, entitled "Reflections on Gottmann's thought," contains 13 articles in three groups. In the first group are those that focus on the thought of Jean Gottmann, such as the papers of Robert Harper, John Agnew, Luca Muscarà, Nicolas Prevelakis, Jean-Paul Hubert as well as Pavlos Tzermias whose essay concentrates more on the relationships between history and geography. The papers in the next group – contributed by Christian Lagarde, Jean Laponce, Ron Johnston, Yasuo Miyakawa and the present guest editor – refer indirectly to the thinking of Gottmann. Lastly are essays by Paul Claval who highlights some relationships with Gottmann's thought, and Thomas Pierre Fournel who provides an in-depth analysis of new geographical realities. Let us examine them analytically.

The first papers of this part emphasize the theme of the relationship of the political thinking of Gottmann with those of urban geography.

● For **Robert Harper** the scientific life of Gottmann is cleanly divided into two parts and in the second he discovers that urban change corresponds to an important economic, social and political change. He writes: *"Megalopolis: The Urbanization of the Northeastern Seaboard of the United States* was a watershed for Jean Gottmann as well as for the study of metropolitan areas. Up until he embarked on his seminal study of the adjacent, interacting huge metropolitan areas from Boston to Washington he had written little about cities and not much more about the United States. After that time the bulk of his writing was about large urban places." But, Harper continues, "in *Megalopolis* Gottmann was already writing about the emerging global economy – and its accompanying global cultures – that increasingly dominated the world through the remaining more than 30 years of his life. The rest of his life would be spent thinking of this phenomenon, discussing it with urbanists throughout the world, and writing about the large urban concentrations of this new world." The study of urbanization brings

Gottmann to the realization that the change had greater depth: "What began as the study of a spatial, regional complex, increasingly turned to concern, even predictions, emphasizing social and economic developments. Now, two good quarters of a century later, he realized that he was dealing with the mutation in the very nature of the city, and in the behavior of urban society" ("The opening of the oyster shell," 1990).

With this opening of his urban thought towards the big economic and social changes of our time to which Harper refers, Gottmann's reflections on contemporary urbanization must be put in the context of his in-depth analysis of territorial systems.

● In the essay that he devotes to megalopolis and global cities, **John Agnew** writes "his urban geography was an outgrowth of his political geography which emphasized historical oscillation between closed and open territorial systems." Consequently "urban development can only be understood in the context of the natures of the territorial system prevalent at a certain historical conjuncture." Gottmann's ideas about urbanization are inseparable from his theories on the partitioning of the world and on the significance of territory: they are inextricably linked together to form a cohesive theory.

● The relationship between Gottmann's contributions to political geography and to urban geography is also analyzed by **Luca Muscarà.** This continuity exists on two levels. First, there is a correspondence between the general historical plan and the author's biography. For example, the context of the Cold War defines a geopolitical scenario characterized by relatively stable borders, which temporarily eclipse the dominant role of political geography in the 1930s and 1940s. In the second postwar period, the newly established political stability fostered economic expansion, a population explosion, development of mass transportation (automobile and airplane), and reconstruction in Europe, all of which contributed to a substantial urban renaissance, a geographic phenomenon anticipated by Gottmann. The second level of investigation moves on from the historical, scientific, and biographical contexts of the epoch to Gottmann's work itself. Here the article attempts to track via its vast bibliography some characteristic constants in the evolu-

tion of his thought, singling out, for example, in what way within megalopolis those factors that had already been theorized to explain the political partitioning of geographical space (such as circulation, iconography, and carrefour) are present.

● **Paul Claval** also refers to, if indirectly, Gottmann's urban geography, but his attention is focused on the changes of urban geography and on the fact that Gottmann could be considered a precursor. "The substitution of cultural approaches to morphological and functional ones was mainly achieved from the 1970s. Some authors had however understood earlier the interest of combining these different perspectives: it explains the interest of Jean Gottmann's contributions to the study of big modern cities."

● With **Pavlos Tzermias**'s essay, we move from urban to political geography. The article faces the theme of the relationships between history and geography seen by both geographers and historians. Since for geographers Tzermias takes Gottmann into consideration, his article is an occasion for a detailed reexamination of the theory of political partitioning of space and other themes of the Oxonian master. After all, "the distinction between the 'static' element of geography and the 'dynamic' element of history recalls the concept of iconography proposed by Jean Gottmann. Here, it should be emphasized that Gottmann was conscious of the interdependence of geography and history. In the intellectual environment in which he studied, the frontiers between geography and history were practically non-existent." For historians, the author considered is instead Fernand Braudel. "From the point of view of a historian," Tzermias writes, "it can be said that there are several connections between geography and history. To follow Fernand Braudel, history could be divided into three parts: an immovable history, a history of slow rhythm, and a history formed by short, rapid and nervous oscillations." And although "the almost immovable history," that is, "geographical time and, quite simply, the relations of man who makes the history with the geographical milieu, are of crucial importance under certain conditions," Tzermias shares Braudel's thought. "Je n'ai pas voulu négliger," Tzermias quotes, "cette histoire-là, presque hors du temps, au contact des choses inanimées, ni me contenter à son sujet, de ces traditionelles introductions géographiques à l'histoire, inutilement placées au seuil de tant de livres, avec leurs paysages minéraux, leurs labours et leurs fleurs qu'on montre rapidement et dont ensuite n'est plus jamais question, comme si les fleurs ne revenaient pas avec chaque printemps, comme si les troupeaux s'arrêtaient dans leurs déplacements, comme si les navires n'avaient pas à voguer sur une mer réelle, qui change avec les saisons" (BRAUDEL, 1990).

As Harper's essay shows, the significance of his study of the American Northeastern megalopolis brought Gottmann to expand his analysis to the issues of contemporary urbanization at a global scale. So Tzermias' essay introduces, as I said, Gottmann's political geography and the two great forces that influence the human geography of the world.

The articles that follow deepen three themes above all: "iconography," territoriality, and finally boundaries and frontier.

● **Nicolas Prevelakis** writes, "Gottmann's 'Iconography' does not make reference to simple images, but to the icons of the Byzantine tradition. Through his studies and his Ukrainian origins, Gottmann was equipped with a profound understanding of Christian Orthodoxy and of the symbolic wealth of icons in the Byzantine and post-Byzantine world." For this Nicolas Prevelakis dedicates his study to an in-depth analysis of the relationship of the concept of Gottmann's iconography – that, as is known, picks up the symbiosis "entre trois éléments essentiels constitutifs de toute société et de toute iconographie régionale: la religion, les passés politiques et l'organisation sociale" (GOTTMANN, 1952, p. 220) – with the Byzantine and Greek

Orthodox traditions.

Tzermias writes: "Jean Gottmann emphasized the necessity 'de faire entrer la géographie régionale dans l'iconographie.' And he writes: 'C'est ainsi que l'iconographie devient en géographie un môle de résistance au mouvement, un facteur de stabilisation politique' ." That is a way to resist change.

● **Christian Lagarde** thoroughly examines this dimension using the example of a Southwestern French minority, considering not only its symbols and myths but also its representations. "In contrast to inherited nationalist groupings, political claims have emerged based on cultural, linguistic or religious identity, tending to produce a fragmentation of the nation-state. These processes, more or less violent in their expression, are nourished by *representations*, that is to say manifestations of the *Imaginary*, based often on myths which are variously understood outside, and conserved to a greater or lesser degree inside, the geographical entities to which they apply. Thus the situation lends itself to an analysis in terms of *images*, which may become *icons* when they are invested with the intangible values associated with the sacred, and may thus form *iconographies*."

● Next, my own study examines the formation of community icons at the urban scale from the concept of neighborhood to that of icon. The analysis concerns above all the literature of urban planners and architects that evokes the symbolic values of the city and architecture in contemporary thought and in images of the past.

The two essays that follow are devoted to a second theme in Gottmann's political geography: territory.

● **Ron Johnston** refers to the 1973 book *The Significance of Territory*, recalling that he had "explored the importance of evolving societies of the division of the earth's surface into bounded territories associated with sovereign states." At the same time, however, Gottmann had "identified the contemporary situation as one of considerable fluidity, with territory losing its importance at some scales but retaining it at others." This research, as Johnston writes, concluded 30 years after it was presented, suggests "how that fluidity has developed and how different scales have become important in the use of territoriality strategies."

● A new form of territoriality is investigated by **Thomas Fournel,** who focuses on the inhabitants of Hong Kong who, after the return of the city to China, moved to Canada. "During the last few decades, another form of Chineseness emerged in Hong Kong, modern and capitalist, announcing a new Chinese identity not only for its inhabitants but also for all the overseas Chinese. In particular, the recent brain drain, along with the exodus of business people, ended up in spreading satellite communities in the English-speaking New World. Simultaneously, this complexification of human migration was predicating a new territorial era corresponding to the dispersion of an ethnic group (or even of a family) around the world according to capital accumulation strategy. Therefore, a migrant lifestyle was born, culturally self-sufficient, including a Western developed environment."

Already Gottmann, Johnston writes, "explored the importance to evolving societies of the division of the earth's surface into bounded territories associated with sovereign states."

● A theme closely connected to that of territoriality is that of *confinements*, to which **Jean Laponce** dedicates his article. In the essay, starting from the recognition that Gottmann was right in pointing out a tendency – parallel to the process of globalization – of new states to multiply, he posits how boundaries could be defined from there. "True, the EU and Schengen type of agreements reduce some of these borders," Laponce writes, "but for the world as a whole the century just ended marks a triumph of the movement of nationalities expressed in the juxtaposition of sovereign states with juridical control over separate

territories." He asks: "Will the 21st century reverse the process of fragmentation of the world system of states?" Certainly, "the formation of large economic and military blocs capable of measuring up to the super powers of the time will push the system in that direction; but, ethnic and national conflicts will continue to have an opposite effect. We should thus anticipate that new nations will appear, especially if economic markets and political 'markets' become decoupled from each other, thus allowing very small states to find viable niches in the global economy."

● **Yasuo Miyakawa**'s essay is also of great interest. It is well known that Gottmann returned repeatedly to Japan where he was able to closely examine the development of the megalopolis. Miyakawa examines the history of Japanese geography in the light of Gottmann's thought, above all the concepts of central regions, frontier regions, iconography, and orbits. "The development of central regions and the evolution of frontier regions in Japan," he writes, "have been closely interrelated with each other as Japan has become incorporated into the modern world system." Recalling the basic structure and the mechanism of interaction between center and frontier, Miyakawa investigates "the growth of Japan at five historical stages, at each of which the changing role of iconography is examined in relation to the expansion or contraction of Japan's orbit on the global scene."

● This part closes with the contribution of **Jean-Paul Hubert**, who discovered the thought of Gottmann after studies of a quantitative and analytical nature. The interest of this essay derives from the fact that, continuing the same approach, Hubert places the master's thought in the historical context of the years when American geography spread throughout the world. "The

profound transformation of the natural as well as the social sciences," he writes, "was felt with exceptional force in the United States after the Second World War. As a consequence, it became imperative for geography, which was 'born of the need to build a bridge between the natural sciences and the human sciences' (GOTTMANN, 1952), to reconstruct this bridge entirely, in a more rational manner and with a keener awareness of what was at stake than that of the nineteenth-century masters." In this historical and theoretical perspective, Hubert thinks that "after having developed a formal method for the analysis of spatial organization ... [Gottmann] carried out a critical review of existing theories concerning the determining factors of this organization, and devised a new one. Through this epistemological maneuver," Hubert proposes, "Gottmann re-oriented geography by placing it in the realm of the sciences of organization and structures. It is in this very structuralist orientation that the value of this theory lies, although it was acknowledged as such neither by geographers, nor by the main representatives of structuralism." In fact Jean Gottmann's thought continues to influence many contemporary geographers, and his contribution not only represents a bridge between the natural sciences and the human sciences, as he himself wrote in 1952, but a real bridge between the methods of historical and scientific disciplines.

Of course the order I give to the articles of the first part is arbitrary. The effort is to put together the contributions of many authors on the thinking of Gottmann. But the reflection of the great master is so varied and complex that each author gathers a different aspect that is very difficult to coincide with unitary speech.

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Geographer, historian and classic French regionalist: The evolution of the writings of Jean Gottmann

"What began as the study of a spatial, regional complex, increasingly turned to concerns even predictions emphasizing social and economic developments. Now a good quarter of a century later, I realize that I was dealing with a mutation in the very nature of the city, and in the behavior of urban society."

Robert A. Harper

The author, Professor Emeritus of Geography, University of Maryland, College Park, holds four degrees from the University of Chicago and is the recipient of the University's Distinguished Alumnus award. A close associate of Jean Gottmann, he co-edited two volumes – Metropolis on the Move and Since Megalopolis with him. Harper's urban interest primarily concerns cities as central places and city networks. He also edited Modern Metropolitan Systems with Charles Christian. He has keen interest in geographic education. He is past president of the National Council for Geographic Education and recipient of their George J. Miller Award. He has written world geography texts for students from elementary school to college. He has been a visiting professor at the University of Manchester, University of Sydney, University of Durban-Westville, and Peking University.

Introduction

Megalopolis: The Urbanization of the Northeastern Seaboard of the United States was a watershed for Jean Gottmann as well as for the study of metropolitan areas. Up until he embarked on his seminal study of the adjacent, interacting huge metropolitan areas from Boston to Washington, he had written little about cities and not much more about the United States. After that time the bulk of his writing was about large urban places.

Early focus far from cities; but a seed had been planted

A Russian immigrant whose family had fled to France during the Russian Revolution, Jean Gottmann was educated in the French geographic tradition that emphasized human occupation of regions. This regional approach focused on the development of a particular culture's use of a given region through time. Emphasis was on the evolution of human development in the area from historical roots. As Gottmann, himself, has written:

I entered on a geographical career, intending to specialize in the human geography of the Mediterranean. I was trained in France where, at the time, the first two university degrees in geography and history were joined. So that historical geography or geographical history always seemed to me to be natural approaches (GOTTMANN, 1983a, p. 23).

Robert Dickinson in his book *The Makers of Modern Geography* wrote about a discussion between a French professor at the Sorbonne and his pupil in 1932. The professor identified four major practical problems to which a geographer could direct his attention:

• what to do about the crowding masses of population and the inadequate food supply in eastern Asia;
• how to improve the relations between Whites and Negroes;
• how to enlarge the areas under irrigation in arid lands without polluting the land with accumulations of salt; and,
• how to guide the growth of great cities.

The professor was Albert Demangeon, author of one of the first French regional studies; the pupil Jean Gottmann.

Gottmann's earliest papers from the early 1930s seemed to focus on the third of the above questions: irrigation agriculture. Fluent in Russian, he began writing about the agricultural and regional aspects of the Soviet Union. In the mid-1930s his interest in agricultural geography and irrigation became more focused, and his regional interests were now shifted to the arid lands of Palestine and the Middle East. He wrote about arid lands and irrigation agriculture.[1]

Writings about agriculture and the Mediterranean continued into the years of World War II. He now wrote about the Sahara and West Africa. It was during this period that he began writing more generally about human and social matters and about political states and power. From his first papers through this period almost all of his writing was in French journals.

(Source: Gottmann, 1961, inside front cover).
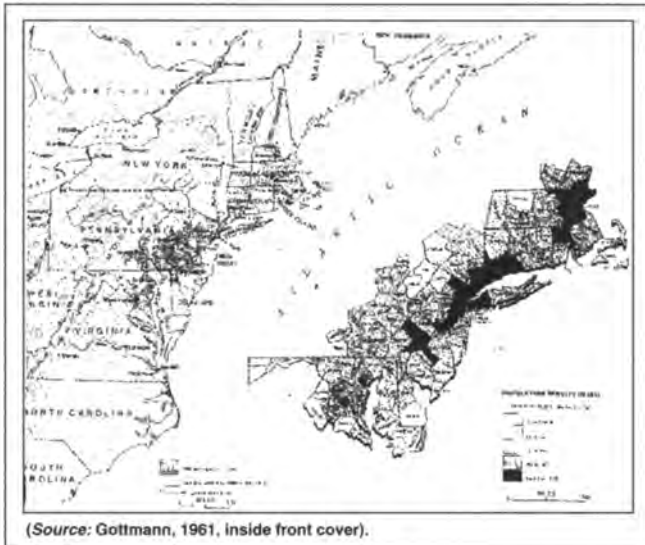
Fig. 1: The concept of Metropolitan Areas was first used by the U.S. Bureau of the Census in 1950, the latest census Gottmann had to work with. He used the population density map to illustrate the central cities and their surrounding urban sprawl.

(Source: Gottmann, 1961, p. 181).
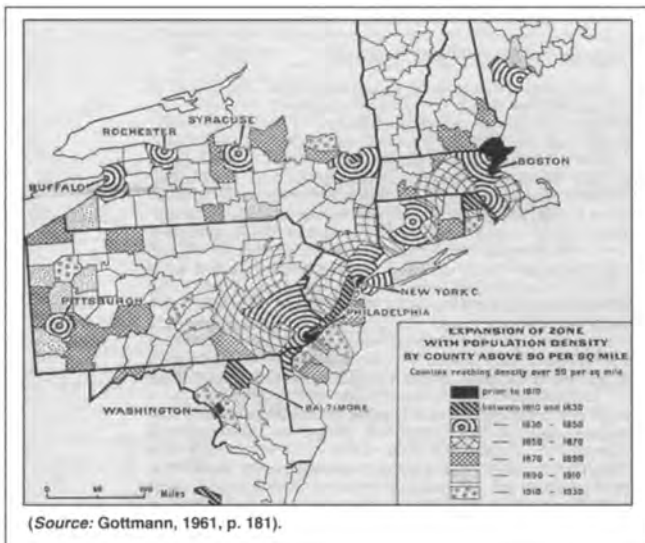
Fig. 2: Gottmann used this map to illustrate the outward sprawl from the key city centers through time.

World War II and the beginnings of Gottmann's "Atlantic Transhumance"

During the War Gottmann began what he called "a trans-Atlantic transhumance" (GOTTMANN, 1983b, p. 23) working for the French government in Washington, then teaching at Johns Hopkins before moving on to the United Nations when it was located in Lake Success, then to the Institute of Advanced Studies at Princeton. All of these experiences took place within the boundaries of Megalopolis: in Washington, Baltimore, and the New York Metropolitan area.

After the War he wrote a series of articles dealing with methodology in social and human geography. But, he now began writing about the United States in French journals. In 1949 he published a text on the United States in French, then a year later reversed and wrote a geography of Europe in English. Both displayed his ability to conceptualize from

particulars and utilize his broad knowledge of history. During this time, with service for the French government and the United Nations, he began to write about political geography and international relations, geography and the United Nations, the Monroe Doctrine.

In the 1950s, based at the Institute for Advanced Studies at Princeton, he was writing about the organization of space, political partition, the partition of Palestine and the new state of Israel, even the presidential campaign of 1952. During this time he did his first regional study on the United States in English: *Virginia at Mid-Century*. Research for the book took him to the southern fringe of Megalopolis in the Virginia suburbs of Washington DC.

At first glance, Jean Gottmann seemed an unlikely choice for the monumental study of the cities of the Northeastern Seaboard of the United States (figs. 1 and 2). He had proved his scholarship and, with the work *Virginia at Mid-Century*, his ability to handle a complex regional study, but at the time he certainly was not an urbanist. But, writing in the foreword of *Megalopolis*, August Heckscher, Director of the Twentieth Century Fund, states "In planning a study of the growth of a great urban region, so characteristic of our times, it seemed to the Trustees of the Twentieth Century Fund a good idea to seek out the contribution of a geographer with his own method of combining the insights of various disciplines and of a foreigner, who could look on a representative American phenomenon with fresh eyes." Notice that the study is seen by Heckscher as a regional study whose focus is a cluster of large urban centers, not as an urban study in itself. In the study Gottman speaks of a "symbiosis of urban and rural" and devotes chapters to megalopolitan agriculture, and woodlands and wildlife. But, *Megalopolis* would change both the direction of Jean Gottmann's career and the scope of urban scholarship throughout the world. Moreover, a new word – megalopolis – had been added to our urban vocabulary, a word that applied to much more than the seaboard of the Northeastern United States.

Discovering Megalopolis and its nature

The study of *Megalopolis: The Urbanized Northeastern Seaboard of the United States* grew out of discussions with colleagues at the Institute of Advanced Studies. Robert Oppenheimer, its director, was impressed and arranged for the Twentieth Century Fund to underwrite the study and its publication. Gottmann worked on the study full-time from 1956 through 1960.

For Gottmann *Megalopolis* was a complete shift from his earlier studies of his mentor's third practical issue, irrigation, to the fourth, how to guide the growth of great cities, but his methodology was a clear up-grading of traditional French regional geography. In *Megalopolis* he was following the French regional method he had been taught, examining the changing human occupance of a particular region. Writing of the purpose of his study in his preface to the book, he states:

> What is offered here can hardly be called a description. The writer has not aimed at a portrait of the area and its people ... Rather he has endeavored to analyze and understand the extraordinary dynamics that have created, in a place that was a wilderness three centuries ago, the enormous and powerful concentration of people and activities now achieved in Megalopolis ...

> Exceptional as it is, the urbanization of this part of the Atlantic seaboard of North America has been a signal of a steady trend toward the concentration of dense populations in large urbanized regions, a trend gradually becoming

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(Source: Gottmann, 1961, p. 560).   (Source: Gottmann, 1961, p. 571).
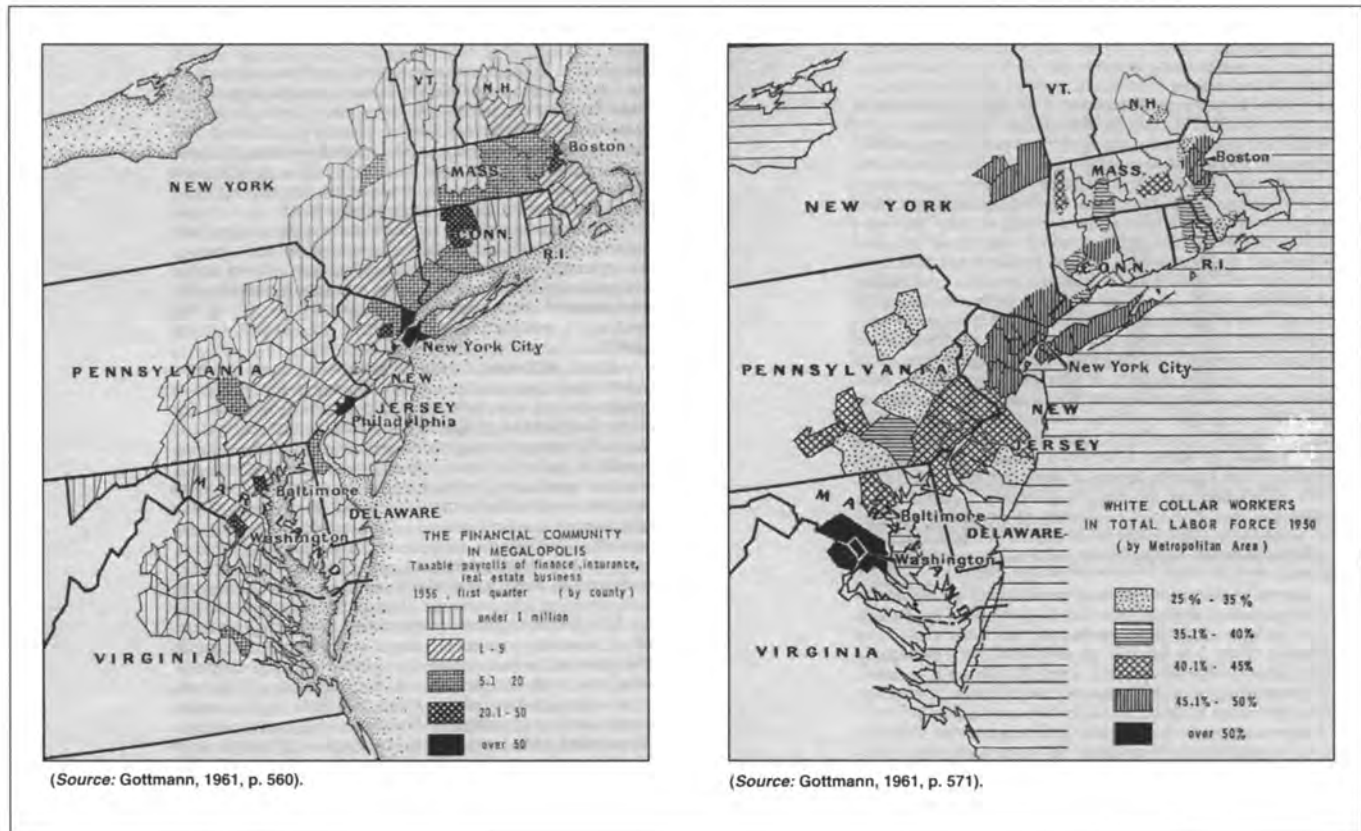
Fig. 3: Gottmann used the two figures above to illustrate the importance of white-collar employment, his quaternary functions, to point out the importance of finance and management functions in what he saw as the rise of these functions as the keys to the dominance of Megalopolis in the U.S. and world economies. He saw the centers within Megalopolis as changing from dominantly manufacturing-trade centers into what he spoke of as "transactional centers."

characteristic of this century. The distribution of habitat and economic activities is thus changing; new modes of life are appearing and spreading. This process, which marks an essential turning point of history, has been most advanced in this region, Megalopolis. In this book the urbanization of Megalopolis is presented as a significant experiment, the lessons of which must be taken into account not only by the people living in the area but by those of many other lands (GOTTMANN, 1961, p. lx).

This was a clear statement of his interpretation of the French approach to regional geography. Notice, in the statement above, Gottmann saw the megalopolitan region as "a signal of a steady trend toward concentration ... in large urban areas, a trend characteristic of this century ... new modes of life are appearing and spreading." In 1990 in writing about his thinking over almost 30 years since Megalopolis, he spoke of how that study "proceeds from a particular case in point to more general observations. What began as the study of a spatial, regional complex, increasingly turned to concern even predictions emphasizing social and economic developments. Now a good quarter of a century later, I realize that I was dealing with a mutation in the very nature of the city, and in the behavior of urban society" (GOTTMANN, 1990, p. 4).

Gottmann's choice of the cluster of giant metropolitan areas along the Eastern Seaboard of the United States from Boston to Washington in the immediate postwar period could hardly have been more significant in time or place. Those adjacent urban concentrations had been and were increasingly "the hinge" between the world's largest economy and the rest of the world. As the largest urban centers of the

United States since the beginning of European colonization, in the post-World War II period its "hinge" function now served the world's largest economy as it emerged from a tradition of isolation into a power in the new global world. The trends he saw emerging along the Northeastern Seaboard of the United States were being mirrored on varying scales in the urban core centers of every country.

In Megalopolis Gottmann was already writing about the emerging global economy – and its accompanying global culture – that increasingly dominated the world through the remaining more than 30 years of his life. The rest of his life would be spent thinking of this phenomenon, discussing it with urbanists throughout the world, and writing about the large urban concentrations of this new world. From Megalopolis onward, he was engulfed in the last of Professor Demangeon's four great issues for geographers.

In Megalopolis Gottmann examined a number of emerging facets of the new global cities: white-collar employment, communication links, commuting, urban centrality that for Gottmann were a part of the urban concentration he was examining (fig. 3). A review of urban writings of the time indicate that they were not major issues in urban geography and sociology courses then, but they have become major themes of the study of large cities since. Their importance was recognized in large part by his findings in Megalopolis.

After Megalopolis was published in 1961, Gottmann's writing was almost entirely about urban matters, although a few political articles continued in the 1960s. They probably represent materials that he had worked on before Megalopolis.
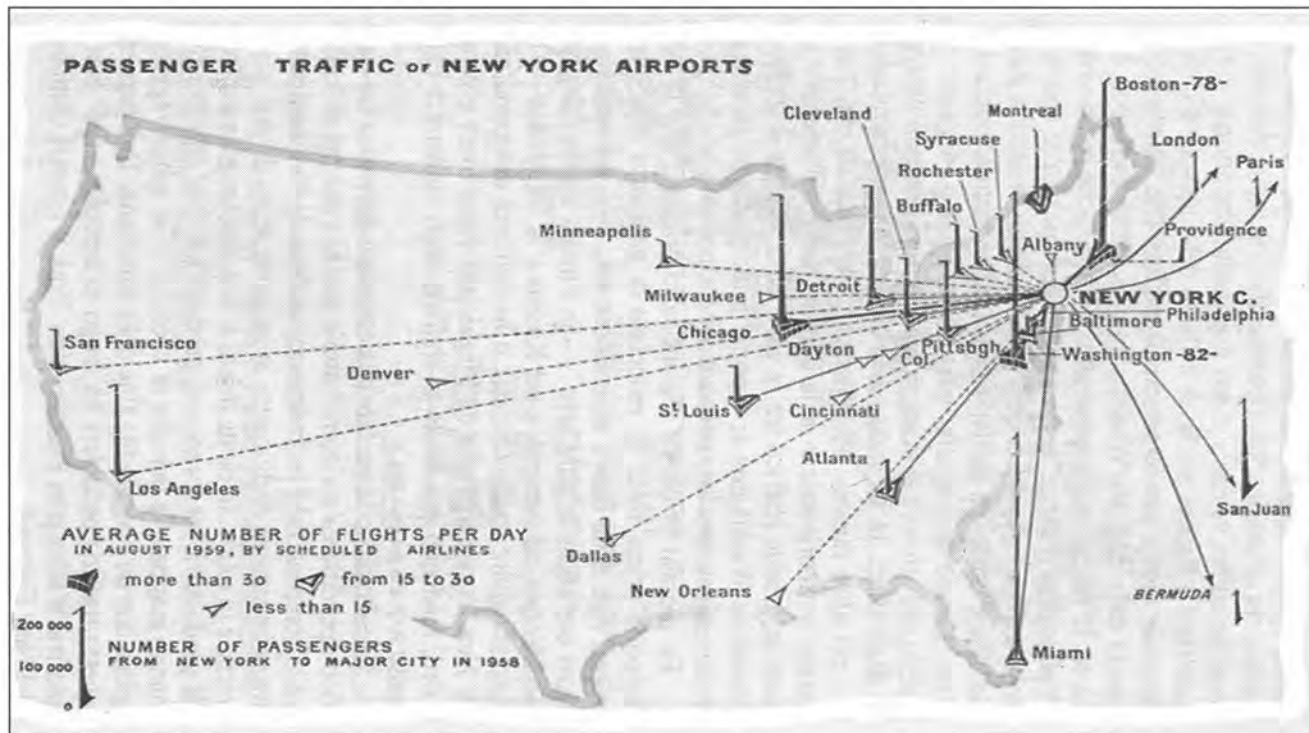
(*Source:* Gottmann, 1961, p. 646).
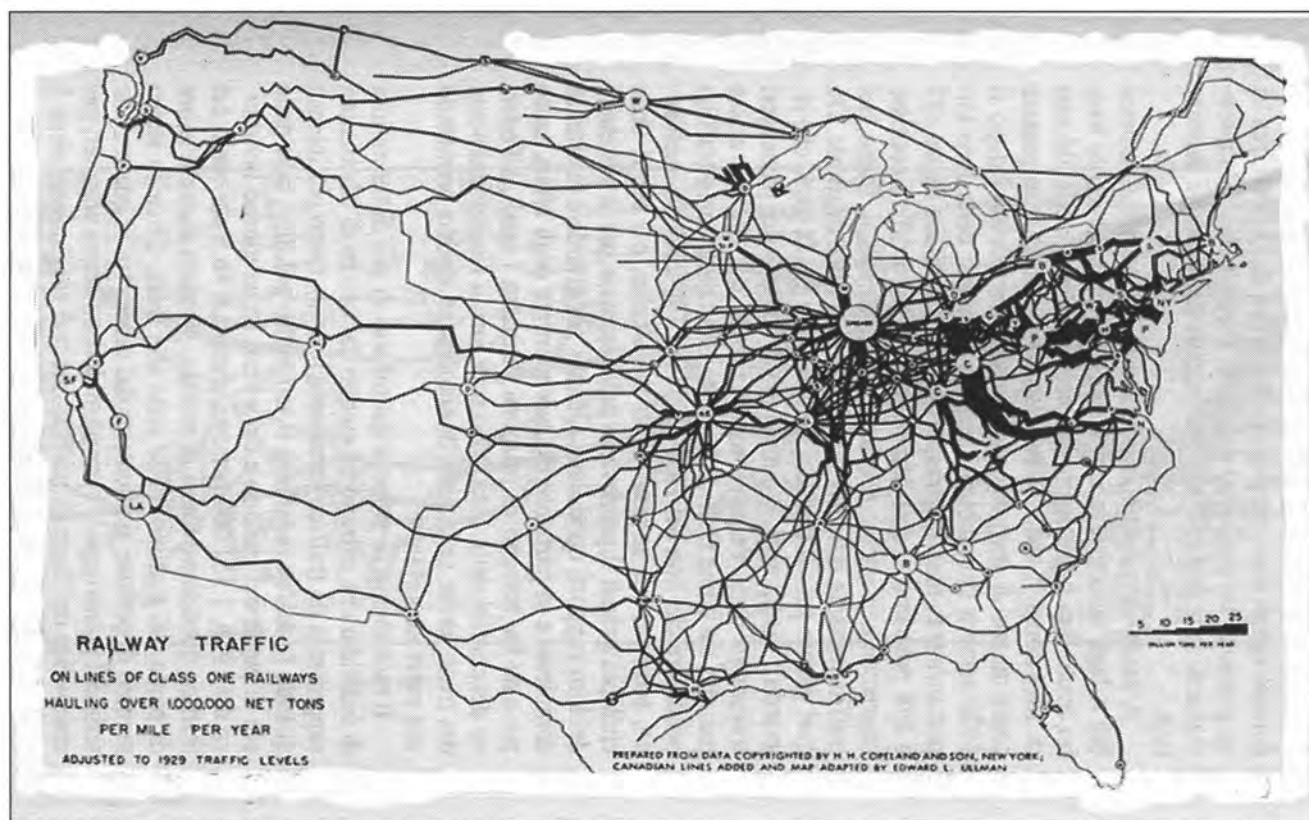
(*Source:* Gottmann, 1961, p. 635).

Fig. 4: The transactional role of Megalopolis was further emphasized by using transportation and communications data. These are noted in the maps of passenger traffic at New York airports, U.S. railroad traffic and telephone destinations between Boston, New York and Philadelphia and selected cities for April 1958.
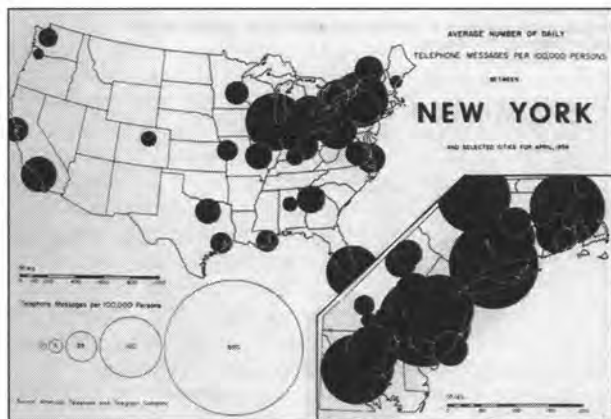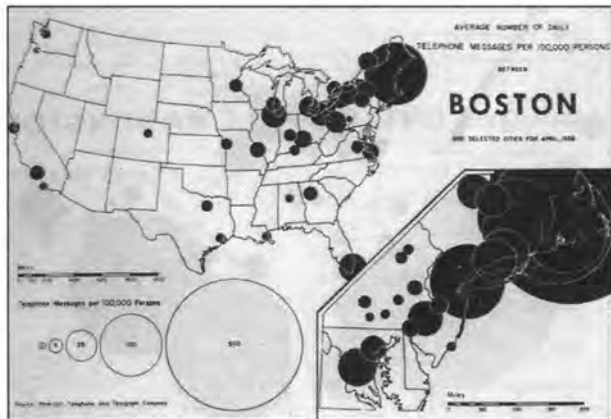
a. Telephone destinations – Average number of daily telephone messages per 100,000 persons between Boston and selected cities for April 1958. (*Source:* American Telephone and Telegraphy Company; Gottmann, 1961, p. 583).

b. Telephone destinations – Average number of daily telephone messages per 100,000 persons between New York and selected cities for April 1958. (*Source:* American Telephone and Telegraphy Company; Gottmann, 1961, p. 584).

c. Telephone destinations – Average number of daily telephone messages per 100,000 persons between Philadelphia and selected cities for April 1958. (*Source:* American Telephone and Telegraphy Company; Gottmann, 1961, p. 585).

Fig. 4 (cont'd)

A whole new direction after *Megalopolis*

Jean Gottmann never wrote another book, but produced a wide range of articles following up on the issues he examined in *Megalopolis.* Many of them appeared in *Ekistics.* He also was asked to lecture and speak at symposia and conferences. Many of these talks were published.

In his post-*Megalopolis* writings and lectures, Gottmann moved from the particular case of the urban complex he called Megalopolis to explore the ideas he gained in that study in the examination of large urban centers generally – both in time and space.

His new writings spread across the spectrum of urban topics that had emerged in *Megalopolis.* Drawing on his background in history and geography, a body of his writings dealt with urban centers of the past. He examined the early development of large cities and city networks around the Mediterranean – on the ancient Greek island kingdoms, in the days of King Solomon's Jerusalem, in Alexander's empire, then in Rome and Constantinople. He dealt with historic China, the founding of Brasilia, even cities on the American frontier.

He fleshed out the key dimensions of *Megalopolis* – quaternary services, urban networks and the interplay of world cities, urban centrality, the dimensions of urban social and political processes, how large cities grow. In *Megalopolis* he had written about "the transactional city" and the importance of the office work involved in transacting business (fig. 4). He later described these transactional activities as "the product of administration (including the administration of justice), politics, business management, the gathering and interpretation of information – and therefore of the mass media, but also of scientific research, higher education, the performing arts, and the specialized commercial trades aiming at special categories of customers" (GOTTMANN, 1970, p. 47). He called these activities "quaternary." He followed "the white-collar revolution," that he had emphasized in *Megalopolis* as it burgeoned with advances in electronic technology that has produced today's global system. He now wrote about the dimensions of "the transactional city." He wrote about the ethics of living in high density settlements and the attraction of the world's great cities to migrants.

Megalopolis made Gottmann an international celebrity among academics interested in urban matters and his thinking benefitted greatly from his interactions in those circles. He was asked to speak to international symposia and to serve on panels on development and change, urban affairs, regional development and habitat. He gave lectures at universities throughout the world and filled visiting appointments in a number of them. He was asked to contribute chapters to collections of urban writings.

Over the years he regularly commuted between Europe and North America. In time his ideas gained particular followings in Japan and Italy. In all this, he had the opportunity to study the megalopolitan complexes that have been emerging in all of the major urban regions of the world.

Most of all, Gottmann responded to the tremendous changes taking place in the large urban centers of the world in the years after *Megalopolis.* He had identified some of those in the study, but the technological changes in transport and communications of the final decades of the century and the responses to them increased the importance of the centrality, networking, and urban growth that he had noted in the Northeastern United States.

More and more, his thinking on these topics expanded. In *Megalopolis* he had spoken of the urban region as "a hinge"

connecting the United States and the world. Now, in another metaphor, he described the global outreach of "world cities" as "the opening of the oyster"; when commuting made cities into metropolitan regions, local society was changed by the influx of newcomers from many countries and cultures, and the interests and connections of such cities became global. As he put it "Rather than being simply the center of a region, the city has become a participant within a partnership of many cities. Probably it has always needed to function in that way. But the city is only now becoming fully conscious of the new dynamics of a world increasingly woven tightly together" (GOTTMANN, 1990, p. 16).

Nowhere did he get more stimulation than in his association with C.A. Doxiadis and his concept of Ecumenopolis, "immense networks of urbanized corridors extending as a frame over the continents, weaving an almost continuous and universal urban system which could be the habitat of 90 percent of future mankind even if it reaches the tens of billions" (GOTTMANN, 1978, p. 157). The two men talked of the Great Lakes Megalopolis, a trans-European megalopolitan belt crossing the continent from the Mediterranean to the North Sea and the Irish Sea, the Japanese megalopolis, and potential centers elsewhere in the world. Gottmann became increasingly fascinated by the "mutations" he saw occurring so rapidly in the world's largest cities.

Unlike most scholars whose seminal writings must be retrieved from various sources, Gottmann's most important post-*Megalopolis* writings appear in one volume, *Since Megalopolis*.[2] That volume contains the fifteen articles – out of the dozens and dozens written after *Megalopolis* – that he, himself, thought made up the heart of his legacy with regard to large cities plus a specially written introduction that places them into an overall framework and stands as the summary of his view of modern cities.[3] In the volume his writings are grouped in terms of concepts that he developed in *Megalopolis.* He deals with seven different ideas:

• urban origins
• urban centrality
• the differences between city and metropolis
• megalopolitan systems over the world
• the transactional city, and
• living in the modern metropolis.

He concludes with
• an examination of "transatlantic orbits" over time to show the evolution of cities and city systems.

Many of his writings in *Since Megalopolis* first appeared in *Ekistics.* Nine of the 16 articles that he chose for inclusion in the book came from *Ekistics,* one of them his reworking of a combination of two *Ekistics* pieces.

Gottmann's own assessment of large urban centers

He summed up his view of the problems and prospects of today's largest cities in his introductory essay in *Since Megalopolis* designed to be an overall statement of how the components of his writings fit together.

Success, wealth, and power attract crowds of those who do not have such benefits, but hope to achieve them once implanted in the place that breeds them. The result often appears to be chaotic ...

The difficulty today resides in the speed of change, the unexpected shifts of trends, in the fragility of forecasts, in the tide of rising expectations, in the opening of closed societies. Things have been made worse by the neglect to which most cities in the world have been subjected. Physical change lags behind social change, the main barriers to attempts to adapt to the latter are in the minds of people.

... New cultures, new structures are gradually emerging in the lively and exciting cities of today. The new forms differ from place to place. Much of what is happening shocks our established taste and threatens our expectations and old scales of values, even more than modern youth may perceive. The city is in permanent revolution. It is not easy and it may be unpleasant to many to live in the midst of it. But, if so many cities continue to attract and retain larger numbers of people, at least in daytime, it can only mean that they hope and strive for a better future, and know somehow that the past is past and that a new and better world is coming and may be achieved through participation in this immense chaotic urban transition (GOTTMANN, 1990, p. 19).

Gottmann's writings after *Megalopolis,* as well as those before, drew heavily on his early training in history and geography as well as his own interpretation of the French regional geographic approach as he moved from the particular megalopolitan case of the urban complex along the Northeastern Seaboard of the United States he had examined so closely, to the general case of large cities evolving through time until in the time after *Megalopolis* they had become both the primary engines of modern economic and cultural growth and the fundamental network connecting the global world. As global urban centers grew and, as he noted, "mutated," so, too, did his writings about the fundamental nature of the world's largest urban centers today and their outreach that increasingly encompassed the world. Where others focused on the problems increasingly concentrating within large urban places, to the end, Gottmann saw large cities as positive forces in our world and wrote optimistically about their future.

Notes

1. A list of the titles of all his writings before *Megalopolis* can be found in *The Coming of the Transactional City.*
2. An Italian book (*La città invincibile,* Milan, 1983) collects 20 articles translated by Luca Muscarà (for the English comparison with *Since Megalopolis* see: http://www.nexta.com/geografia 2002/download/SinceMegalopolis).
3. The volume also includes a listing of all of his urban writings before 1990.

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From megalopolis to global city-region? The political-geographical context of urban development

... [Gottmann's] "urban geography was an outgrowth of a political geography that emphasized historical oscillation between closed and open territorial systems. Consequently, according to Gottmann, urban development can only be understood in the context of the nature of the territorial system prevalent at a certain historical conjuncture ..."

John Agnew

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Introduction

Discussion of the development of cities has remained largely inattentive to if not blissfully ignorant of the political-geographical context of urban development. If one motif has been to find "laws" of city development independent of political considerations, for example in central-place theory, another has been to reduce city development to purely economic terms without necessarily seeing every city (or city-size category) as having the same economic base but resisting the idea that city development is an emergent phenomenon with political and cultural, as well as economic, origins. One of the great exceptions is Jean Gottmann, who organized his approach to city development with direct reference to the political-geographical processes that not only constrain but also direct the concentration of socio-economic functions and activities at discrete locations. Thus, in his magnum opus, Megalopolis (1961), Gottmann makes a powerful historical case for the growth of the urban concentration in the northeastern United States in terms of the region as the "economic hinge" of the emerging continental polity with a global role. This continued his long-standing focus in his explicitly political-geographical works on the relationship between the openness/isolation of polities, on the one hand, and the geographical pattern of accessibility and urban agglomeration, on the other. The problem is that reading Megalopolis has become separated from the larger framework of Gottmann's thought, much to the detriment of the former (MUSCARÀ, 1998).

In this essay I want to highlight the political-geographical aspects of Gottmann's urban geography to counter what I see as two problematic readings of Megalopolis that result from separating this work from the larger oeuvre.

• The first is associating the idea of megalopolis as articulated by Gottmann with simply the urban sprawl of big cities or the specific urban form of the northeastern US rather than with the functional interrelation between cities and hinterlands under specific political conditions that he emphasized. The term "global city-region" as used in some contemporary writing captures this feature of Gottmann's position.
• The second lies in missing Gottmann's focus on the geographical dynamics of urban development as the impacts of national-level regulation and global political centrality change over time.

Gottmann took a deeply historical approach to understanding the evolution of cities. Not for him the structural or timeless accounts that have tended to dominate urban geography since the 1960s with the experience of this or that city, New York, Chicago or Los Angeles, or abstract models of "systems of cities" based on a single city-center, substituting for rich historical description of urban form in historical-geographical context. His urban geography was an outgrowth of a political geography that emphasized historical oscillation between closed and open territorial systems. Consequently, according to Gottmann, urban development can only be understood in the context of the nature of the territorial system prevalent at a certain historical conjuncture.

Megalopolis: Giant city or global city-region?

In the Foreword to Megalopolis, August Heckscher notes how the term "megalopolis" is subject to misconception. In particular, he notes that "In recent years, while this work has been in progress, I have found the almost universal impression among those who heard of it for the first time to be that of a monstrous city, a kind of indefinite extension of Times Square up and down the whole Atlantic seaboard" (p. vii). It is not simply "a very large city," as Webster's dictionary would have it. Rather, to Gottmann it is "an almost continuous system of deeply interwoven urban and suburban areas, with a total population of about 37 million people in 1960" (p. 7), providing "the whole of America with so many essential services, of the sort a community used to obtain in its 'downtown' section, that it may well deserve the nickname of 'Main Street of the nation' " (p. 8), and "the country's chief facade toward the rest of the world" (p. 8). In other

words, "Just as a Main Street lives for and prospers because of the functions of the whole city, rather than because of any purely local advantages of its own, so is Megalopolis related to the whole of the United States and its rich resources" (p. 8). And it provides "a connecting-link relationship between the rich heart of the continent and the rest of the world" (p. 8). In sum "It is now the most active crossroads on earth, for people, ideas, and goods, extending its influence far beyond the national borders, and only as such a crossroads could it have achieved its present economic pre-eminence" (p. 9).

Yet, much of the literature about cities since publication of Megalopolis in 1961 has resolutely refused to acknowledge either the "Main Street" or "crossroads" character of the urban form or its recent rise to primacy. When it comes to defining "megalopolis" the dictionary definition rules the roost. For example, Sutcliffe (1993) sees the megalopolis as a "giant city [that] has been a component of human civilization for several thousand years." Similarly, if with somewhat more attention to contemporary examples, Frost (1993) presents Los Angeles and other "Anglo-Saxon cities on the Pacific Rim" (in Canada and Australia as well as the US) as quintessential megalopoli because of their "low-density physical fabric." The source of this common usage of the term is not difficult to discover. Meller (1993) points out that much recent usage of the term can be traced to Patrick Geddes and Lewis Mumford who used it to signify low-density urban development or urban sprawl. This was the main feature of the aesthetics of modern urbanization that Mumford hated. Unlike Gottmann, who expropriated the term for analytic purposes, Mumford used it descriptively as a synonym for sprawl. It is this usage that has been dominant, not the careful analytic usage of Gottmann.

Though Megalopolis is obviously focused on the northeastern seaboard of the United States, Gottmann claims that his analysis has a wider relevance. This is not in the sense of a universal form of urbanization of which the northeastern US is an example, as with the usage referred to above. It is, rather, that as the processes that produced Megalopolis in this region are spreading worldwide similar forms will spring up elsewhere to serve the national and global mediating roles that the "original" Megalopolis has come to serve for the United States. This is not simply by "imitation" of the American megalopolis. Gottmann connects the rise of Megalopolis to the widening of horizons, the opening of trade, and the increased pace of technological innovation. Gottmann (1961) refers to the ancient philosopher of Alexandria, Philo Judaeus, as the teacher of the idea that what he called Megalopolis (and, hence, from whom Gottmann has borrowed his usage of the term), is first and foremost "a great city of ideas ... that commands the material world in which we live." Megalopolis, then, refers to an urban command center and its extended fabric that is not only functionally interrelated "internally" but also vitally connected to other cities and megalopoli.

The recent literature on global cities (SASSEN, 2001) and global city-regions (SCOTT et al., 2001), although rarely referring to Gottmann's pioneering work (but see, e.g., HALL, 2001), nevertheless picks up on the meaning he ascribes to megalopolis. The similarities are threefold.

• In the first place, this new literature links together the dynamics of city development and the larger spatial context in which this occurs. Sassen (2001) refers to this in terms of "new forms of centrality," by which she means the ways in which urban development is no longer dependent upon a centrality "embedded in the central city" but, rather, involves a "grid of nodes" scattered over broad urban regions and wider networks connecting such urban regions at continental and global scales. From this perspective, it is the connectivity of urban agglomerations that determines their relative growth not simply their "internal" characteristics. Cities are necessarily elements in networks of cities and hinterlands, not individual entities casually related to one another (BEAVERSTOCK et al., 2002) (fig.1).
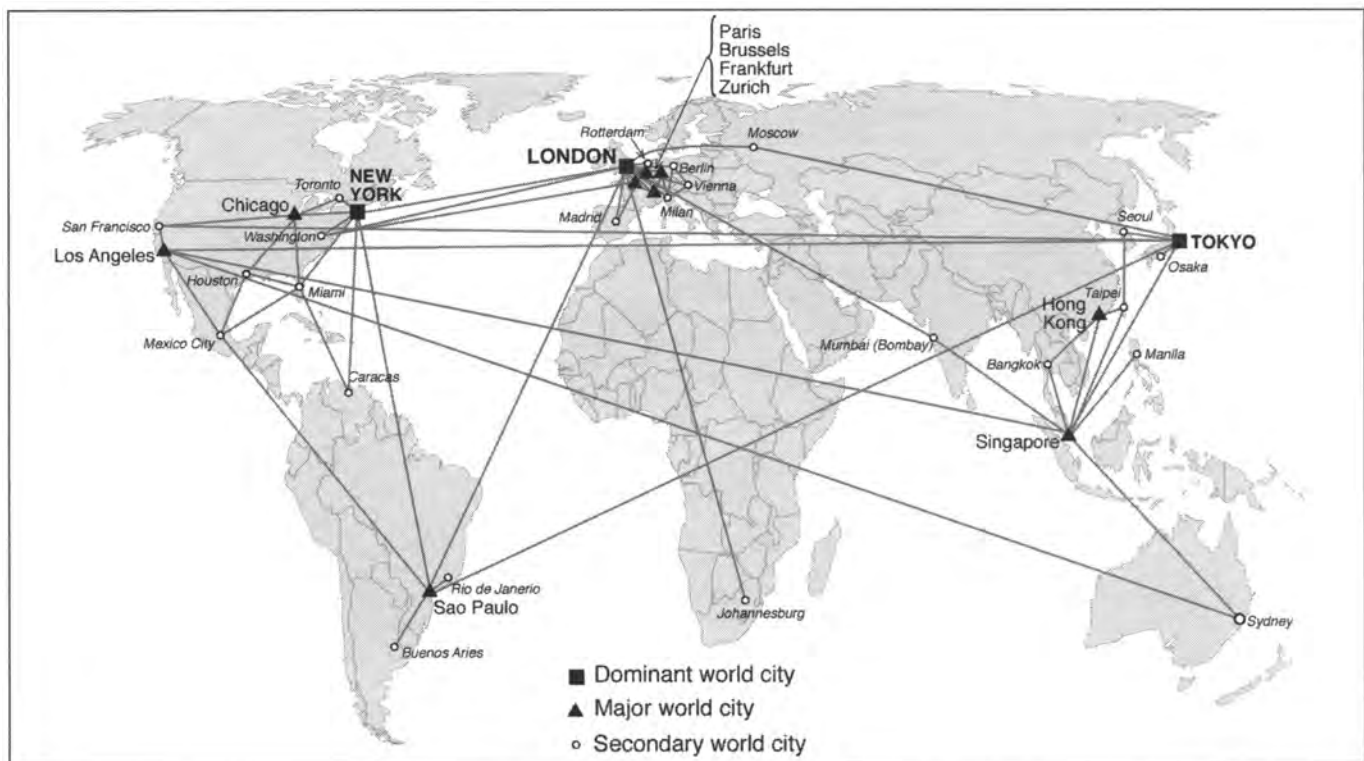
Fig. 1: A global city-regions map, emphasizing the linkages between their central nodes. (*Source:* Knox et al., 2003).

• Second, global city-regions are seen as "the motors of the global economy" (STORPER, 1997; SCOTT, 1996 and 1998). The geographical clustering of industries and spatial linkages between complementary industries are what drive the global economy. Not all locations are equal. Far from it. Major efficiencies derive from geographical propinquity between specialized producers. Furthermore, such propinquity has an historical basis that cannot be reproduced at will elsewhere. It rests on the accumulation of interdependencies, both economic and social, that Gottmann (1961) described so brilliantly for the American *Megalopolis*. As national boundaries have become increasingly porous to trade and investment flows the benefits of historically sedimented local networks of economic relationships have become increasingly apparent.
• Third, global city-regions are viewed as polycentric or multi-clustered agglomerations. If metropolitan regions in the past "were focused mainly on one or perhaps two clearly defined central cities, the city-regions of today are becoming increasingly polycentric" (SCOTT et al., 2001). Two examples of this process at work today are Shanghai and the Pearl River Delta of south China; each of which is a global city-region (or megalopolis) that contains over 30 million inhabitants. More generally, however, "in virtually all global city-regions there has been a rapid growth of outer cities and edge cities, as formerly peripheral or rural areas far from old downtown cores have developed into urban centers in their own right" (SCOTT et al., 2001).

The language is different from that used by Gottmann (1961) and the arguments relate the advent of global-city-regions more to the onset of "globalization" than Gottmann found necessary in the case of the American *Megalopolis*. Of course, he was writing before the onset of much of the opening up of national economies that is subsumed under the label of globalization. But the general thrust or logic is much the same. Gottmann drew a tight connection between the emergence of *Megalopolis*, on the one hand, and the need for a "crossroads" or "Main Street" function, on the other. If today the emphasis is somewhat more on the global as opposed to the international context of urban development then this reflects the time of writing more than any problem with Gottmann's essential theoretical point.

The geographical dynamics of urban development?

A second problematic element in readings of *Megalopolis* has been the tendency to assimilate it and other studies of American cities into structural and ahistorical national-level accounts of urban development. Shortly after *Megalopolis* was published a very different rendering of city development came to dominate American urban studies. Associated with such ideas as "cities as systems within systems of cities" (BERRY, 1964), "national urban systems" were seen as defining distinctive national spaces with processes specific to those spaces producing the distribution of city-sizes across an urban hierarchy. The American urban system was taken as an exemplar against which other national urban systems, particularly in underdeveloped countries, were compared and found wanting because of the "excessive" concentration of population and functions in "overdeveloped primate cities." This involved ignoring the focus on urban primacy in the American context, after all that is what the northeastern megalopolis represented, and to which Gottmann had so clearly drawn attention. It also required a return to a focus on cities as individual "nodes," notwithstanding the systems language, rather than as parts of wider networks at regional and global scales. New York, Philadelphia, Boston, and Baltimore were once again totally separate entities.

Ironically, political-economic and postmodernist writing on urban development that has heavily criticized the "cities as systems" type of analysis has continued on similar tracks in relation to understanding of the separability of different cities and the lack of interest in historical change in patterns of political regulation. On the one hand, specific cities (such as Chicago or Los Angeles) are taken as representing distinctive models of urban development and offered as lenses through which all other cities can be seen. So, for example, Los Angeles is "where everything now comes together." Cities everywhere are on the path towards the LA Model that has now definitively replaced Chicago as the universal urban exemplar (e.g. DEAR and FLUSTY, 1998). With *Megalopolis*, a new type of urban form emerging in the novel political circumstances of the United States during the Cold War with possible larger implications for political and economic organization was identified, now the focus is on individual cities as reflections of new patterns of production and consumption. The larger geographical contexts of political and economic change are missing. On the other hand, the enhanced interest in the spatiality of urban development (in particular, patterns of suburbanization and ethnic segregation) that is undoubtedly a strength of newer writing (e.g. SOJA, 1998), can lead to a weakened interest in the changing historical conditions under which new urban forms have evolved. In particular, urban studies typically neglect the ways in which historical-geographical conditions create new circumstances for urban development. The contemporary development of Los Angeles and its region, for example, is taking place in totally different historical-geographical conditions from the development of Chicago that inspired so much urban theory for much of the 20th century. Los Angeles is supposedly the global or postmodern city par excellence. Certainly, its global reach with respect to the influence of the film industry and its draw on immigrants are unusual. But its two major industries are quintessentially American at the same time that they symbolize old and new types of global imperialism: high-tech military and aerospace hardware (dependent on federal government spending) and Hollywood (dependent upon American cultural traditions). This complex national and global setting involving defense and entertainment industries is totally different from the national setting in which Chicago developed in the early 20th century, dependent largely on its linkages to the emerging agricultural industries of the American Midwest and Great Plains (transportation, meat packing, etc.).

This is where a renewed appreciation for Gottmann's fusion of political and urban geography enters in. His entire approach in *Megalopolis* is premised on seeing urban development as profoundly conditioned by changing historical-geographical circumstances.

The political-geographical context of urban development

The idea of *Megalopolis* as a crossroads or *carrefour* that is so important to Gottmann's argument about modern urban development, though lacking in so much discussion of megalopolis in the years since Gottmann first developed it, did not simply come out of thin air. For many years before writing *Megalopolis*, Jean Gottmann had been deeply involved in developing a general theory of geographic space with particular attention to the politics of territorial partitioning.

This theoretical framework must be understood to truly appreciate the theoretical contribution of *Megalopolis* to urban studies. For Gottmann the most important feature of human history has been the oscillation between closed and open territorial systems. This binary model of historical-geographical conditions is based on the idea that people and their social

practices can be oriented in two different ways:

- on the one hand, they can prefer a rigid territorial partitioning of space so as to enhance safety, group identity, and self-sufficiency;
- on the other hand, they can opt for greater opportunities that arise from open connections and accessibility that facilitate circulation across wider geographic spaces.

If Plato recommended the first of these options, then later philosophers, beginning with Plato's pupil Aristotle and his protégé Alexander the Great, were advocates of the second. The crossroads place or city (*carrefour*) is where the two orientations come into tension with one another. Cities can either serve closed territories or knit together open spaces. Much of Gottmann's career before and after *Megalopolis* was devoted to this approach to understanding the political partitioning of global space. Political territoriality is seen as the product of the tension between territorially-rooted human communities with common symbols and beliefs (*iconographies*) and the force of external change (*circulation*) that moves people, goods, ideas, and information from place to place (see, e.g. GOTTMANN 1947; 1952 and 1980).

This understanding of global political geography is central to the approach to urbanization taken by Gottmann in *Megalopolis*. The northeastern US Megalopolis grew in the way it did as a result of a changing balance between pressures for closed and open space. From this point of view, urban form cannot be separated from the shifting nature of political territoriality. The development of Megalopolis was only possible because of the relatively open territorial system of the United States that set a premium on accessibility and efficiency in economic linkages (or *circulation*) at the expense of preservation of historic forms and symbols (*iconographies*). This open system was the outcome of a substantive shift in the role performed by northeastern US cities for the US, and increasingly, world economies. As a developing global *carrefour*, Megalopolis was the urban form par excellence of an emerging global order that pointed beyond the supremacy of the national boundaries that had come to dominate political territoriality in Europe and North America in the 19th and 20th centuries. Its combination of higher density centers and lower density fringes provided an auspicious environment for innovative activities, supportive services, and agglomeration economies. Though obviously problematic in various respects, not least in its constant recycling of land uses and complex internal flows, as Gottmann himself noted, Megalopolis provided the model for an open urbanization appropriate to a world moving away from rigid territorial partitioning.

Conclusion

In *Megalopolis*, Jean Gottmann provided the earliest example of a theoretical reasoning akin to what is now associated with the idea of global city-regions. But he was not simply a prophet of a new urban form. He clearly linked his case for the emergence of an American Megalopolis, and possible ones elsewhere, to a particular model of historical-geographical change. This model is based on the tension between pressures towards openness and closedness in territorial systems such as modern states. Both the connection to recent ideas about global city-regions and the fundamental insight about the political-geographical underpinnings of urbanization have re-

ceived little or no attention. Instead, *Megalopolis* has been increasingly, and misleadingly, associated simply with urban sprawl and assimilated to a literature in urban studies that still sees cities as largely separable entities that exist in a time warp independent of political-geographical restructuring. Forty years after publication, therefore, *Megalopolis* stands in need of a radical re-reading that re-asserts the continuity between Gottmann's political and his urban geography and that shows the continuing relevance of this great book to the emerging idea of global city-regions and the present world order of cities and spaces.

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The long road to Megalopolis

Megalopolis was certainly not a simple reflection of Jean Gottmann's biography, but rather a natural evolution of his theoretical work on political geography. The megalopolitan pattern of settlements was the expression of a megalopolitan process based on the priority of circulation flows. In this perspective it effected a transition from a political geography of nation-states to a new geography of nodes and networks at the scale of time.

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Origins and youth

The long road to Megalopolis began early in the life of Iona Jean Gottmann (1915-1994). He was born in Kharkov, in the Eastern Ukraine—then an industrial city of about 300,000 near the Donets Basin. His Jewish family, of Dutch and French origins, had been living in Russia for some time. Both his parents were killed in the turmoils that followed the October Revolution. Jean was the only survivor, with his grandfather Kelman – a partner in a large locomotive factory during the development of the Russian railroads – and Gottmann was adopted by a childless paternal aunt who lived in Moscow.[1]

On his fourth birthday they moved to Sebastopol, in the Crimea on the Black Sea, one of the last fronts of the White Russian army of General Wrangel. His grandfather had invested in the building of a railroad in the Crimea and was still hoping for a reversal of the conflict. There Emily Gottmann married a cousin, Michael Berchin, who, having renounced a rabbinical career, devoted his life to journalism and became an ardent supporter of the Zionist project.[2]

In the fall of 1920, with the collapse of Wrangel's army, the new family left Sebastopol on a Norwegian coal ship and fled to Constantinople, then under Allied occupation. In the great Mediterranean metropolis Gottmann had his first contact with exotic and diversified cultures and spent a few months there until a French ship gave the family a passage to Marseilles. Then he finally went to Paris, where he settled for some 20 years (fig. 1).

Paris was then the cultural capital of the Western world, and, as his adoptive parents were connected to the circles of the Russian intelligentsia in France, from Chagall and Miliukov, to Prince Volkonsky and Jabotinski, Gottmann grew up in a considerably intellectual and liberal environment: "Ours was a hospitable home with a great variety of guests: Russian emigré academics, writers, artists and aristocrats; American professors, brokers from Lloyd's of London, South African businessmen, even an Afghan exiled politician."[3]

Berchin worked as foreign editor at the Poslednya Novosti, which – under the direction of Paul Miliukov, a former foreign minister of the Czar – became the main Russian language newspaper outside of the Soviet Union. His engaged journalism became political militance, when Vladimir Jabotinski (1880-1940) resigned from the Zionist executive and Berchin convinced him to start a new movement: the Zionist Revisionist.[4]

Gottmann's education was entirely French, as were his main childhood friends, and he spent his summer holidays in Alsace, Vendée, Côte d'Azur, Préchacq, or Aix Les Bains. Yet his family insisted that he learn Russian and English too. They also introduced him to the Russian classics such as Tolstoi and Dostoevski – with injections of English literature, while he attended the Lycée Saint-Louis.

Fig. 1: Born in Kharkov, Ukraine, at the age of three Gottmann escaped the October Revolution first to Sebastopol, Crimea, then to Constantinople, Turkey, finally reaching Paris via Marseilles in 1921.

Selected to compete in French literature, history and geography in the national *Concours Général*, Gottmann won the second prize in Geography in 1931. This success had a decisive influence on his life, and in 1932 Gottmann enrolled at the Sorbonne in the faculties of both law and geography.

His former geography teacher, René Clozier, proud of his award at the *Concours Général*, introduced him to his own mentor, Albert Demangeon, professor of human and economic geography at the Sorbonne, then a recognized leader in the field, and the two developed a long and intense relationship.[5]

At the Institut de Géographie

In the French academic system during the 1930s, physical and human geography were equally part of the standard geographic curriculum – before their separation during World War II – and Gottmann studied both branches with many important scholars of the first generation of "Vidalians," such as Henri Baulig, Raoul Blanchard, Albert Demangeon, Émile-Félix Gautier, Emmanuel de Martonne, and Jules Sion.[6] Another important encounter of the 1930s was with André Siegfried.[7]

With his works on *peuplement* and *habitat,* Demangeon was then the leading scholar in human geography, and he soon convinced Gottmann to abandon the faculty of law and concentrate on geography and history.[8] When the time came for choosing a subject for Gottmann's thesis, Demangeon enumerated some topics that his generation did not have time to develop: the study of large urban agglomerations; the great masses of population of the Far East (China, Japan, the deltas of India, Vietnam); irrigation in arid countries; and the relationships between blacks and whites around the world.[9]

Gottmann was therefore aware of the importance of studying urbanization since the very beginning, but at the time he chose irrigation in Palestine for his thesis.[10] Indeed in this choice it is possible to see a reflection of his family origins and of his intellectual dialogue with Michael Berchin, as well as an excellent opportunity to conjugate the study of physical and human geography. Demangeon provided him with a scholarship to collect documents and information on the field in October 1933 (fig. 2).

At the time, the debate on environmental determinism was already opposing the French and the German schools of geography; and Gottmann wanted to prove that it was not the aridity of the region that determined the potential development of Jewish settlements in Palestine, but the culture through which the use of water was organized.

Through analysis of Palestine's orography, climate, hydrography, land use and cover, a hypothesis of regionalization in seven main agricultural areas was drawn. De Martonne's index of aridity was then applied to each area to determine where and how much irrigation was needed. Palestine's human geography was introduced in terms of the different perspectives that the struggle with nature took among Jewish colons, nomadic and sedentary Arabs, and the British administration.[11] Finally the partitioning of irrigated cultures was analyzed for each of the seven regions. In the conclusions, the limits defined by aridity or economy could possibly be overcome by the European Jewish pioneers' will to challenge nature, through capitals, technology and manpower.

The geographical debate on environmental determinism was certainly not the only focus of intellectual life in Paris. In fact, the development of human geography in the 1930s could be

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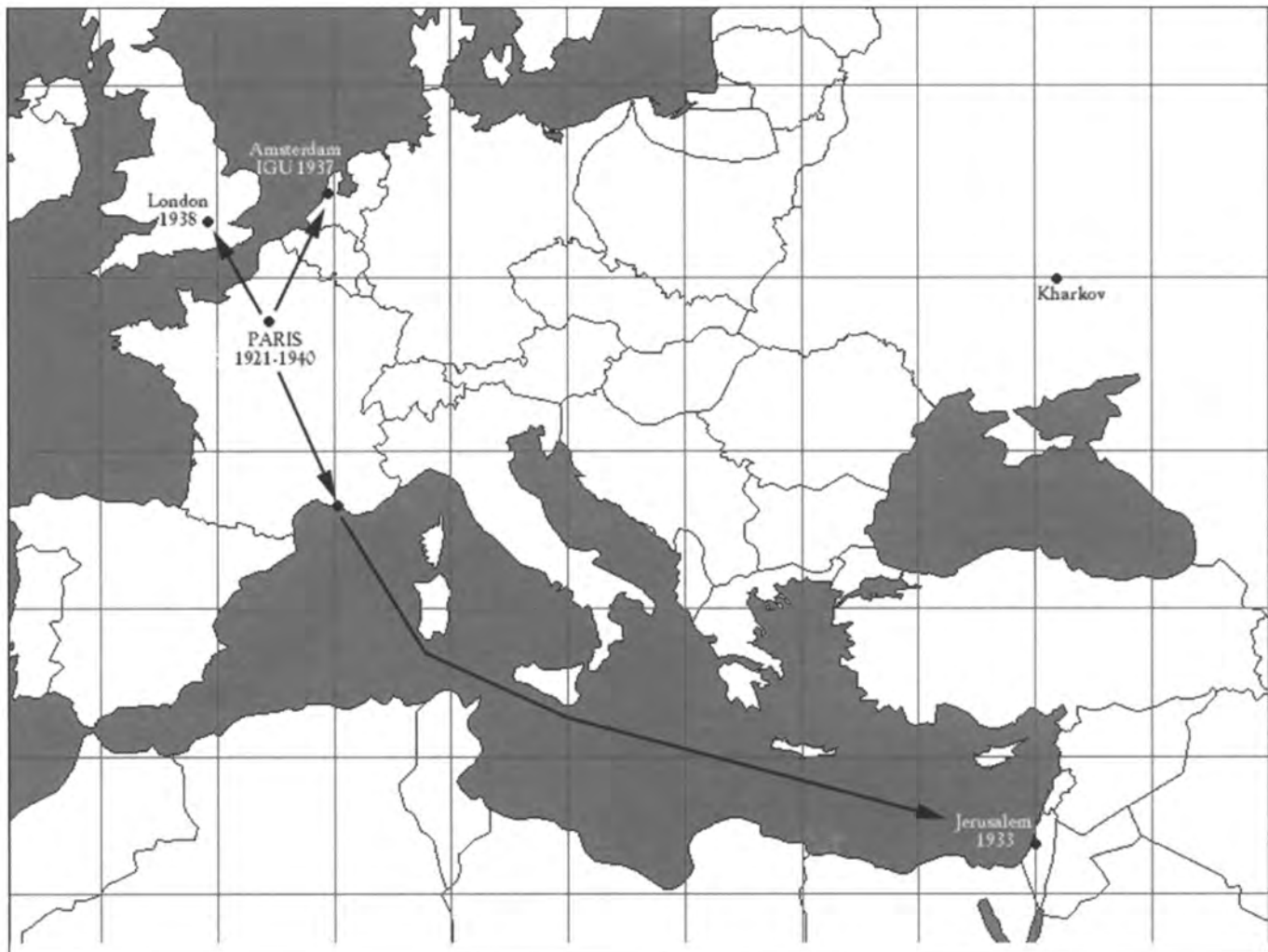
Fig. 2: While studying at the Institut de Géographie in the 1930s, Gottmann made three missions: to Palestine (1933), to the International Geographical Union conference in Amsterdam (1937) and to London (1938). A fourth mission to French North Africa, planned for 1940, was cancelled because of the war.

better understood through its relationships to history and the social sciences.

Thanks to the efforts of the rector Charléty, in 1935 the University of Paris obtained from the Rockefeller Foundation – through the *Conseil universitaire de la recherche sociale* – a five-year funding plan to develop new research on contemporary social problems.[12] A new generation of social scientists – among whom were Gottmann, Aron, Dennery, Gourou, Levi-Strauss, and others -- could conduct research issues as diverse as rural geography; social psychology and changes in ideology; religious practices, quality of life, the middle class and the psychology of the working class; advertising; organization of consumption; the demography of French colonies; nomadism and Islam; legal ethnology.

Under this program Demangeon directed Gottmann in an enquiry on rural geography of France, Lucien Febvre directed a study on rural folklore, and Levy-Bruhl directed Claude Levi-Strauss' studies on ethnographic issues related to French colonization. The Rockefeller Foundation also funded a *Centre d'études de politique étrangère,* and Gottmann contributed to another chapter of this program with a study on France's raw material supply.[13]

Another intellectual community, which gathered around the journal *Annales d'histoire économique et sociale,* contributed to the development of economic and social sciences in France. According to Mazon (1985), its leaders – Marc Bloch and Lucien Febvre – promoted a deep interpenetration of disciplines to study the history of social groups and economic forces with a strong focus on contemporary issues. The analysis of contemporary society was based on contributions from different disciplines of the social sciences: economics, geography, sociology, psychology.

In fact, in an attempt to improve the field's scientific status relative to the natural sciences, Demangeon emphasized the importance of interrelationships in geography and underlined the role of those "hidden factors" that oriented the more visible and material phenomena in human geography. Those hidden factors were of a psychological nature. This interpretation of geography as a discipline that should focus not only on the material elements of the territory, but also on the ideal aspects that characterize its population, was to become a constant in Gottmann's scientific path.

If in Gottmann's thesis it is possible to read his early interest in the psychological dimension of a community – expressed in the ideals or in the form of a collectively shared project able to modify physical geography to the point of overcoming the limitations imposed by unfavorable environmental conditions – Gottmann soon also discovered Isaiah Bowman's theory of the

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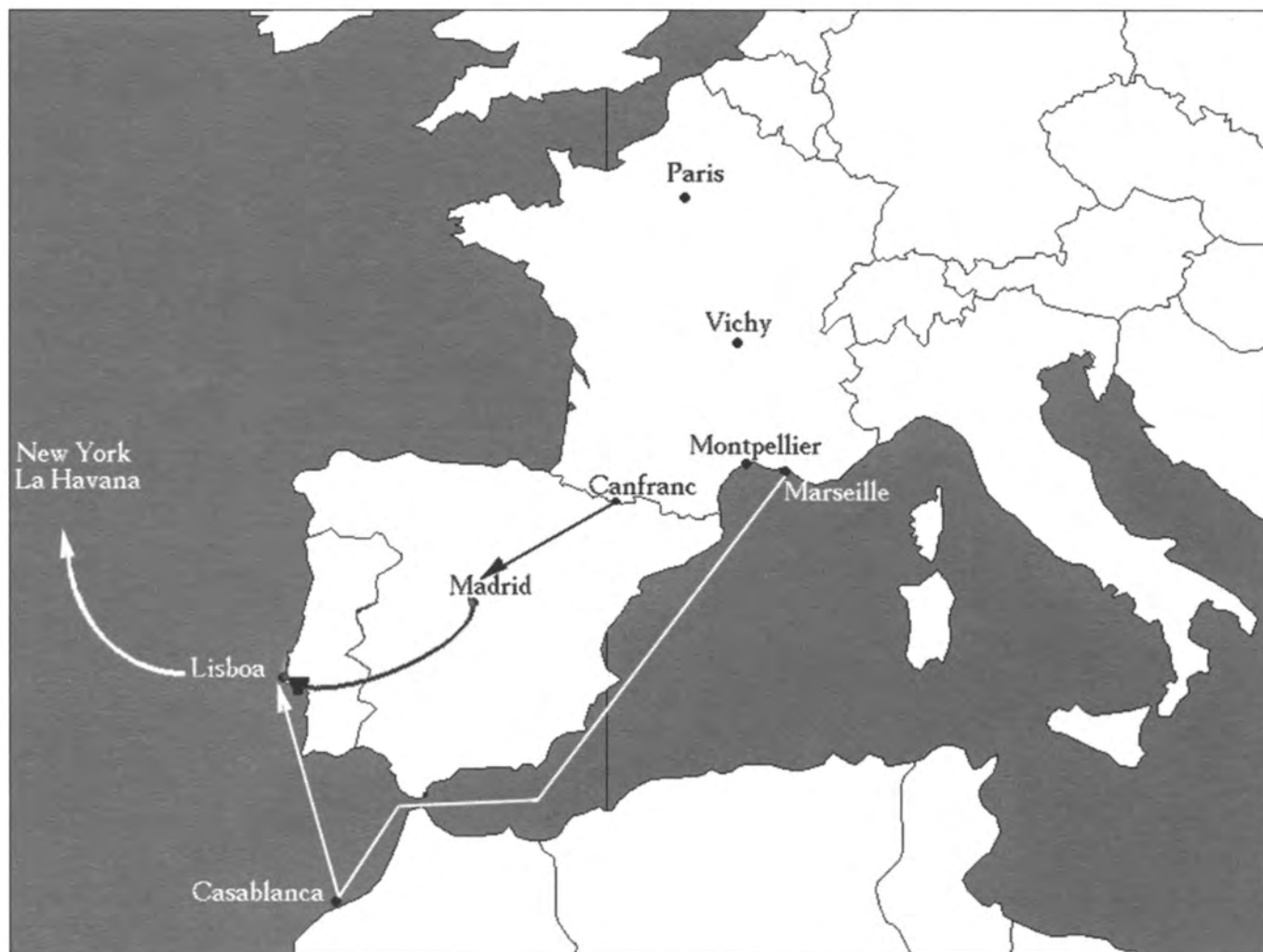
Fig. 3: Gottmann escaped from Paris to Montpellier in June 1940. Then he left France in October 1941 through Canfranc, Madrid and Lisbon, finally reaching New York via Cuba in early December. Since he was uncertain about obtaining a transit visa through Spain he had also planned an alternative route to reach Lisbon, sailing from Marseilles through Casablanca.

pioneer fringe.[14] According to Neil Smith, with this concept "Bowman sought ... to explicate the relationship between human settlements and the land under extreme environmental conditions."[15] Gottmann tried to apply the pioneer fringe concept to Palestine and the Near East.[16] Yet, when he confronted Bowman with it, he realized his attempt was too theoretical.[17]

A year later, Gottmann was again fighting environmental determinism. In his article "L'homme, la route et l'eau en Asie sud-occidentale,"[18] he refuted Ellsworth Huntington's hypothesis, according to whom the alternate fortunes of the great ancient civilizations could be explained as a consequence of climatic oscillations. Instead Gottmann explained the rise and fall of past civilizations in this region as a function of human circulation, in the French geographic tradition initiated by Paul Vidal de la Blache, also interpreting geography as a "connectionist" science, based on a collaboration between archaeology, geology and the social sciences.

Finally, Gottmann also worked on different aspects of the economic geography of the Soviet Union, thanks to his knowledge of the Russian language. Yet what was already a promising academic career in France was brusquely interrupted by the outbreak of World War II, the Nazi occupation of Paris, the sudden death of Demangeon, and the promulgation of the racial laws, which excluded Gottmann from any university appointment.

Gottmann left the family house in rue Ernest Cresson three days before the Nazi occupation, in June 1940, and fled to Montpellier, in unoccupied France, where he remained for about 15 months. Berchin managed to get immigration visas for the U.S. on the Russian quota, yet Gottmann, who thanks to the support of his teachers had become a French citizen in 1939, could not leave the country because of his age (fig. 3).

The escape was a complex matter in 1941 Europe, especially for someone who was at risk of the Holocaust.[19] Preparations involved contacts with the Jewish organization Hicem,[20] credit to buy tickets for the Lisbon-New York route, many trips to Vichy to obtain an exit visa (from the Petain government),[21] contacts with the French Resistance, which through its Spanish connections, helped him to get temporary visas to enter and exit Francist Spain,[22] and the support of his friend and colleague Orlando Ribeiro in Portugal.

In November 1941 Gottmann boarded the "Colonial," a Portuguese ship used in pre-WWI Africa's circumnavigation routes, which after some readaptation and loaded with passengers was on its first Atlantic crossing. After 22 days of sailing, and eating the same kind of fish, a feverish Gottmann arrived in New York, where he was put in quarantine at the Coast Guard hospital on Ellis Island, finally entering the United States in the same week as the Japanese attack on Pearl Harbor.

Living and working in Megalopolis in the 1940s

Gottmann never had the opportunity to know the United States before the war. Once in New York, he wrote to many American scholars with whom his teachers Demangeon and de Martonne had been on good terms – including Bowman – in the hope of getting recognition for his pre-war work at the Sorbonne. Thanks to his pre-war contacts in Paris and to new ones in the U.S., he succeeded in getting a fellowship from the Rockefeller Foundation to work in the seminar of Edward Earle, a military historian who directed the School of Economics and Politics at Princeton's Institute for Advanced Study.[23]

Despite its continuous exchanges with Princeton University, the Institute was not a college or university or research foundation. Nor did it have a specified program of research, and all regimentation was absent. As its bulletin stated: "the scholars thus brought together are as much interested in their respective tasks, in their own development and in the advancement of knowledge, that the usual academic arrangements such as regular courses, required attendance, degrees, examinations and administrative supervision can be dispensed with as superfluous."[24] Therefore, for about two years Gottmann had the support of a unique institution that provided him with a stipend, a status, and an extremely stimulating international, interdisciplinary and free environment. It is thus not surprising that he maintained his relationship with the Institute for a long time even after the war, and that the Institute became his reference model of a research institution.

Like most of the top U.S. universities, the Institute was deeply involved in the war effort. It was not only its physicists and mathematicians that contributed to important classified programs, such as those on ballistics, cryptography, and the Manhattan project. But the social scientists were also very active: economists, sociologists, demographers, psychologists and political scientists served the armed forces or other branches of government to study resources, manpower, public opinion and propaganda, or worked for military intelligence.[25]

According to Neil Smith, while Bowman worked mostly for the State Department, "an estimated 225 geographers were drawn to Washington to work on behalf of the war effort. They populated the Office of Strategic Services, where Wisconsin political geographer Richard Hartshorne headed up the Research and Analysis Branch; the War Department; the Office of Economic Warfare; the U.S. Board on Geographic Names."[26]

Edward Earle, in particular, was consultant to the Office of Strategic Services, the War Department General Staff, and the headquarters of the Army Air Force. Because of Gottmann's knowledge of Mediterranean geography and of the Russian language Earle soon sent Gottmann to consult in Washington for the Board of Economic Warfare. In that position, between 1942 and 1943, Gottmann wrote numerous memos and reports on a variety of applied matters: from two brief reports on the role of unoccupied France in the German war economy and on the approach of propaganda in unoccupied France; to the memoranda on Syria and the Lebanon, and on Madagascar (both June 1942), on the strategical routes of the Sahara (July 1942); on French Morocco, and on the Arab problem (both August 1942). He also researched the Caucasus' energy resources, the vulnerability of dams and hydroelectric plants, and other topics. Thanks to Earle's many contacts in Washington, these reports were distributed to a variety of offices, including the Military Intelligence Division G-2 of the War Department, the Naval Intelligence Division of the Navy, the Office of the Coordinator of Information, the Department of State, the Western European Section and the Board of Economic Warfare. And despite being a foreigner in a country at war, Gottmann quickly

commanded universal respect in Washington, Princeton and Baltimore.[27]

If in the early days of his American experience Gottmann had felt the difference between the French and the

American schools of geography, in the lack of a general research framework and "in the strict specialization that cut geography into a dozen disciplines separated by closed partitions,"[28] throughout the war not only did he manage to explore a wide range of applied subjects, but he deepened his knowledge in economic and political geography. He discovered Tocqueville, wrote a book on France's commercial relations (1942), and a few articles on different subjects such as the ongoing debate on German *Geopolitik* (1942), North Africa (1943), the development of French colonial warfare (1943) and Vauban (1944).[29] Moreover he started to teach courses in the Army Specialized Training Program (ASTP) to the officers that were soon to guide the reoccupation of Europe. And in 1943, Bowman negotiated with the president of Princeton University and the Rockefeller Foundation the services of Gottmann, who started to teach at Johns Hopkins University, first part-time and then, after 1944, on a full-time basis.

If in the prewar years his life and work took place entirely within Paris, with just a few missions abroad, within six months after his arrival in the U.S., Gottmann managed to have such a busy schedule that he had to commute weekly between three or four different cities of the northeastern seaboard of the United States. In New York there was his family, the Rockefeller Foundation, the American Geographical Society, the *Geographical Review*, and at the Ecole Libre, where he taught. In Princeton he was a fellow at the Institute (1942-1944) and also taught at the University (1943); in Washington, he consulted for different branches of the U.S. government (1942-1944); and in Baltimore, he taught at the new institute of geography founded by Bowman (1943-1948).

It is considering this continuous commuting on the Pennsylvania Railroad between the many great cities of the Atlantic coast – in the common war effort that unified them all – as opposed to the monocentrism of his French experience in Paris before the war, that it is possible to see how the original concept of Megalopolis took shape (fig. 4). What, a few years after the war was to become Gottmann's future object of study, during the war was the very context in which he operated. This is confirmed by Gottmann himself,[30] who recalled a curious episode dating back to 1942: "(Bowman) was going downtown and he drove me in his car back to the Pennsylvania Railroad Station where I was taking the train back to New York. And he asked me what had impressed me the most on that first trip in America from New York to Washington. And I said without hesitation 'the density and vicinity to one another of great cities'. So he laughed. I think that's when the idea of mgalopolis arose"[31] (fig. 4).

Yet, if the future megalopolis was the hinge between the regional and international scales, Gottmann's wartime work was not limited to his contributions to the American government. Disrupting the preceding social order, the war had multiplied his professional and political relationships, and Gottmann, who adhered to *La France Libre* of De Gaulle after March 15, 1942, was in touch with many exiled French intellectuals who gathered in New York at the Ecole Libre des Hautes Etudes, within the New School for Social Research, among whom were many former Parisians, such as Raymond Aron, Roman Jakobson, Alexandre Koyré and Claude Levi-Strauss.

After the reoccupation of France, the U.S. government had new direct sources of information and Gottmann started to consult with the French government, through his relationship with Henri Laugier[32] (fig. 5). First he was sent by the Ministry of Education to the French Antilles on a university mission (1944); then, while Roosevelt, Churchill and Stalin were meeting in
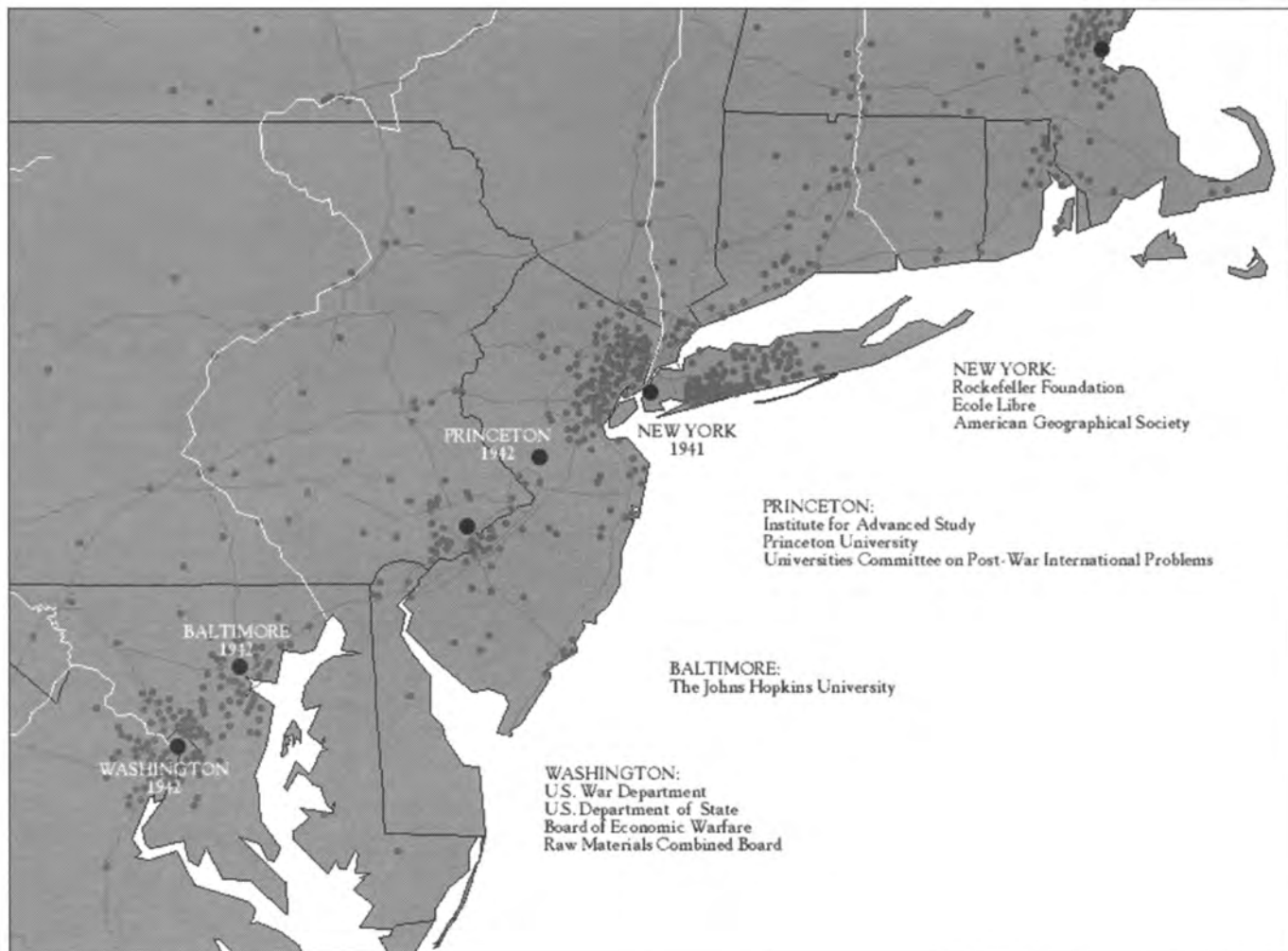
Fig. 4: Once in the U.S., during the war Gottmann travelled regularly on the Pennsylvania Railroad between New York, Princeton, Baltimore and Philadelphia. In this experience is the origin of the concept of Megalopolis.

Yalta, he returned to France for six months on a mission to consult for the French Ministry of Economy (1945) under Mendes-France and Pleven, with field surveys in northwestern France and other work for the Bureau du Plan.[33] In Paris, he saw many old friends and colleagues at the Institut de Géographie and in the governement, and some publishers. His American experience gained him recognition in a contract for a book with Hachette, explaining America to the French public.[34]

Yet, Gottmann could not be away from *Megalopolis* for too long, his aunt in New York was sick; and in July 1945 he resumed service at the Raw Materials Combined Board, a large economic mission in Washington preparing the reconstruction of France, headed by Jean Monnet, where he worked until the beginning of 1946. He then returned to Johns Hopkins.

Social sciences and international organization after the war

Thanks to the reputation Gottmann had acquired both in Paris and Washington, the French Ministry of Foreign Affairs again asked for his services, this time as an officer at the newly founded United Nations. Henri Laugier, then adjunct secretary general of the U.N., was also the head of the Department of Social Affairs. In April 1946 Gottmann started to direct its office of studies and research, where a small group of scientists was

gathered (among whom were the French anthropologist Alfred Métraux and the French historian Louis Gros). Gottmann wanted to return to New York to be closer to Berchin, as his aunt had just died. And in this position, he was the main promoter of Laugier's enquiry on the creation of U.N.'s international research laboratories.

The importance of this experience is not to be underestimated. The war had finally come to an end, and in the ferment of reconstruction and the creation of an international organization, the role of science – and especially social sciences – was thought to be both a key to guarantee peace and security, and the way to solve the many problems perceived as global: population and settlements, soil erosion and urbanization, water conservation and hunger, astronomy and tuberculosis. In this context, the focus was placed on the social and economic function of science rather than on its military function. The need to overcome the pre-war gaps through an effort of coordination and information among scientists was to be pursued with the creation of a network of U.N. international research laboratories in the general interest of humanity.[35] The enquiry involved an international number of scientists, and Gottmann interviewed many scientists worldwide, including Albert Einstein.[36] Still, the project first was opposed by the Soviet Union, and then clashed with Unesco's concurrent projects, raising a dispute of competence between the latter and the Department of Social Affairs. Despite two missions to Latin America (on urbanization and

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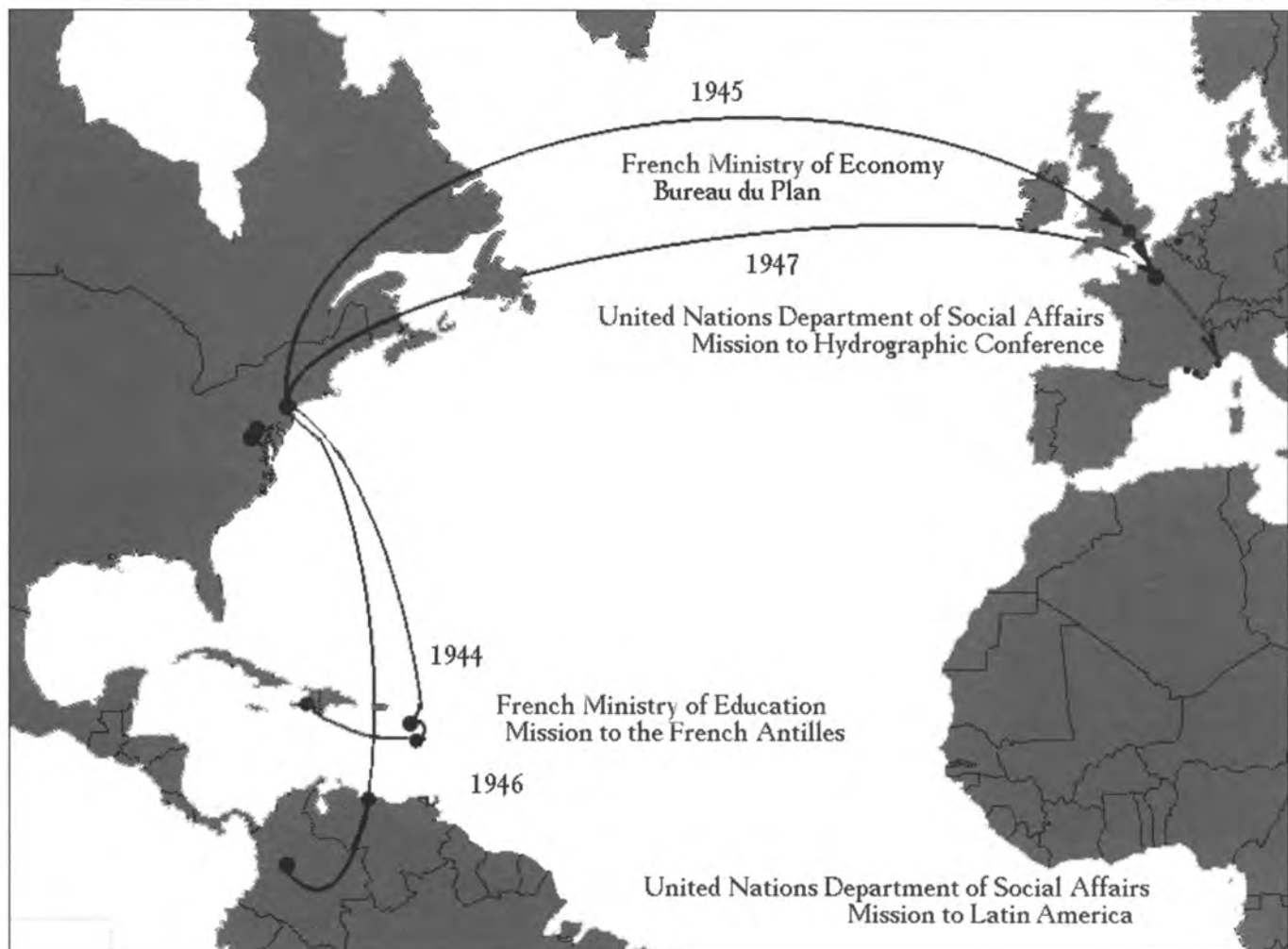
Fig. 5: Aside from a few trips to Canada, between 1944 and 1947 Gottmann made four missions abroad: the French Government sent him to the French Antillles (1944) and to Paris and Britanny (1945). The United Nations sent him to Venezuela and Colombia (1946) and to Monaco's Hydrographic Conference (1947).

planning) and to the Hydrographic Conference in Monaco (for the purpose of international coordination of cartography, hydrography and oceanography), Gottmann soon realized that the U.N. was already too bureaucratic, and decided to renounce his post and return to full-time academic and scientific research at Johns Hopkins, where he had kept his job on a part-time basis. Still the 18 months spent at the U.N. during its inception gave him the opportunity to review his postwar "map of the world," to expand his network of contacts, to benefit from the cosmopolitan atmosphere of the international organization, and to dream of a world government inspired by the ideas of social scientists.

Influenced by philosophical as well as physical and biological ideas, Gottmann recognized in this paper the extreme fluidity of human geography and the corresponding importance of circulation as the most important legacy of the historic canon. In fact, circulation was reconsidered in the light of French philosopher Henri Bergson's *L'Evolution créatrice*, which pointed out the limitations of language in capturing the dynamism of life and posited the reciprocal implication of antagonist tendencies in all living species. Inspired by these ideas, Gottmann realized that they could also be applied to analyzing the geographical dynamism of human circulation through crossroads and their chains, echoing the frequent exchanges he had with prominent physicists at Princeton's Institute and foreshadowing his future studies of urbanization and the megalopolis. Since circulation was

assumed to be perhaps the most important tendency in human geography, Gottmann started to search for its Bergsonian "opposing trend." In this investigation, another extra-geographic insight came from 19th-century French experimental physician Claude Bernard, who, in his *Introduction à la Médicine expérimentale*, postulated a biological relative balance between two milieux: the inner environment (the body) and the external environment (the cosmos), in a modern holistic and ecological perspective. Gottmann projected Bernard's theory from the individual to the collective scale. In this case the inner environment of the human body was substituted with that of the collective body, composed of political, religious, social, economic, and cultural elements. Therefore Gottmann imagined drawing a curve out of the changing relationships between human society's cultural environment and its hosting physical environment to explain the fluidity of human geography.

As we shall see, these ideas were developed further in Gottmann's political geography. His article concluded with an appeal to the importance of the psychological and "spiritual" in human geography, considered the underlying basis of the inner environment and therefore a possible opposing or regulating tendency in the drive of circulation.

Ironically, the psychology of the Cold War was soon to have an impact on his own geography. In fact, once returned to Johns Hopkins, he did not remain there for long. George Carter, an ambitious colleague in the Department of Geogra-

phy, complained to Bowman about Gottmann's prolonged absences, leading to the end of his relationship with Baltimore in 1948. The Cold War system was just starting to take place when Gottmann lost his main connection with the American academic system, but he could not have known that his departure was a sign of a more general deterioration. Entering what Neil Smith (2003) defined as the "bitter end" of his life, Bowman then also decided on the closure of the Geography Department at Harvard University, which represented a terrible blow to the discipline. And a year later when the Chinese Revolution happened, the same Carter supported Senator MacCarthy's accusations against Owen Lattimore – Gottmann's former office mate – who was accused of using the darkroom of the Geography Department for spying, in the first case of a witch-hunt.[37]

The North Atlantic transhumance

The years 1948-1952 were a turning point in Gottmann's life and an extremely fertile period. His frequent "transhumance" across the Atlantic was mirrored by his attempts to explain one side of the North Atlantic to the other.[38]

Gottmann decided to return to Paris in June 1948 to resume his French academic career which had been interrupted by the war eight years earlier. Yet he soon found out that the possibilities of re-entering the Sorbonne were very limited.[39] For better or worse, seven years of "Americanism" had made a difference. But he obtained a three-year fellowship at the *Conseil Nationale de la Recherche Scientifique* (CNRS) as *chargé de recherche* for a study of the Boston-Washington region (1948-1951). The faculty members approving this project were Max Sorre, Roger Dion and Emmanuel de Martonne, then president of CNRS; the idea was also supported by Pierre Gourou and Lucien Febvre. André Siegfried, who had written a few books on America,[40] also approved Gottmann's research, observing that if in the days of Coolidge American unity was complete, the situation then was much more diversified and complex.[41] Gottmann recalled him also saying at a later date: "It seems that what you are historically describing has been a hinge of America's economic history."[42] The only opposition – to Gottmann's surprise – came from Henri Baulig, who countered the idea as too distant from the classic regional monograph. In October 1948, de Martonne proposed Gottmann for a promotion to first-class researcher from third, and a raise of ten thousand francs in his monthly stipend. Chabot was to be the tutor of the main thesis, and Cholley of the secondary thesis. Meanwhile Gottmann was also invited to teach at the Institut de Science Politique (Science Po) in Paris, whose president was Siegfried.

At the time, and especially after his international experience at the U.N., Gottmann's scientific interests were focused on an area between political and cultural geography: the attempt to define the "personality of a nation," a concept that Vidal had already tried – somewhat vaguely – to capture with his ideas of "genre de vie" and of "esprit d'une nation," and of his own interpretation of Bernard's "inner environment" as a collective body composed of political, religious, social, economic, and cultural elements.

In fact, in the summer of 1948 Gottmann returned to Europe with a new fellowship from the Rockefeller Foundation for an enquiry on the "European zones of civilization."[43] Inspired by historian Arnold Toynbee's diachronic study of civilizations – in this project Gottmann planned to analyze synchronically the simultaneous co-existence of different civilizations or cultures in Europe at the time of its reconstruction.

This field enquiry brought him to travel during the summer of 1948 from Sicily to Scandinavia, allowing him to research the psychology of the different national communities surveyed. He found that all the countries seemed to share not only the post-war drive for reconstruction, but also – in varying degrees – a deep moral crisis which was probably more evident in comparison with his U.S. experience (fig. 6).

The data and observations gathered during that summer gave birth to *A Geography of Europe*,[44] written while Gottmann was a visiting professor at Columbia University in the summer of 1949. There, in order to frame geographically the different cultures or civilizations, he introduced his concept of iconography for the first time. "The results of this research emphasize the role of the spiritual factor in the creation of cultural regions and national differences, leading to the concept of iconography ... To be distinct from its surroundings, a region needs much more than a mountain or a valley, a given language or certain skills; it needs essentially a strong belief based on some religious creed, some social viewpoint, or some pattern of political memories, and often a combination of all three. Thus regionalism has what might be called an iconography at its foundation" (p. 70).[44] Iconography served to identify for Gottmann that historical, distinctive, and individualizing character of a community in relation to its neighbors, beginning with the densely populated and highly differentiated territory of Europe.

This concept was to be developed further.[45] While teaching at Science Po, in the summer of 1951 he wrote his first theoretical book: *La politique des États et leur géographie*, where he explained the genesis of regional divisions through an heuristics based on the dynamic interplay between two antagonist tendencies, as in the Bergsonian scheme already announced in his methodological article (1947). Two such tendencies or forces – circulation and iconographies – would be responsible for the political partitioning of geographical space and for the cultural differentiation at the regional scale.

Circulation – whose effects could be understood in terms of physical displacement – would naturally improve accessibility, opening the inhabited space to movement and producing cultural change. Iconographies, as we have seen, were defined as abstract sets of symbols that moor a community to its territory, sometimes in relation to the same landscape. In contributing to the definition of a group territorial identity, iconographies acted as a system of resistance to circulation and change. The action of iconographies on circulation flows and accessibility would be particularly visible on borders, as Plato had suggested in order to maintain the *polis* stability, and could reach the extreme of dictating the total closure of national space to external influences, as exemplified by Japan during the Tokugawa era. Finally, Gottmann pointed out that circulation and iconographies are not always in opposition: they also find forms of coordination through the action of carrefours, where "circulation, iconography, and politics" are reunited.

In *Elements de Géographie Politique*, the concept of iconography was developed further through its opposition to that of iconoclasm and he explored its role in terms of the self-defence of a community.[46] This was probably the result of an exchange of views on the interplay of circulation and iconographies he had had with Toynbee himself a year earlier.

"I wonder how much the crumbling of the old 'geographical barriers' as a result of technological progress does not provoke in the minds of most of the peoples on earth a movement of resistance that wishes to compensate for the trends of uniformization and standardization imposed upon us by technological progress. In other words, I wonder whether a great deal of the strength of contemporary nationalisms is not due to such a response to the new challenge of uniformization. It always seemed to me a striking and important characteristic of geographical space, that is space accessible to men, that they were partitioned in some way (political, legal, economic, etc.) very soon after they became accessible. If this kind of partitioning could be accepted as the product of something inherent

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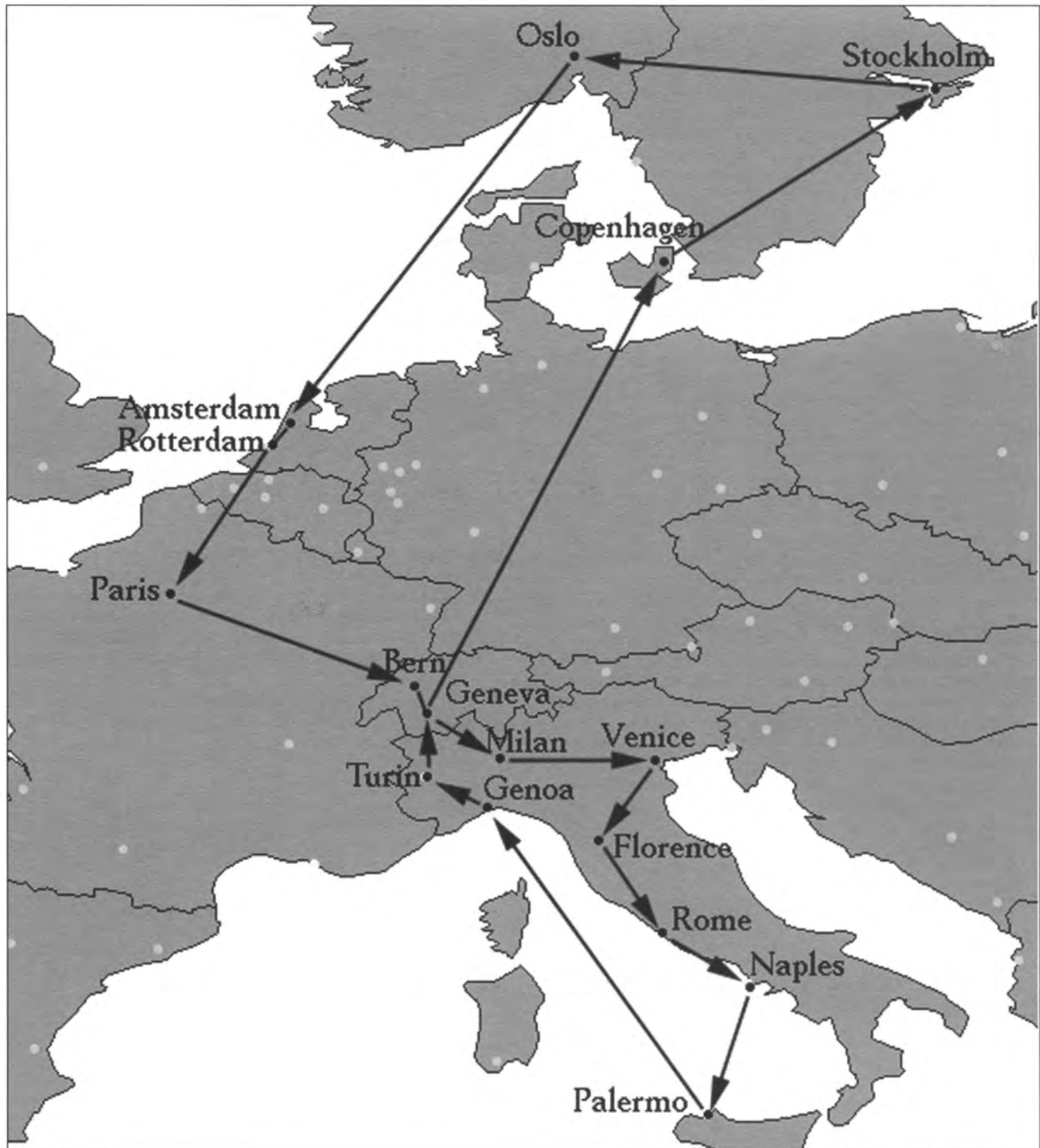
Fig. 6: Between August and October 1948, Gottmann was on a mission to study the "European zones of civilization," during which he travelled from Paris to Switzerland, Italy, Denmark, Sweden, Norway, and the Netherlands.

to collective psychology or to the organization of society, and perhaps to both, would it not be logical that our present period, endeavoring to erect new geographical barriers based on local beliefs, does so with increasing enthusiasm in order to avoid too much uniformization and unity?"[47] Toynbee agreed: "The breaking down of barriers makes people re-erect them, for fear of losing their local heritages. Iron curtain and air travel bang together. For this reason, I believe, the future organization of the world will always have to combine local variety and autonomy with standardization and central control in order to satisfy psychological needs, and unless it does that, it will not last. I think our object should be, not to try to iron out the differences,

but to try to understand and sympathize with one another's different outlooks and ways of life."[48]

Circulation and iconography were therefore thought of in terms of systems of movement and systems of resistance to movement, the latter conceived as a factor of political stabilization, deliberately manipulated by political powers for their aims. In an ulterior conceptual articulation, the possibility of circulation of iconographies was also considered, as exemplified by the different layers that with every migration wave structured the iconography of the New World.[49] In this perspective it was also possible to conceive an American iconography of circulation,[50] represented by the concepts of the frontier and of the "permanent revolution" of American society. With the predominant role of the United States during the 20th century, this type of iconography soon became part of an iconography of globalization, which promoted in the West during the Cold War a geopolitical era of international integration.

Gottmann's reflections on circulation and iconography, which had already led him to emphasize the importance of cross-roads, evolved into the study of the Megalopolis of the Northeastern seaboard of the United States, a perfect symbol of America's Prometheism and at the same time a tangible geographic reality, which was now confronted in systematic terms. Although Gottmann never explicitly mentioned his heuristics of circulation/iconographies to explain the partitioning of space in Megalopolis, it is exactly in this perspective, in light of how much urbanization in the modern world is one of the basic trends affecting national and international structures, that it is possible to gain a better understanding of it.

On the origins of Megalopolis

Two articles published in 1951 summarize some of the scientific findings of Gottmann's thesis on the Boston-Washington region,[51] and allow one to see how many of the ideas of Megalopolis were already developed ten years before the publication of the book. The subject was introduced first in terms of an extraordinary change in land use and an unmatched density of great cities along the North Atlantic coast. The scale of this phenomenon was unprecedented: 600 km long, 50,000 sq.km of area, 25 million inhabitants (1940 Census) growing to 30 million 10 years later, representing about one-fifth of the entire U.S. population. While such a concentration of people was possible thanks to an impressive industrial, commercial, financial, administrative and communications infrastracture, the ordinary distinction between town and country was lost. Comparing this development to a new Rome of the 20th century, Gottmann analyzed the phenomenon in terms of the history of the circulation flows, and theorized a "circulation equation" in the partitioning of people, resources and forms of habitats to explain it.

A further development of this research was delayed for a few years by a chain of events. When that year Gottmann came to discuss the terms of his promotion to maître de recherche at the CNRS, he refused to submit to the limitations of physical and intellectual movement imposed by the Paris faculty in order to renew his fellowship, and decided to return to the United States.[52] Then, at the beginning of 1952, Gottmann broke his neck and suffered a quadriplegia that required many months of rehabilitation. During his stay at Mount Sinai Hospital, he received many visits from Abraham Flexner, former head of the Institute for Advanced Study. Flexner later introduced Gottmann to philanthropist Paul Mellon, Later, through the Old Dominion Foundation, Mellon sponsored a three-year research on Virginia – a general historical, economic, social, and political survey of the state – which ended with a report and the publication of a book.[53]

Virginia at Mid-Century was the first attempt of a regional monograph in the French geographic tradition for a region of the U.S. Virginia was also the southern tip of the megalopolitan region, and for the preparation of the monograph, Gottmann worked at the Institute in Princeton and often in Washington, where he improved his knowledge of the metropolitan area. In its conclusions it is possible to find, published for the first time, the idea of megalopolis on the Northeastern seaboard, anticipating that "northern Virginia, and ultimately the whole of Virginia would be greatly influenced by their position ... at the tip of megalopolis."[54]

The Institute and Oppenheimer played an important role in starting the Megalopolis project.[55] Since 1947, Robert Oppenheimer had become the director of the Institute for Advanced Study, and he granted Gottmann single-term membership for nine consecutive years between 1949 and 1958 (and a few more times in the 1960s).[56] Oppenheimer was a trustee of the Twentieth Century Fund, which sponsored this project from 1956 for five years. He supported Gottmann, especially at the beginning, when, once the project had been already agreed upon, the trustees tried to reorient it towards a general study of the "Metropolitan Areas in the United States." Gottmann stuck to his original plan, but some tension remained until the name "Megalopolis" was found.

In his Reminiscences, Gottmann recalled a discussion at a luncheon during which Oppenheimer proposed the term megapolis to identify the phenomenon. Since there were also some classicists, they protested that the correct Greek word should have been megalopolis and later provided him with information about an ancient city of the Peloponnese with that name. The final choice was apparently influenced by the fact that "a number of Greek philosophers used the word 'megalopolis' to mean the great city of ideas which determines the city we build for ourselves on earth."[57] It seems that Lewis Mumford, who had used the term in his book on the culture of cities, cautioned Gottmann against its use, and Gottmann believed he never forgave him for not following his advice.[58]

In the proposal for a survey on the Megalopolis prepared for the Twentieth Century Fund, many of the main ideas were already in place.[59] From its pioneering role both as a laboratory to study urban growth, and in the organization and management of urban life; to the understanding that its growth – more rapid and continuous than that of most other urban areas in the world – summed up a good part of the economic history of the United States; from its polynuclear origin, beginning to be repeated in other regions, to "the part played by the series of northeastern seaboard cities as a hinge of the American economy serving both as an oceanic facade for relations abroad and as a springboard for the settlement and development of the continent inland"; from its crucial role in determining national trends, to its weight in the political life of the country.

Its main functions were summed up as the maritime facade, the manufacturing, the commercial and financial and the cultural leadership functions. The primary problems considered were traffic and slums, like in all downtown sections of modern cities then, but also water supply, and local (megalopolitan) government. In fact Gottmann understood that if the growth of such an enormous urban territory had been rapid, the evolution of its laws and customs would take much longer, not least because of the psychological problems involved in adapting to its needs, huge scale and accelerated pace.

When considering the research methodology, a strong accent was placed both on the variety of interrelated fields involved, and on the need of gathering, processing and coordinating huge quantities of data, while the constant use of cartographic methods was to help clarify the meaning of the data and the trends in the study area.

Beyond Megalopolis

The production of Megalopolis took two years longer than the originally planned three years. An office was set up in Manhattan to coordinate the effort and a small team of researchers helped Gottmann manage the massive and complex work. Meanwhile, in 1957, Gottmann married Bernice Adelson, with whom he had been acquainted as a family friend since his arrival in New York. An editor at *Life* magazine, Bernice had tended him while he was suffering from quadriplegia, before becoming his life partner and worldwide traveling companion.

When the book was finally published, a press conference was organized for its launch, and a year later, a richly illustrated abridged version was produced by Wolf von Eckardt. Megalopolis gained immediate success worldwide, and distinguished urban scholars discovered and analyzed more megalopolises in other parts of the world in the following years.[60] Given the scope of this work, some controversies were inevitable, especially with Mumford and others who, more or less conscious of following the biblical condemnation of urban growth, were concerned by the problems related to the urbanization process and pressed – somehow regressively – for a return to a Platonic small scale in urban matters. Others, like Hans Blumenfeld, feared Gottmann as an outsider invading what they thought was the exclusive field of urban planners. In fact, Gottmann's analysis is today confirmed by the spectacular rate of urbanization at the global scale of the last five decades, as well as by the recent studies on "global city-regions."[61]

Moreover, at the time, few were aware of the long process that brought Gottmann to Megalopolis. Only the singularity and variety of Gottmann's biographic and scientific experience could have allowed one to foresee the novelty that this densely urbanized region represented. It was the same circulation flows on which Megalopolis was based that brought Gottmann in the turmoils of the century from Eastern Europe to "the main street of the nation." During the War he experienced there the new scale, morphology, and functions of human settlements and their political dimension. And during his Atlantic transhumance, he traveled along its "weave of relationship wrapping around the twentieth century world"[62] and centered from there.

Yet, Megalopolis was certainly not a simple reflection of his biography, but rather a natural evolution from Gottmann's theoretical work on political geography. The megalopolitan pattern of settlements was the expression of a megalopolitan process, based on the priority of circulation. In this perspective it opened the transition from a political geography of state-nations to a new geography of nodes and networks, at the scale of the time.

The analysis of circulation flows through carrefours and their chains allowed Gottmann to understand the physical, economic, social, political and administrative mosaic of the Megalopolis and its many challenges.

The Megalopolis was never just an updated version of the American frontier's myth or a new icon of America's Prometheism in the Cold War era, as some interpreted simplistically. The fact that the Megalopolis eventually became an icon in itself does not diminish or contradict its scientific value; rather it allows us to see how deeply Gottmann understood the psychological role of iconographies in the creation of territorial identity.

Megalopolis represented a mutation in the geographic scale of human settlements that became a prototype at the global scale, not only for its material infrastructure, or for its anticipation of the 'white collar revolution' in the division of labor, but more importantly, as an *incubator* of a new geopolitical order. In this perspective, since Gottmann had a "communitarian rather than a statist or liberal conception of the political"[63] (or, we may add, a cosmopolitan one), the very acknowledgment of

its existence contributed to expand the same geographic limits of a community's identity, which is not to be seen as simply regional, but, through the bonds of international interdependence and diasporic networks, as part of the process of creation of a world community.[64]

Ten years after his death, the creation of a world community endowed with a global territorial identity still seems to have a long way to go, not least because, as Gottmann anticipated, a certain degree of territorial separation is a necessary condition for a peaceful cohabitation based on tolerance. Still, the recognition of the "psychological underpinning of territorial sovereignty," which leads to his interpretation of territory as a "psychosomatic device,"[65] in the framework of an ever accelerating world urbanization, allows us to explain why the emergence of international terrorism is not a national but a megalopolitan phenomenon, and therefore throws some light on how current politics could be improved, through the development of feelings of mutual belonging to megalopolitan communities, whose hinges strengthen bonds and linkages across iconographic boundaries.

Notes

1. Biographic information collected from David Hammack (ed.), 1987. *The Reminiscences of Jean Gottmann* in the Oral History Collection of Columbia University.
2. Since the time of the Paris Peace Conference, Berchin's adhesion to the Zionist project was critical of the ways in which the leadership of the organization had intervened in the treaties and invoked the necessity to obtain larger support in the public opinion of the Great Powers through the action of the media. *Source:* Jean Gottmann, 1952. "Michael Berchin (1885-1952)," typescript, Fonds Gottmann, BnF, Paris.
3. Jean Gottmann, "Jean Gottmann's youthful period of development" (document A), unpublished typescript approx. 1990, Fonds Gottmann, BnF, Paris, p. 1.
4. In the same document Gottmann explained the militarism of his stepfather with his personal experience in the Russian Army: Berchin was convinced that military life provided both an adequate discipline and a "spirit of corps."
5. See: Jean Gottmann and Pierre Gourou, "Albert Demangeon (1872-1940)," *Bulletin de la Société Languedocienne de Géographie*, 2e série, Tome XII, premier fascicule, Montpellier, 1941, pp. 1-15; see also: Jean Gottmann, "L'oeuvre d'Albert Demangeon (1872-1940)," typescript dated August 1972, Fonds Gottmann, BnF, Paris.
6. For a detailed account of the French school of geography during the war, see Jean Gottmann, 1946, "French geography in wartime," *Geographical Review*, 36, pp. 80-91. See also: Anne Buttimer, 1971, *Society and Milieu in the French geographic tradition*. Published for the Association of American Geographers by Rand McNally, Chicago, IL; Olivier Soubeyran, 1997. *Imaginaire, science et discipline*, L'Harmattan, Paris, p. 230; Paul Claval, 1998. *Histoire de la géographie française de 1870 à nos jours*, Nathan, Paris.
7. Gottmann attended a full class on the crisis of Europe taught by Siegfried at the Collège de France in 1934. See Gottmann (1989), "En travaillant avec André Siegfried," in *Etudes Normandes,* Rouen no. 2, 1989 (André Siegfried, la politique et la géographie), pp. 13-16.
8. Since the end of the 19th century, and thanks to Paul Vidal de la Blache, history and geography are integrated in the French academic curriculum. This endured until 1943. Gottmann's secondary thesis is dedicated to the study of diplomatic relations in the Balkan wars.
9. *The Reminiscences, op. cit.*
10. J. Gottmann, 1933-34, La culture irriguée en Palestine. Thesis. Institute of Geography, Hebrew University of Jerusalem and Fond Gottmann, BnF, Paris.
11. His thesis contains also a useful reconstruction of the recent history of Palestine: from the beginnings of Jewish settlements, to the formation of a Muslim solidarity progressively opposing European colonization and the Jewish state, to the ambivalence of the British

administration, which started the first cadastre of the region. The analysis of Jewish migration flows is possible thanks to the existence of a detailed register, while there were obviously no data available for Arab movement to and from Transjordan.

12. B. Mazon (1985), "La Fondation Rockefeller et les sciences sociales en France, 1925-1940," *Revue française de sociologie*, XXVI, pp.330-331; See also: B. Mazon (1988), *Aux origines de l'EHESS, le rôle du mécénat américain*, Cerf, Paris; E. Loyer (2001), "La débâcle, les universitaires et la fondation Rockefeller: France/Etats-Unis, 1940-1941," in *Revue d'histoire moderne et contemporaine*, no. 48, pp. 138-159.

13. See: J. Gottmann, 1938, "Le problème des matières premières: l'approvisionnement de la France," *L'Information Géographique*, 2 , (4), pp. 155-157. This line of research was then developed at the European (1939) and global scales (within the Paris-based Institut International de Co-opération Intellectuelle of the Society of Nations). After the war, Gottmann also consulted for the Raw Materials Combined Board, and finally synthesized those experiences in a publication: Jean Gottmann, 1957, *Les Marchés des Matières Premières*, A. Colin, Coll. Sciences Politiques, Paris.

14. Isaiah Bowman, *The Pioneer Fringe*, American Geographical Society Publication, no. 13, (New York: AGS, 1931).

15. Neil Smith, 2003. *American Empire. Roosevelt's Geographer and the Prelude to Globalization*, California University Press, Berkeley, p. 213.

16. J. Gottmann, 1937, "The pioneer fringe in Palestine settlement, Possibilities South and East of the Holy Land," *Geographical Review*, 27, pp. 550-565.

17. Gottmann to Berchin, 22 July 1938, Fonds Gottmann, BnF, Paris.

18. *Annales de Géographie*, 47, 1938, pp. 575-601.

19. Back in Montpellier at the end of the war Gottmann discovered that the Germans came to look for them in their former home in rue Lepic. Gottmann to Berchin, 5 May 1947, Fonds Gottmann, BnF, Paris.

20. HICEM was an international Jewish organization founded in 1927 to support Jewish migration. The name was derived from the three Jewish organizations of which it was constituted: HIAS (Hebrew Sheltering and Immigrant Aid Society, a Jewish American organization based in New York); JCA (Jewish Colonisation Association, founded by Baron de Hirsch in 1891, in Great Britain); and Emig-Direkt (founded in Berlin in 1921). Its activities, largely funded by the American Joint Distribution Committee (AJDC), allowed about ninety thousand Jews to flee during the Holocaust. Based in Paris, it helped the refugees with information, visas, transportation, credit, etc. In 1940, before the Nazi occupation, it moved to Lisbon, where it operated undercover from within the local emigration office.

21. According to a private conversation with Bernice Gottmann.

22. *The Reminiscences, op. cit.*

23. The Institute for Advanced Study was founded by Louis Bamberger and Caroline Bamberger Frank Fuld after advice from Dr Abraham Flexner. When Gottmann arrived, it consisted of the prestigious School of Mathematics (opened in 1933) which had among its permanent staff Albert Einstein, Kurt Gödel and John von Neumann; of the School of Humanistic Studies, with classicists like Ernst Herzfeld and E.A. Lowe, and art historians like Erwin Panofsky; and of the School of Economics and Politics, directed by Edward Mead Earle, both started in 1935. It also hosted a mission with many members of the Economic, Financial and Transit Department of the League of Nations, including Martin Hill and Frank Notestein and a temporary members flow from a wide range of disciplines and countries.

24. The Institute for Advanced Study, *Bulletin no.11 1941-1944*, Princeton, NJ, March 1945, pp. 3-4.

25. See letter of Earle to Admiral Wilkinson, 16 May 1942. Courtesy of the Archives of the Institute for Advanced Study.

26. Neil Smith, *op. cit.*, p. 294.

27. See Earle to Bowman, 25 March 1942, and Bowman to Earle, 26 March 1942. The Johns Hopkins University, Milton S. Eisenhower Library, Department of Special Collections and Archives, Inventories of the Ferdinand Hamburger, Jr. Archives, Isaiah Bowman Papers Ms. 58, Series 2 Correspondence Box 2.17, Gottmann file.

28. Gottmann to Gourou, 15 octobre 42, Fonds Gottmann, BnF, Paris. Curiously Gourou never received this letter as the mail service was suspended and it was returned to the sender.

29. The above mentioned works are: 1942: *Les relations commerciales*

de la France, (vol. I of the Collection France Forever), preface of Prof. Henri Laugier, Montreal, Les Editions de l'Arbre; "The background of geopolitics," *Military Affairs, Journal of the American Military Institute*, 6, (4), pp. 197-206. 1943: "Nature and men in French North Africa," *The Yale Review*, 32 (3): 474-492; Bugeaud, Galliéni Lyautey, "The development of French colonial warfare," in: *Makers of Modern Strategy: Military Thought from Machiavelli to Hitler* (ed. E.M. Earle), Princeton, Princeton University Press, pp. 234-259. 1944: Vauban and Modern Geography, *Geographical Review*, 34 , pp. 120-128.

30. See Neil Smith interview to Gottmann (1982); *The Reminiscences...*, op. cit.; also M.-C. Robic and J.-L. Tissier, 1993, *Entretiens d'Oxford*, Laboratoire E.HGO, CNRS Paris.

31. *The Reminiscences..., op. cit.* p. 24.

32. Henri Laugier was the president and co-founder of the French CNRS between 1936 and 1940. During the war he was director of cultural affairs at the Ministry of Foreign Affairs after 1944, adjunct secretary of the United Nations from 1946 to 1951, and member of the executive board of Unesco from 1953 to 1957.

33. Between March and August 1945 Gottmann reported on a variety of subjects such as: The USA and the French colonies; French aeronautic industry and strategic bases, the perception of French space; The Rhenan problem and French economic policy towards Germany; The geographical framework of the economic plan, Rural planning in the Toulouse region; The crisis in the hydroelectric power production, the international controls on raw materials.

34. Jean Gottmann, 1949. *L'Amérique* [Vol. I of the collection "Les Cinq Parties du Monde"], Hachette, Paris.

35. See Patrick Petitjean: "L'Onu a-t-elle voulu dominer la science mondiale? Les projets de laboratoires internationaux entre 1946 et 1949," *Proceedings of the XXI International Congress of History of Science*, Mexico, July 2001. (Universidad Nacional Autónoma de México), *forthcoming*.

36. Albert Einstein: "The idea of international scientific research, which is interesting in principle, has to be considered with great care and caution. All the history of science shows that it is not through organization and planning that the great advances were achieved: the mind of some individual must get the spark, and, finally, the freedom of work of the individual scholar is the main condition of scientific progress. Organization is a poor instrument to find out new ways and means." Courtesy United Nations Archive, Department of Social Affairs, DAG -18/ 1.4.1 E/620 (1946).

37. Owen Lattimore was Roosevelt's ambassador to Chiang-Kai-Shek's China and was sharing his office at the department of geography at Johns Hopkins with Gottmann since 1944.

38. See L. Muscara (1998), "The Atlantic transhumance of Jean Gottmann and the development of his spatial theory," *Finisterra*, vol. 33, no. 65, pp. 159-172.

39. This discovery must have been very hard to face in view of his aspirations to re-enter the Sorbonne, and given the harsh judgments expressed in the following letter as opposed to his usually very well-balanced style: "Hier soir j'ai eu des nouvelles intéressantes sur les plans de mes préoccupations d'avenir. Il y a eu une grande élection à la Sorbonne dont voici les résultats: Gurvitch a été élu à la chaire de sociologie (succédant à Albert Bayet). George (hélas!) a été élu à la chaire de géographie économique (Sorre). Perpillou à la chaire de géographie humaine et politique (Dion). Dresch à la chaire de géographie nord-africaine (Larnaude). George et Dresch sont tous deux officiellement communistes et font partie de la bande Cholley. Dresch a de la valeur scientifique mais George ... tu sais. Bien, me voici dans une situation où l'Institut de Géographie de Paris va cesser de m'interesser beaucoup. Il va degringoler. De plus tous les 3 nouveaux elus sont des partisans de la géographie classique, traditionelle, sans grand changement. Dommage. Il va falloir bien réflechir à la situation mais ça n'est pas très favorable. Décidément il sera dit que je n'irais pas à la Sorbonne. Il y a d'autres possibilités, me diras-tu. Oui, mais c'est encore une illusion qui s'envole. L'équipe actuelle est surtout faite de médiocres: Cholley, Chabot, Perpillou, même Robequain, qui est mieux mais pas formidable. Un bluffeur: George. Un sérieux mais conservateur en science: Dresch." (Gottmann to Berchin, 13 July 1948, Fonds Gottmann, BnF, Paris.)

40. André Siegfried, 1927. *Les États-Unis d'aujourd'hui*, and 1938, *Qu'est-ce que l'Amérique?*

41. Gottmann to Berchin, 24 October 1948, Fonds Gottmann, BnF,

Paris.

42. *The Reminiscences ...*, *op. cit.* pp. 55-56.
43. Courtesy Rockefeller Foundation Archives, R.G. 1.1, Series 500. Centre d'Etudes de Politique Etrangère, Paris, Box 21, Folder 212.
44. J. Gottmann, 1950. *A Geography of Europe*, New York, Henry Holt.
45. J. Gottmann, 1951, "Geography and international relations," *World Politics* 3, (2), pp.153-173. J. Gottmann, 1952. *La politique des Etats et leur géographie* (Coll. Sciences Politiques), Librairie Armand Colin, Paris. J. Gottmann, 1952, "The political partitioning of our world: an attempt at analysis," *World Politics,* 4 (4), pp. 512-519.
46. J. Gottmann, 1955. *Eléments de Géographie Politique* (Cours de l'Institut d'Etudes Politiques 1954-5), Paris, Les Cours de Droit, 2 fascicules, April/May.
47. Gottmann to Toynbee, 27 July 1954, Fonds Gottmann, BnF, Paris.
48. Toynbee to Gottmann, 30 July 1954, Fonds Gottmann, BnF, Paris.
49. This subject was already dealt with in his 1949 *L'Amérique* and elsewhere.
50. J. Gottmann, 1963, "La politique et le concret," *Politique Etrangère* 28, (4-5), pp. 273-302.
51. J. Gottmann, 1951, "La région charnière de l'économie américaine," *Revue de la Porte Océane* (Le Havre) 7 (71-72), pp. 9-14, (73-74), pp. 11-20.
52. *Entretiens d' Oxford* , *op. cit.,* pp. 21-22.
53. J. Gottmann, 1955. *Virginia at Mid-Century*, Henry Holt, New York.
54. *The Reminiscences ...*, *op. cit.,* p. 59-60.
55. See: Gottmann to Oppenheimer, 15 April 1956, IAS Archive, Princeton.
56. Gottmann file at the IAS Archive, Princeton.
57. *The Reminiscences ...*, *op. cit.,* pp. 55-56.
58. *Ibid.*
59. "Note on a Survey of Megalopolis, prepared by Jean Gottmann for the Twentieth Century Fund," IAS Archive, Princeton.
60. By the mid-1970s, the megalopolis of the Great Lakes had been studied by C.A. Doxiadis and Alexander Leman; the Tokaido megalopolis in Japan was studied under the direction of Eiichi Isomura; the megalopolis of England was analyzed by a team directed by Peter Hall; the megalopolis of Northwestern Europe, that spans from Amsterdam to the Ruhr and the industrial agglomeration of Northern France, was described by I.B.F. Kormoss. See Gottmann (1976), "Megalopolian systems around the world," *Ekistics*, vol. **41**, no. 243, pp. 109-113.
61. Scott, A.J. (ed.), 1999. *Global City-Regions*, Oxford University Press.
62. *The Reminiscences...*, *op. cit.,* p. 61.
63. J. Agnew (2003), *Making Political Geography* (London, Arnold), p. 98.
64. J. Gottmann (1994), *Beyond Megalopolis, Towards a World Community?* The Community Study Foundation, Tokyo (reprinted in *Sistema Terra*, **5.1** (June 1996): 82-84, and **5.2** (December 1996): 4-8.
65. J. Gottmann (1973), *The Significance of Territory* (Charlottesville, VA, University Press of Virginia), pp. x, 7 and 156.

City and culture

"The substitution of cultural approaches to morphological and functional ones was mainly achieved from the 1970s. Some authors had, however, understood earlier the interest of combining these different perspectives: it explains the interest of Jean Gottmann's contributions to the study of big modern cities (...). He started from the skyscraper, a classical element of the morphology of great American metropolises, but he immediately went a step further than other urban theoreticians: the vertical circulations the skyscraper accelerated could be substituted for horizontal ones; thanks to it, switching from partner to partner became easier; the skyscraper contributed to the efficient functioning of the social and economic switchboards downtown areas are."

Paul Claval

The author was born in Paris but raised and educated in South-Western France. He was a student at the University of Toulouse and then taught for a few years in secondary schools in Bordeaux and Montpellier. He then spent 12 years at the University of Besançon and 25 years at the Sorbonne in Paris. He has a permanent interest in the history and epistemology of geography, and in the relations geographers developed with other social sciences. In the 1960s, he worked mainly on the economic connections of geography, in the 1970s, on its ties with sociology and political sciences. During the last 20 years, he has been fascinated by ways geographers deal with culture. He has also maintained a permanent curiosity for urban geography.

Introduction

Urban studies seek to answer three questions:
- What does a city look like?
- What are its uses?
- What is its significance?

● The first group of approaches is a morphological one. It has been practiced for a long time.

● The second family is functionalist. It throve mainly during the 1950s and 1960s and remains in many respects fundamental.

● The third perspective developed essentially during the last 30 years. It considers the city as a set of scenes city dwellers frequent at different times during the day, the week or the year, in order to play various roles and participate in multifarious activities. The diversity of places and the originality they offer give city dwellers the possibility to enrich their experience. The city is an incubator of cultures.

It is this third perspective that we shall analyze after a rapid glance at the first two: in this way, it will be easier for us to stress its specificities.

What do cities look like?
The morphological approaches

Those who use the morphological approaches start from what everybody knows: human settlements do not have the same shape everywhere. There are numerous cases where they are split into isolated farms or hamlets, or divided into more or less important villages. The built areas cover only a small fraction of space, its most important part being devoted to fields, meadows, pastures or woods: we are in the countryside. When buildings become continuous and leave between them only the space covered by streets and some greenery, it is a city.

Streets, green areas and built areas

The city is first a morphological reality. It is made of a patchwork of voids and built-up sectors, the structure of which has to be explored. The areas which are not built are used by streets or roads, gardens, parks, playgrounds, horsetracks, etc. The analysis of street patterns involves a measure of the percentage of urban area they cover, an evaluation of their width and a description of their uses and the way they were conceived and equipped. Squares are devoid of vegetation, or planted with trees and covered by lawns. The areas where nature is still present are diverse: the monotonous lawns of green areas, the well-designed paths and vegetable- or flower-beds of gardens, the flexible distribution of groves, clearings and alleys of parks.

The plans and elevations of built-up areas have both to be evaluated: what is the proportion of urban space which is really built-up? Are houses and buildings dispersed in the midst of lawns or aligned along streets between road and garden? Do they cover the totality of blocks in between the streets? Are blocks opened by small or big courtyards? What is the share of the built-up area which is devoted to factories, warehouses, workshops or stores? Are the different types of building mixed together, or strictly segregated by imperative rules of zoning?

The diversity of built volumes is as remarkable as their plans. In the suburban areas, low houses, one, two or three storeys

high, occupy in a continuous way extensive areas: this is mainly true for British or American cities. Downtowns essentially attracted, and still attract, offices, but there are also department stores, luxury shops, movie-theaters, theaters, night clubs, music-halls, restaurants, etc. In these areas, buildings are generally higher. The skylines of American cities are characterized by the contrast between the proud skyscrapers of the downtown areas and the low horizons of suburban rings. Other configurations exist. In Eastern Asia, where the street pattern results from the superimposition of Western-style wide streets on an older maze of narrow lanes, the main avenues often appear as corridors of high-rise buildings separated by zones which are still surprisingly low. The rapid evolution of techniques had led Soviet planners to build increasingly high apartment houses: the height of the buildings grew upwards pardoxically when moving out from the city centers. In Brazil, where insecurity is such that it is difficult for people to live in isolated houses, verticalization is proceeding all over urban areas.

The projects of planners and property developers

The layout of streets, the design of gardens and parks and the conception of important buildings generally feed much discussion. The decision to build a new neighborhood, to renovate old districts or to open new ways for restructuring congested areas is taken by local authorities after public debates: their registers record the different opinions which were expressed, the critiques against such or such proposition and the final choices. The plans prepared by different developers and architects are submitted to competitive examination. Each group prepares plans, builds models and writes commentaries and explanatory texts.

Social scientists have thus a rich documentation on the ways the built-up areas were planned and carried out. Programs have to meet precise requirements: width of streets and roads, capacity to accommodate traffic flow, phonic protection. The organization of built-up areas has to meet the functional needs, symbolic messages and aesthetic tastes of City Halls or property developers. The morphological study of the city is always more than a simple description: thanks to archives, the perusal of press articles and the interviews with conceptors and decision makers, it reminds one of the ambitions of the people in charge of urban change, the stakes they took on the future, the aesthetic themes which inspired them and the ideological trends they represented (on the history of architectural and urbanistic projects, see BENEVOLO, 1960; on a theoretical reflection on this aspect of urbanism, see CHOAY, 1986).

Morphological studies provide precise photographs of land use, road systems and the volume of urban areas. They explain how morphologies are born out of the impulse given by the decision makers who rule over the urban scene. Their ideas are translated into precise projects following passionate reflections and debates. Specialists, architects, urbanists or engineers, transform them into operational programs. Real choices depend on the legal conditions which favor public housing here and private property development there. They vary according to financial conditions: the mortgage system, the more or less easy access to loans. They reflect the modes which prevail at a given time among architects and urbanists.

The morphological approach does not stop when a precise picture of built forms is provided. It establishes the time and the reasons for which specific architectural and urbanistic programs were chosen. It explains the conceptions that ruling groups on one side, architects and urbanists on the other, developed about what is an urban neighborhood, a district or a city. It stresses the symbolic dimensions that people wish to confer on such or such a type of official building or company

headquarters. The creation of built-up areas is a life-size game of construction: the participants get information on the programs to carry out; they are given a kit in which there is a choice of models to be used in order to discover satisfying solutions; they get notice of the actors which are willing to finance the equipments and the construction of residential or office neighborhoods. The morphological approaches to the city linger long on the work of conception and programming which shaped the spaces they analyze. On the other hand, they tell nothing on the way a city functions, and the difficulties, griefs and joys of those who inhabit it or work in it.

It is thus necessary to develop other approaches.

What is the use of the city? The functional approaches

What is the use of the city? Functional approaches seek to answer this question. For them, the specificities of the city do not come from its visible forms, but from the tasks it performs.

The diversity of urban functions

The list of functions performed in a city is generally a long one. Political power is normally exerted from cities: the Sovereign settles in the capital city, the most important of them; all the information he needs in order to ensure the security of the population, to maintain civil peace and to ward off external threats, converges towards it; he prepares orders and diffuses them to his agents, located in the other cities: these civil servants implement them and look after the respect for laws and regulations. Religions which rely on a centralized organization, Roman Catholicism for instance, also require cities in order to harbor their hierarchies.

Cities are market places. Traditionally, the farmers from the neighboring areas offered their products for sale to urban dwellers who consumed them or middlemen who resold them further. Craftsmen working in the city marketed their production in the same place; traders, some of whom were pedlars, offered rare and exotic commodities. With the modemization of transport and the industrial revolution, the volumes exchanged increased, forms of transaction became more differentiated, but market and trading functions remained essential.

In order to provide children with education, treat sick persons, advise enterprises on legal or economic matters and establish contracts, specialists are needed. In order for them to live, the demand for the services they provide has to be high enough. Service activities are specifically urban; they are hierarchically distributed according to the size of cities and the areas they attract.

The high density of the built-up areas prevents cities from producing the food they need – even if the proximity of a market place is a stimulus for farmers, who display treasures of imagination in order to increase the yields of their fields. For a long time, cities participated in the productive process only through the activity of their workshops. With the industrial revolution, they began to attract all forms of industrial activities. Since urbanization accelerated at the same time, the industrial function appeared as the most significant one.

Looking for a unitary principle

Thanks to the growing number of analyses of urban functions during the first half of the 20th century, it became possible to propose a rich and qualified answer to the question: "What are the uses of the city?" but the multiplicity of functions reduced the significance of these results. Urban studies became increasingly precise: thanks to them, it was possible to distinguish between market places, administrative, religious or in-

dustrial centers, and capital cities. In its first stage, the functionalist approach was more useful for emphasizing the diversity of cities than for showing what they shared.

In order to go further than the description of functions to explain what a city is, an effort of abstraction was needed. The new orientation was opened in the 1930s by Walter Christaller's studies on central places: service activities play a decisive role in the characterization of cities (CHRISTALLER, 1933). The fundamental function of urban areas is to serve as market places.

For explaining in a satisfactory way what a city is, something was however still lacking: Christaller did not say why market places were needed; he did not specify why urban activities were mainly linked to services. At the end of the 1960s, the reflection on contacts and face-to-face relations threw light on these points (TÖRNQVIST, 1968). In the 1970s people began to conceive market places as switchboards between social partners (CLAVAL, 1977; RENFREW, 1975; WILLIAMSON, 1975).

By the beginning of the 1980s, it had become possible to define the city in an abstract way: it is a form of spatial organization which allows for the maximization of social interaction (CLAVAL, 1981). Such a perspective offers numerous advantages. The techniques and equipment of communication which allow for an easy switching between partners evolve. Urban forms change at the same time. As long as face-to-face relations between those who provide the services and their clients are needed, the interactions which are the *raison d'être* of the city are located in the downtown area. With the use of motorcars, the avenues which converge towards it are increasingly congested. The city becomes polycentric.

With the expansion of modern telecommunications, an increasing share of social transactions can be realized without direct contacts: services which were until then restricted to the populations who lived in urban areas are now available in regions with lower densities: it is the reason for suburban sprawl and, further, for the development of rural areas.

For urban theory of the 1980s, the morphologies which give access to a high level of social interaction are not set once and for all. Thanks to the universal access to the telephone, the possibility to consult the Internet and the democratization of car ownership, the dense and continuous urban texture of the past has become outmoded. In the contemporary world, the forms of activities linked to urban life have ceased to be limited to dense and continuously built-up areas.

The diversity of interaction forms

The functional approach places emphasis on the economic dimension of cities. It also explains some of their other aspects. The interactions which take place in an urban area, in its downtown sector more particularly, are not always of the same type. In the traditional world they were developed between individuals who spoke for themselves, their families or the family firms they belonged to. Today most of those who meet work for private companies or public administrations.

The reasons for which people meet are diverse: imperatives of trade, exchanges between industrial enterprises, family relations, leisure, entertainment, political affinities, religious practices, shared ethnic origins, use of the same language, etc. In this way the functional approach opens perspectives on the cultural dimensions of urban life (CLAVAL, 1981).

What is the significance of cities? The cultural approaches

The morphological perspective conceived the city as a whole, the unity of which was expressed by the continuity of built forms. The functionalist approach apprehended also urban spaces in a global way. It relied on the following argument: the

population who inhabited an urban area could only live on the foodstuffs imported from outside; in order to pay for what it imported from other regions, the city had to develop either a levying power or non-agricultural productive activities.

These global approaches contrast with those which start from the city dwellers. The problem ceases to understand what is a city as a totality, but how it is lived by those who inhabit or visit it: a cultural point of view has to be adopted. Morphological and functional analysis had cleared the ground for it in two ways:

• they had shown the perspectives of those who had presided in the building of cities or participated in their extensions;
• they had placed emphasis on the diversity of interactions which developed between city dwellers.

These themes are useful, but do not touch the heart of the problem.

Urban life trajectories and itineraries

The cultural approach follows step by step the individuals throughout their existence. The orientation was given, from the early 1950s, by a map published by Chombart de Lauwe (1952): it showed the trips of a young lady living in the 16th arrondissement in Paris. She frequented and used only a very small portion of the whole urban area; she was going back and forth in the streets close to her home in order to meet her daily requirements, make normal purchases and encounter her friends and parents; she was a student at the Institut d'Etudes Politiques, so that another bundle of trips was organized around the Saint-Guillaume street, in the 6th arrondissement.

The mode of analysis imagined by Paul-Henri Chombart de Lauwe was resumed and systematized by Torsten Hägerstrand (HÄGERSTRAND, 1970). When a student, he had been fascinated by the publications of a demographer, Lotka. Instead of studying the dynamics of populations through the evidence provided by censuses and birth and death data, this statistician adopted a longitudinal approach: he followed the life of people, retracing their moves and noted the places where the events – marriages, divorces, births, deaths, etc. – occurred which interested the specialists of populations.

Hägerstrand systematized this type of procedure: social sciences do not study realities which are shaped once and for all, but sets of people constantly renewed by births and deaths, and migrations. Most social scientists are glad with the drawing of maps. But the reality they map is changing. They need a movie which captures moves, and not a snapshot which freezes reality. Their observations concern three dimensions: the coordinates of the place where each individual is located at a given time, and the time when the observations are made (PARKES and THRIFT, 1980).

Reflecting on these techniques of analysis, Hägerstrand made a few simple, but fundamental, remarks. The trajectories followed by individuals are never exactly similar, since they do not frequent the same places at the same time. The luggage everyone receives for his (or her) life has not been given to him (or her) once and for all, at the time of his (or her) birth, by the society in which he (or she) evolves. It has been progressively built. Within his (or her) family, parents, brothers or sisters serve as living models; they provide many pieces of advice on what has to be done – but what the younger boys or girls learn necessarily differs from what their elders have experienced. School also plays an essential role in the acquisition of attitudes, practices and norms, but even when programs did not change over time, teachers and schoolmates are not the same, which means that what is transferred evolves. The changing opportunities of encounter that life offers explains why culture differs from one person to the next: it is constantly modified, enriched, or gets critical.

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This inventory of life trajectories puts emphasis on the complexity of the settings people move in, and the variety of their itineraries even when their lives are inscribed within the same spatial unit, a city for instance. The experiences of everyone differ. The cultural approach is mainly centered on the analysis of these experiences, the meaning they confer to life and the significance they give to places and people.

Organized and arrowed spaces

In order to multiply the opportunities of encounters and the relations urban dwellers wish to have, the space in which urban life takes place has to be organized. The city is for the city dweller a labyrinth of streets and public squares through which he has to get oriented. As long as societies were purely oral, people had no other means in order to find their way than to ask where they were and what road to follow. It was time-consuming and sometimes inefficient: in order to get better results, people carved or painted signboards to mark the most important thoroughfares and indicate shops, inns or restaurants. The habit, for all the traders working in the same branch, to locate in the same street in medieval towns or in the same alley of a bazaar in oriental cities, had the same significance: to simplify the information that city users had to master.

The use of the written word and techniques of numeration made the urban organism more easy to read: it was enough to have a map and look at the name or number of streets to find one's way and explore urban space by oneself. The system appeared at a time when most streets had already been drawn and continuously lined with houses: it was enough to have all the gates numbered, even numbers on one side, uneven on the other, to find out the shop you were spoken about, or the house where friends lived. New roads were not continuously lined with buildings. If those which were already built had been directly numbered, the numeration had to be modified whenever new houses appeared. The only solution was to measure the distance of each building to one or the other end of the street: Mr Jones's house is 322 meters or 657 yards from the end of the street.

A new phase is reached with the arrowing of itineraries. It is a necessity for people travelling by car: at a crossing, they have no time to consult a map in order to know whether they have to turn left or right, or go on. Signs located adequately ahead of the crossings inform the drivers of the choices they will have to make, and the streets they may take in order to reach their destination.

Marc Augé explored the extension of the procedures of signalling. They transform a part of urban space into no-places, i.e. locations which do not speak about themselves, but about more or less distant destinations. "It is evident that by no-place, we designate two complementary, but distinct, realities: spaces constituted in relation with some aims (transport, transit, commerce, leisure) and the relations individuals develop with these spaces" (AUGÉ, 1992, pp. 118-119). What is the result of these practices?

In this way are created the conditions of circulation in spaces where individuals are supposed to interact only with texts, without any other enunciators than artificial persons or institutions (airports, air companies, etc.) [...], the presence of which looms vaguely or is more explicitly affirmed [...] behind the injunctions, pieces of advice, comments and "messages" transmitted through the innumerable supports [...] which are an integral part of the contemporary landscape (AUGÉ, 1992, p. 121).

The spatial layouts and equipment which transform the city into a place for encounters and opportunities vary with the modes of communication people know and use and the techniques of transport. In public areas, the internationalization of life leads to the growing substitution of pictograms for text, since they may be understood by persons who do not use the same language.

The city as a scene

In a city, the trajectories of men and women continuously cut across each other. Every place appears as a scene where plots are constructed and dramas or comedies performed. The atmosphere is created by the actors and the scenery behind them.

The city appears in this way as a complex theater: there is the city of the working days, the city of weekends and feasts and the city of riots and revolutions. The urban space is made of a juxtaposition of scenes doubled by wings. The opposition between private and public space is a founding one (KOSTOF, 1992; PAQUOT, 1996). It gives city dwellers the opportunity to participate in a multitude of interactions, to be members of various groups, to be mingled with the crowd of big events and to find oneself back in small groups, or alone, in order to reflect, work, relax and resume one's forces.

The city offers its inhabitants an inexhaustible repertory of forms of interaction. The diversity of built forms gives an idea of this wealth, but a weakened one, since the same settings often serve for different forms of encounter depending on hours and days. I remember Boston about 5 pm, when flows of employees leave the office buildings where they have worked all day. At the same time but in the other direction come those who will give the evenings and nights their rhythms, music, dances, disputes and crises of violence. The only change in the setting comes from the lights which indicate the entrance of night clubs located in basements.

When conceiving the façades of public buildings, department stores, temples or churches, architects of the past sought mainly to emphasize the symbolic dimension which was attached to their uses. Law courts had to be stamped by solemnity and to recall, by their borrowings, the grammar of classical architecture, the Greek and Roman tradition which inspired modern law. The palaces of rulers spoke about power and stability. Big office towers stressed by their verticality the wealth and ambitions of the companies which located their headquarters there (GOTTMANN, 1966). Coffee shops and restaurants were the only buildings to break with these conventions: they were open to the street, occupied it partly and invited passers-by to eat, relax and enjoy the mutual exhibition they made of themselves.

Cities had their feast days, but the scenery which was set up for them was ephemeral: paper chains, cardboard triumphal archs, banners, lattice work of greenery and flowers (KIM, 2000). All had faded before the last lantern went out. The city offered in this way two faces, the serious one of its political, religious and economic functions, and the passing one of its moments of relaxation and rituals of social inversion.

The city of today is conceived differently. Those who draw it purposely rub out all that speaks about the work really done in the buildings, which they transform into dream decors in order to make city dwellers oblivious of their daily difficulties. They disguise the working cities of the past as festive cities: the change in the role given to the scenery speaks about a fundamental transformation in the meaning given to urban life. The city was the place where people worked, where those with political, religious and economic responsibility built up the collective destiny. Today it is there that people have fun and forget their daily difficulties. The city has ceased to speak about those who mold the fate of others. It is designed in order to meet the longings of masses in societies where consumption dominates, the religious experience has ceased to be a dramatic one, and faith itself is accompanied by unbridled music and dance (GRAVARI, 2000).

The diversity of cultural experiences

Meeting points, ways, scenery, everything is set out to allow individuals to multiply their encounters, frequent people they confide in, or experiment with new conceptions, perspectives or rituals. The city offers an unequalled field of cultural experiences (PAQUOT, 1996).

These experiences differ according to income or social class. A good example is provided by contemporary Brazil (BRUNO, 2000): the poorest people have no place to take refuge from their neighbors because they have no homes; the only space open to them is that of streets where they often squat at night, sheltered by cardboard. Slightly higher in the social scale, families have a room in a *favella*, only a few square meters, without security (there are no property titles in these neighborhoods), under the pressure of the *bicheiros* (local *mafiosi*) who control these areas; children are condemned to live in the streets, with its temptations and dangers – crime, prostitution, drugs. Families with high enough incomes have an apartment in a residential tower, the entrance of which is controlled by armed guards; their children spend their afternoons in *clubes*, where they are protected from the risks of the streets. All Brazilian people like to live on the beach, to practice dancing; they are all fond of football and schools of samba, but the cultural universes they are immersed in differ by most of their characteristics.

Encounters and forms of cultures they generate are linked to the professional activities for which life and school prepare them. Many possibilities exist also in this domain. The strength of the city comes from the juxtaposition of know-hows and the knowledge it favors.

After work, people meet friends, within a community where they feel at ease: it is often a group from the same village when urbanization is recent, or the same country when urban growth is fed by international flows of populations, as is the case in most contemporary metropolises. Local dialects or the languages of the home countries survive in this way, transforming cities into multi-ethnic realities.

People participate equally in religious communities: there is a multiplicity of cults, which tend to diversify at a time when sects proliferate. What people seek there is the support of those who share the same opinions; they wish to preserve the feeling of identity which stems from their spiritual roots; they hope to find an answer to the existential questions about life, illness, death, injustice and violence that the urban environment compels them to ask.

Modern urbanites have often forgotten their origins and practice halfheartedly the religion they pretend to believe in. They prefer to learn, cultivate their minds or entertain themselves. They attend evening classes, visit museums and frequent theaters, opera houses or concerts. They go out at night for eating, drinking or dancing. In the morning, they jog, practice modern forms of gym, play tennis, fence or practice judo, etc.

All the forms of activities and sociability we just evoked are generally consonant with the dominant values of society. They are sometimes in conflict with them: the city is often the place where countercultures develop. In traditional societies, they were mainly characteristic of the lower classes where oral traditions were still alive, and the memory of old animisms or paganisms persisted. With the development of the modern press, it was in the intellectual spheres that the efforts to think the world anew and criticize the existing practices and institutions became the more noticeable.

In contemporary societies, countercultures thrive thanks to the blending of several components of the population: marginal groups, who refuse work disciplines and make permanent availability their essential value; intellectuals ready to surf on the web in order to support the causes they espouse; ethnic or religious minorities, who disagree deeply with some of the dominant attitudes.

Age-sets generally played only a minor role in traditional cities. Industrialization strengthened this tendency. Contemporary forms of youth socialization are leading to opposite results : through movies, radio or TV, young people participate in networks the adults do not control, but companies have interest in encouraging in order to open new markets to their activities. Groups of young people turn into gangs and elaborate, on the margins of society, countercultures all the more worrying that their content is generally negative and exalts violence.

Landscapes, identities and heritage

Just as for any other group, the identities of city dwellers have to hold on to material signs. Landscapes and monuments drawn in the past by commissioned architects to meet official orders are often accepted as a shared heritage by people today. Is there a Parisian who is not proud of Sainte-Chapelle, Notre-Dame, the mansions of Le Marais, the Palais Royal, the urbanism of Haussmann, the Eiffel Tower and the collections of the Louvre and Musée d'Orsay? This reading and reinterpretation of artistic forms by the populations who frequent them is one of the most fascinating fields of the cultural analysis of contemporary cities. Tastes and sensibilities evolve: the significance given to vernacular forms grows.

The contestation coming from the countercultures attacks what it considers a dangerous conservatism. Concerning landscapes, a few scores of taggers are enough to besmirch the image of architectural realizations which tried to be harmonious. It is by calling into question built forms that revolution then starts.

The city as a multicultural reality

The city is a multicultural reality: it allows bearers of different practices and plans to live in close vicinity and intervene. Everyone gets richer on that occasion. The urban community in this way gains useful competences for economic competition.

The co-existence of cultures modifies the components of each one. It happens sometimes as the result of conversions, when people abandon the values they had learnt when they were young and adopt new ones. The industrial world experienced this type of process when rural people or international immigrants forcefully strove to internalize the cultures of the cities they had settled in, since they judged them superior. It was only religious convictions which kept diasporas alive.

It is today fashionable to refuse the fusion in a common mold. Each group asserts loudly its identity. As a result the dominating impression is that of a mosaic of pieces with no shared features. Further analysis leads to more qualified conclusions. The transformations which occur within cultures do not always pass through the adoption of new values. They result from the discovery of new horizons of expectancy. Individuals receive from the environments they live in rules to respect and principles to honor. Through the haphazard encounters they have, they parallelly develop an idea about what life may offer, and has to offer them. It is these horizons of expectancy that the encounters between cultures deeply modify in contemporary cities. It is not because people proclaim their diversity that their longings have ceased to get closer.

The fundamental problems of modern cities result from that: the multicultural situation deeply transforms the horizons of expectancy of those who live there and makes them more similar. Since it is impossible for everyone to enjoy the status and the level of well-being one aspires to, tensions accumulate in the lower classes or minorities unable to meet their expectations. The rise of violence bears witness to this evolution. At the same time, the city remains a melting pot which brings the people who live in it closer. How are we to take advantage of these convergencies and avoid the conflicts which reduce the possi-

bilities open to all?

A few years ago Samuel Huntington became famous by suggesting that we are entering a world threatened by the clash of civilizations (HUNTINGTON, 1996). The book mainly covered the international scene, but in the contemporary world, the clash of cultures is generally closer: the groups which are struggling are there, in the city. Contemporary analysis shows that multicultural situations are not only bearers of conflicts; they deeply transform the behavior and expectations of the different collectivities. How can we take advantage of the positive side of this evolution and abjure the negative one ? It is the fundamental problem of societies caught up by globalization and the mobility it creates (TAYLOR, 1991 and 1992).

Conclusion

The cultural approach to urban realities has a long history, but it is only during the last 20 years that research has given it the coherence it was deprived of until then. Starting from the way individuals build their culture in a haphazard way along the itineraries they follow and depending on the people they meet, research stresses how cultural facts are linked to space and shows the originality and depth they take in the places where social interactions are the more highly differentiated.

The cultural approach introduces new ways to understand the construction of urban policies. The narratives of those who conceived them yesterday were often long monologues. Today those of the people in charge of cities are increasingly open to the aspirations of the populations they are destined to.

The substitution of cultural approaches to morphological and functional ones was mainly achieved from the 1970s. Some authors had however understood earlier the interest of combining these different perspectives: it explains the interest of Jean Gottmann's contributions to the study of big modern cities (GOTTMANN, 1966). He started from the skyscraper, a classical element of the morphology of great American metropolises, but he immediately went a step further than other urban theoreticians: the vertical circulation the skyscraper accelerated could be substituted for horizontal ones. Thanks to it, switching from partner to partner became easier; the skyscraper contributed to the efficient functioning of the social and economic switchboards downtown areas are. At the same time the skyscraper fired the imagination by its boldness and its architectural quality: it thus gained a symbolic value; it reminded one of the power of the company which built or operated it; it participated, thanks to its presence among buildings of the same type, in the symbolic affirmation of liberal economy and capitalism. It was the reason for which Islamic terrorists chose, on the 11th September, 2001, to strike the World Trade Center in Manhattan.

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Geography, geopolitics and history: Considerations and conclusions

"The intellectual environment in which he (Gottmann) studied was one where academic boundaries of the time, in the English sense, were neither as clearly demarcated nor as closely guarded and cherished. Political science and philosophy were a pervasive part of the atmosphere; the frontiers between geography and history, for long rigid in the English-speaking world in the 19th and early 20th centuries, were practically non-existent in French universities. Gottmann's Diplôme d'Etudes Supérieures, taken in 1934, and his Licencié ès Lettres, taken in 1937, were both in 'Histoire et Géographie'."

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Interdependence of geography and history

The object of geography is the description of the earth. History is the course of mankind's life. Therefore we can say that the object of geography is "static," the object of history "dynamic." On the other hand, this distinction is relative. Geography analyzes the conditions offered to human groups by the environment. It explores the demographic and spatial evolution, the exploitation of agricultural land and mineral resources. It is subdivided into physical geography and human and economic geography. The "static" element in the frame of physical geography is stronger than in the frame of human and economic geography. The latter, by the nature of things, has a "dynamic" element. Human and economic geography and history are close together. But even in the field of physical geography the "dynamic" element is not quite non-existent. Geomorphology, climatology, hydrography and biogeography explore not only constants but also changes.

The distinction between the "static" element of geography and the "dynamic" element of history recalls the concept of iconography proposed by Jean Gottmann. Here, it should be emphasized that Gottmann was conscious of the interdependence of geography and history. John Patten has correctly re-

marked: "The intellectual environment in which he (Gottmann) studied was one where academic boundaries of the time, in the English sense, were neither as clearly demarcated nor as closely guarded and cherished. Political science and philosophy were a pervasive part of the atmosphere; the frontiers between geography and history, for long rigid in the English-speaking world in the 19th and early 20th centuries, were practically non-existent in French universities." Gottmann's Diplôme d'Etudes Supérieures, taken in 1934, and his Licencié ès Lettres, taken in 1937, were both in "Histoire et Géographie" (PATTEN, 1983, p. xiii). In the thought of Gottmann the iconography is indissociable from his vision of political geography. To explain the phenomenon of political partitioning of geographical space, Gottmann used the distinction between the movement factor and the iconography. Gottmann described the movement factor by its effects of displacement: "In the political order, it displaces people, armies and ideas; in the economic order, it displaces merchandise, techniques, capital and markets; in the cultural order, it displaces ideas, it shuffles people" (GOTTMANN, 1952, p. 215). This force of change, this "dynamic" element is limited by a second force, which Gottmann called iconography. Iconography is the sum of "icons" (symbols, ideas, images, beliefs, persuasions, etc.), to which the members of a community are profoundly attached.

Therefore, in the thought of Gottmann iconographies are links between peoples and "icons." Iconographies lead to the definition of territories. They build partitions. Partitioning is in this sense a process taking place first in the minds and then on the ground. But, according to Gottmann, an iconography can differ from an ideology, because it can appeal to emotions rather than to the intellect. Iconographies are deeply rooted in traditions. In this sense iconography is of a conservative character. On the other hand, iconographies are not totally unchanging. They can change, but their transformation is not very fast.

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The distinction between the "static" element (iconography) and the "dynamic" element (the movement factor) is relative. Gottmann's reflections confirm this observation.

Gottmann's urban geography, ecology and ekistics

Gottmann's concept of political geography is not deterministic. Iconography has a cultural dimension. But it is not based on cultural determinism. Samuel Huntington's concept of "the clash of civilizations" is inadmissible from the point of view of a serious historical approach. Besides, it is politically inacceptable, because it may lead to xenophobia.

Iconography has also a geopolitical dimension. But it is alien to that geopolitical approach that turns the human being into a "hostage to history." I make use here of the title of the book on Cyprus by Christopher Hitchens, a sharp-witted critic of Henry Kissinger's *Realpolitik* (HITCHENS, 1989). Kissinger writes in his memoirs: "Pragmatism without a moral element leads to random activism, brutality, or stagnation; moral conviction not tempered by a sense of reality leads to self-righteousness, fanaticism, and the erosion of all restraint. We must always be pragmatic about our national security. We cannot abandon national security in pursuit of virtue" (KISSINGER, 1999, p. 1076). On the Cyprus question Kissinger's "pragmatism" led to a catastrophe. I refer to my *History of the Republic of Cyprus* (TZERMIAS, 1998, pp. 443-444).

Gottmann's concept of urban geography, especially his work on the role of capital cities and on urban growth as a social and political process, is connected with the cultural dimension of his thought. According to Calogero Muscarà this approach confirms the opinion expressed by C.A. Doxiadis that urban studies should not be confined within the limits of architecture and the physical analysis of the city, but should become more a science of man's relationship with space. I remind readers that Gottmann writes in his work *The Significance of Territory:* "The nature of economic power expresses itself in a definite spatial form; several distinct forms of economic power may coexist in the same space, but each has, at a given time, definite geographical boundaries. Political or spiritual power may rest on the psychology of people; economic power needs material expression. Economics was a word formed from the Greek root *oikos*, meaning 'house,' the original unit of man's organization of space. From the same root was formed the word ecology to describe the study of living organisms in relation to the natural conditions of their habitat; ecology is intertwined with geographical distribution. Recently, the Greek architect and planner, C.A. Doxiadis, coined the word ekistics to describe the study of human settlements" (GOTTMANN, 1973, pp. 53-54 and note 2).

It is characterstic of Gottmann's thought that he criticizes the doctrine expressed by Adam Smith and Karl Marx that the wealth of a nation is the labor of its people. "However, people and territory are not separable in the production of goods and services: production must occur somewhere, and the place or area is one of the conditioning factors of the economic process. The territory where the process develops must be under a political régime, within a given system of laws, and at a certain location with respect to means of transport and markets. The territory, being the habitat of the people, is the receptacle of its economic activities. It was only in the 17th century that economic and political thought in Europe began to realize this significance of territory" (GOTTMANN, 1973, p. 57).

In the third volume of *Das Kapital,* Marx emphasizes that the members of a society are not owners but only users of the earth and that they must use the earth like *boni patres familias* ("Selbst eine ganze Gesellschaft, eine Nation, ja alle gleichzeitigen Gesellschaften zusammengenommen sind nicht Eigentümer

der Erde. Sie sind nur ihre Besitzer, ihre Nutzniesser, und sie haben sie als *boni patres familias* den nachfolgenden Generationen verbessert zu hinterlassen") (KÖSSLER and WIENOLD, 2001, p. 159). But it would be exaggerated to see in this statement proof for a "Marx oecologicus."

Gottmann was conscious of the relevance of economic growth. And it was exactly for that reason that he wrote: "The more urbanization, industrialization, and affluence increase, the more regulation is needed for the environment and for the organization of society" (GOTTMANN, 1973, p. 119). Here, I see an ecological dimension of Gottmann's thought. Not without some satisfaction I would like to mention that in 1978 as Director of the European Cultural Centre at Delphi I initiated a symposium on "Architecture and Protection of Landscape." The conclusions of the symposium clearly show that the protection of nature and landscapes has reached a dynamic stage where it is essential that action be concerted with all the "users" affected (KAHN-ACKERMANN, 1980, p. 21). I am proud of the then initiative at Delphi, but unfortunately we are far away from a satisfactory solution of ecological problems. I think our top challenge in our day is to optimize not only our economic development in nations around the world, but the environmental quality in those nations as well. We are far away from the vision of a "Cité Fleurie" (CHAUVENET, 1980, pp. 110-116). We are far away from the vision of a "Landscape for Life" (MICHELL, 1980, pp. 39-44). The prominent Greek economist Xenophon Zolotas wrote in 1981: "Accelerated economic growth has caused grave damage to the ecosystem, a fast depletion of nonrenewable natural resources and a general decline in the quality of life" (ZOLOTAS, 1981, p. 1). This remark gains in even more importance in the "era of globalization."

Certainly, the interpenetration of economic, political and cultural relationships across existing borders and boundaries has the effect that the geographer David Harvey in his book *The Condition of Postmodernity* calls "the compression of time and space." In this sense geography has been pronounced dead (HOLTON, 1998, p. 1). But that is a figurative expression. Geography is not dead. And, of course, geopolitics is not dead either. According to John Agnew and Stewart Corbridge, there are indications that time-space compression has encouraged localism and nationalism rather than internationalism (AGNEW and CORBRIDGE, 1995, p. 217).

Braudel's "geographical time"

The notion "geopolitics" probably was made up by the Swede Rudolf Kjellén (1864-1922). Kjellén was at the same time a scientist and a politician. One of his books bore the title *Der Staat als Lebensform.* Some associate the field of geopolitics with the name of the German Friedrich Ratzel (1844-1904), the author of the book *Politische Geographie.* Others do not regard him as the father of geopolitics. In Germany in his day a main representative of the field was the military officer and geographer Karl Haushofer (1869-1946). The National Socialist Rudolf Hess was a student of his. Nazi propaganda adopted parts of the book *Politische Geographie* and used it as promotion of the life space theory. Obviously, Nazi exploitation of parts of the geopolitical ideas does not mean that any scientific research in the field of geopolitics is suspicious and to be condemned. Quite the reverse. The scientific attempts in this field may prove to be very useful – on condition of course that the factor man is not ignored or underestimated. The key problem for a human geopolitical approach is to articulate a vision of a world which rejects hegemonic politics and reclaims space for people, not expansion by either states or markets (AGNEW and CORBRIDGE, 1995, p. 227).

From the point of view of a historian, it can be said that there are several connections between geography and history. To

follow Fernand Braudel, history could be divided into three parts: a quasi-immobile history, a history of slow rhythm and a history formed by short, rapid and nervous oscillations. That would be a decomposition of history into areas situated over each other; a distinction between a geographical time, a social time and an individual time. The "presence" of geography in the framework of the first part is obvious. That is why Braudel speaks of a geographical time.

I quote a passage from Braudel's work *La Méditerranée et le monde méditerranéen à l'époque de Philippe II:* "Ce livre se divise en trois parties, chacune étant en soi un essai d'explication d'ensemble. La première met en cause une histoire quasi immobile, celle de l'homme dans ses rapports avec le milieu qui l'entoure; une histoire lente à couler, à se transformer, faite souvent de retours insistants, de cycles sans cesse recommencés. Je n'ai pas voulu négliger cette histoire-là, presque hors du temps, au contact des choses inanimées, ni me contenter à son sujet, de ces traditionelles introductions géographiques à l'histoire, inutilement placées au seuil de tant de livres, avec leurs paysages minéraux, leurs labours et leurs fleurs qu'on montre rapidement et dont ensuite il n'est plus jamais question, comme si les fleurs ne revenaient pas avec chaque printemps, comme si les troupeaux s'arrêtaient dans leurs déplacements, comme si les navires n'avaient pas à voguer sur une mer réelle, qui change avec les saisons." (BRAUDEL, 1990, pp. 16-17).

According to Braudel, in addition to this immobile or quasi-immobile history, there is the history which is formed slowly, a social history, that of groups and groupings. And, finally, the third part, the traditional history, the individual history, the history of events, the most passionate, the most human, also the most dangerous one. It must be pointed out that Braudel's conception is not doctrinaire. He affirms that his "plans étagés" want to be only a means of exposition. And he adds: "Mais à quoi bon plaider? Si l'on me reproche d'avoir mal assemblé les éléments de ce livre, j'espère qu'on trouvera les morceaux convenablement fabriqués, selon les bonnes règles de nos chantiers." (BRAUDEL, 1990, p. 18).

In the preface to the third edition of his book *La Méditerranée et le monde méditerranéen à l'époque de Philippe II* (BRAUDEL, 1976) he writes: "Ce qui change le plus, c'est la problématique de notre metier. Je ne vois plus la société, ou l'Etat, ou l'économie exactement comme hier. Le lecteur pourra s'en rendre compte en se reportant aux trois volumes de *Civilisation matérielle et Capitalisme,* de prompte parution, où j'ai pu mieux formuler mes points de vue et expliquer la survie, étonnante même à mes yeux, de la prospérité relative de la Méditerranée." (BRAUDEL, 1990, p. 23). Indeed, Braudel's work on material civilization, economics and capitalism, 15th-18th centuries, shows that the geographical factor should not be overestimated.

In any case, the quasi-immobile history, the geographical time and, quite simply, the relations of man who makes history with the geographical milieu, are of crucial importance under certain conditions. I have tried to show that in my books, for instance in my works *Land der Griechen* (1981) and *Neugriechische Geschichte* (1999). It would be rather difficult to find another region or country in Europe where the sea and the mainland are as closely interwoven as in Greece. The close interpenetration of the mainland *(steria)* and the sea *(thalassa)* does not allow one to draw a clear dividing line. This interpenetration is beautifully expressed in Odysseas Elytis' poem "Axion Esti."

Interpenetration of mainland and sea

Nevertheless, in spite of the clear interpenetration of the mainland and the sea, the contrast between *steria* and *thalassa* belongs to the distinguishing marks of the country's nature and the population structure. As *thalassa*, the sea represents one of the poles marking the main aspects of Greece; *steria*, the mainland represents the other pole which determines the country's "other face," which should not be neglected. In other words, the mentioned unity holds this antithetic element and reveals itself as being a unity in the diversity.

The image of the *steria*, of the mainland, is characterized by the country's mountainous nature. The population is – one would like to say – crammed into the relatively not numerous regions situated between the mountains consisting to a great part of sterile limestone. In spite of the length of its coasts, Greece is rather poor in natural harbors. And certain regions are hardly accessible, even from the sea. If maritime Greece is the quintessence of openness to the world and to exchanges, mainland Greece, mountainous without large plains and widely spread hills, conveys rather the impression of isolation.

The contrast between mainland Greece and maritime Greece is present almost everywhere in the country which is composed of islands and peninsulas. In geographical nomenclature or in administrative organization, this contrast is reflected in many incertitudes or ambiguities. Almost a third of the population, which amounts to 10 million in all, lives in the Athens- Piraeus agglomeration. Here is a concentration point not only of industry but also of maritime Greece; and this in spite of the fact that to a certain degree maritime Greece enjoys a certain autonomy from mainland Greece. With George Prevelakis one could say: "On voit ainsi se reproduire sur un plan sociologique et économique la vieille opposition régionale entre la façade maritime et l'intérieur continental, représentée par les deux images archétypales de l'Antiquité grecque: Athènes et Sparte." (PREVELAKIS, 1994, p. 121).

Without being subject to schematization or to misinterpretation, one could say that to a certain degree Roumeli (Sterea Ellada) and Morea (Peloponnese) have had a symbolic significance in designing the factor "mainland" during the evolution of modern Greece. The factor of the mainland, *steria*, is often linked to that of a mountainous country. The antithesis *steria-thalassa* is mingled from some point of view with the contrast of the plain and the mountain and, more widely, of the hinterland and the coast, of the town and the country. It is no coincidence that Greek popular poetry so often sings the praises of the happy mountain, "for it does not fear Charon," death.

During Turkish rule (1453-1821), the klephts (kleftes) took refuge in the mountain caves. In an obviously grotesque, but basically accurate way, the notion klephts means thieves as well as freedom fighters. The ambivalence of the notion translates the points of view of the Turkish oppressors and of the oppressed Greeks. For the Ottomans the kleftes were thieves and bandits. For the Greeks they were fighters of the "Eikossiena" (the War of Liberation of 1821); they were the yeast which let the dough rise. Souli, Mani, Sphakia – to mention only a few – could be seen as the representatives of this rebellious, mountainous, hardly accessible Greek country. In the 17th century, the inhabitants of Souli, a wild mountainous region in Epirus, were almost independent.

The call to revolt against the Ottomans launched in the form of a poem (Thurios) by Rhigas Velestinlis (Rhigas Pheraios) was addressed to the oppressed people of the *steria* as well as of the *thalassa*. Concerning Rhigas Pheraios see Woodhouse (1977), pp. 122, 126, 130, 175. There may be some justified scepticism about the influence of geography regarding the development of a country. Nevertheless, the close links between Greece's historical destiny and the sea cannot be negated. These links were already obvious at the time of the Minoan maritime supremacy. For the Greeks the sea was (and still is) a challenge full of dangers and hopes. Ulysses is not only the incarnation of ruse. He is the symbol of the joy of discovery as

well. He symbolizes the struggle against the sea which, at the same time, is also a search for an experience of life.

At the time of Venetian and afterwards Turkish rule, the Greeks of the Aegean Sea who knew the archipelago like the back of their hand displayed important activity in the fields of navigation, commerce and not seldom also piracy. The economic consequences of the activity of the seafarers became particularly evident in the second half of the 18th century. Besides the autonomous administration of the local authority areas, the peace treaty of Kütchük-Kainardji (21 July, 1774) contributed a great deal to this development. This treaty, putting an end to the Russo-Turkish war (1768-1774) and conceding free navigation in the Black Sea to the Russians, the passage to the Mediterranean and important economic advantages, gave an impetus to the Greek maritime trade; all the more so, as French trade in the Mediterranean declined in the last decade of the 18th century because of the struggles of the Revolution. During the wars of Napoleon, Greek maritime trade experienced a new upswing. Not least Thessaloniki profited from this development.

During the Greek struggle for liberation (1821-1830), the islands of Hydra, Spetses and Psara were centers of activity of the "heroes of the sea." That was in the nature of things. Today, the Greek merchant fleet is one of the greatest worldwide. Its considerable potential can only be assessed exactly, if one adds all the ships sailing under foreign flags, partly under the so-called "flags of convenience." Greek readers who are greedy for expansion and eager to invest, when money for jam is in prospect, form "a separate world." Depending on the circumstances, they present themselves as passionate patriots or as convinced cosmopolitans. And the amazing thing is that they feel themselves to be the person they play. The Aegean Sea is too small for the readers. They dream of cargo vessels and tankers that cross the oceans.

Rejection of geopolitical determinism

I could give further examples on the interdependence of geography and history, above all concerning the Mediterranean world. Among other things, I could explain the role of the straits, the isthmuses. I refer to my essay on the Straits of the Dardanelles as a characteristic point of intersection of history and geography (TZERMIAS, 1996, pp. 69-86). The "static" element of history, "le temps géographique" of Braudel is obvious here. However we should not forget that history is made by man. Geopolitical determinism is wrong. I recall the rejection of historicism by Karl Raimund Popper: "Der Historizist sieht nicht, dass wir es sind, die die Tatsachen der Geschichte auswählen und ordnen, sondern er glaubt, dass 'die Geschichte selbst' oder 'die Geschichte der Menschheit' durch ihre inhärenten Gesetze uns, unsere Zukunft und sogar unseren Gesichtspunkt bestimmt" (POPPER, 1980, pp. 332-333).

Popper rejected any historicism, among other things Marxist historical analysis. He emphasized the "moral radicalism" of Karl Marx, but he criticized the Marxist "prophecy." Therefore, Popper's criticism was directed against so-called historical materialism (TZERMIAS, 1982, p. 197): "Per comprendere la critica di Popper alla 'profezia storica' di Marx (quella dell'inevitabile vittoria del comunismo) occorre tener presente che quando si parla di marxismo ci si riferisce tra l'altro a quella dottrina che è divenuta nota sotto il nome di 'materialismo storico'." In several studies I have shown that the historical development cannot be rightly interpreted within the narrow scheme of a socio-economic determinism. The analysis of socio-economic factors is necessary and helpful. But socio-economic optics is not the only one. An example: Max Weber's analysis of the Protestant moral and

the spirit of capitalism shows that the monocausal Marxist concept of the "ökonomische Basis" and the "Überbau" underestimates the significance of other factors (here of religion).

In his book on the national and social consciousness in Greece in the years 1830-1909 the Greek Marxist historian Kostis Moskof makes very remarkable statements on the interdependence of geography and history. In the sensational economic ascent of the archipelago (Aegean Sea) at the end of the 18th and the beginning of the 19th centuries, he sees the second pole of Greece's rebirth (the first pole was the industrial evolution). The influence that Braudel's doctrine on "le temps géographique" exerted on Moskof is evident (MOSKOF, 1974, pp. 9 and 47). However, Moskof talks of historical laws in a deterministic way which is not completely compatible with Braudel's concept. Jean Gottmann emphasized the necessity "de faire entrer la géographie régionale dans l'iconographie." And he wrote: "C'est ainsi que l'iconographie devient en géographie un môle de résistance au mouvement, un facteur de stabilisation politique" (GOTTMANN, 1952). But it is necessary to know as well that the iconographies often changed in the course of time. Great geopolitical upheavals cause ruptures.

In 1946 Braudel wrote: "C'est peut-être ce (i.e. la décomposition de l'homme en un cortège de personnages, author's note) que l'on me pardonnera de moins, même si j'affirme que les découpages traditionnels fractionnent, eux aussi, l'histoire vivante et foncièrement une, même si j'affirme contre Ranke ou Karl Brandi, que l'histoire-récit n'est pas une méthode ou la méthode objective par excellence, mais bien une philosophie de l'histoire elle aussi; même si j'affirme, et si je montre, par la suite, que ces plans ne veulent être que des moyens d'exposition, que je ne me suis pas interdit chemin faisant d'aller de l'un à l'autre ..." (BRAUDEL, 1990, I, p. 18). I quote Braudel's remarks in order to underline some contrasts between the "French school" (Marc Bloch, Lucien Febvre and others) and the "German school." Later, after the belated reception of Braudel's doctrine in Germany, these contrasts led to relations as well.

Often, the influence that the natural environment exerted on a people takes place through an ideology. Ideologies have also considerable influence as an element of national identity that rest on old iconographies. Frequently, the interdependence of geography, history and ideology leads to "imagined communities" (Benedict Anderson), sometimes even to national mythologies. A classical example is the Titoist transformation of the geographical name Macedonia into a national notion (TZERMIAS, 1994).

Conclusion

Certainly, for the historian, the geographical and geopolitical factor is of great importance. But geographical and geopolitical analysis is only a part of the historian's work. And the historical approach requires the distinction between description and judgment. Description, explication is not sufficient. Evaluation is necessary as well. The geopolitical approach should not lead to inhuman conclusions. I would like to close this paper in the words of Braudel: "Peut-il y avoir un humanisme actuel ... sans histoire ambitieuse, consciente de ses devoirs et de ses immenses pouvoirs?" (BRAUDEL, 1990, I, p. 18).

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Iconography: Its historical, theological and philosophical background

"Gottmann's 'Iconography' does not make reference to simple images, but to the icons of the Byzantine tradition. Through his studies and his Ukrainian origins, Gottmann was equipped with a profound understanding of Christian Orthodoxy and of the symbolic wealth of icons in the Byzantine and post-Byzantine world. Therefore, the significance of the Iconography concept for the Social Sciences has to be studied according to the complex issues related to the Icons in the Christian Orthodox tradition."

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Introduction

In the early 1950s, Jean Gottmann introduced a new term to the geographical vocabulary: Iconography. This term had already been used before by historians of Art, but with a completely different meaning. As a geographical concept, Iconography is new and original.

The concept was not much accepted by geographers. Even Jean Gottmann himself avoided using it during the 1960s and 1970s, discouraged by its relatively limited success. However, after the end of the Cold War the term started functioning again, revealed by a small group of Geographers and Social Scientists in their effort to describe the new post-Cold War realities in a more explicit way than with terms like culture or identity (BRUNEAU, 2000, pp. 565-566).

Gottmann's "Iconography" does not make reference to simple images, but to the icons of the Byzantine tradition. Through his studies and his Ukrainian origins, Gottmann was equipped with a profound understanding of Christian Orthodoxy and of the symbolic wealth of icons in the Byzantine and post-Byzantine world. Therefore, the significance of the Iconography concept for the Social Sciences has to be studied according to the complex issues related to icons in the Christian Orthodox tradition. In fact, in the East, during the Middle Ages, every fundamental philosophical, theological and even geographical question focused on the issue of icons, Iconomachy being the most obvious expression. The long Byzantine Civil War shows the destructive force of Iconographies, a force rediscovered after 1989. Destruction, however, is not the essential attribute of Iconographies. Iconographies are usually constructive, since they form the foundations of human societies. Gottmann considers Iconographies a "cement" linking people together and with a portion of space – a territory (GOTTMANN, 1952, p. 220). They structure geographical space; they regulate movement. They represent an essential dimension of the stability of the world, moderating the eternal threat of Circulation – or Change in Space – and its consequent destabilizing effects.

By introducing the term of Iconography, Jean Gottmann conceived the encompassing and dynamic character of this extraordinary, essential influence through a network of connotations. He consequently managed to mobilize a whole world of historical, philosophical and theological references.

For the Social Sciences, Iconography constitutes an important insight. Jean Gottmann's approach could inspire other disciplines in using all the wealth of our civilization's intellectual heritage. As a contribution to this debate, the present article presents the historical, theological and philosophical background of the iconography concept, followed by a first hypothesis concerning its relationship with the theoretical problems of Geography.

The iconoclast controversy

Icons acquired a primordial significance and became a fundamental speculative category in Byzantium during "the iconoclastic crisis" period (714 to 775). Their triumph imposed them as an essential religious feature and established Hagiography, the art of icons, as a basic element of Byzantine culture.

The first Christians used various kinds of images to depict religious events or figures, although this art seemed in contradiction with the Old Testament's condemnation of any idols of God. Indeed, already in the 4th century AD, theologians such as Eusebius of Caesarea condemned all kinds of religious representations, arguing that, after the death of Christ, God ceased to be material and became a symbol, devoid of any kind of material existence.

To avoid any accusation of idolatry, early Christians abandoned the three-dimensional representations and statues of Christ and adopted the more austere art of two-dimensional

images – or icons – which were seen as distinct enough from their prototypes.

In the centuries that followed, icons became the main form of religious art in Byzantium; and the omnipresent complement of churches. Considered as sacred, they had the power to produce miracles, heal the sick, protect the weak, save cities. They could also display human emotion by shedding tears, interpreted as a material manifestation of a divine presence. This is why people worshipped icons, sometimes in an extreme idolatric way, favoring their material existence rather than their symbolic truth. Kissing or prostration has therefore always been the appropriate attitude towards an icon, a quasi-divine object.

The idolatrous risk of such behavior was brought to the fore in the 8th century AD not by the Church but by the Emperors, namely Leo II (AD 714-741) and Constantine V (AD 741-775). Constantine convoked the Council of Hieria (AD 754) which radically forbade icons and caused their massive destruction. The crisis which followed ended in AD 787, with the Seventh Ecumenical Council, held in Nicaea. On the decisive day, officially recognized as the Victory of Orthodoxy, icons were re-legitimized and restored. Iconoclasm was banished as an heresy.

Part of this crisis can be explained as an expression of cultural differences. Images did not have the same importance everywhere inside the Empire. Armenians and Syrians, for instance, did not use icons and it is certainly no coincidence that the iconoclastic Emperors were Isaurians or Armenians. Moreover, much of the non Greek-speaking East of the Empire, as monophysitic, denied the human nature of Christ and were hostile to the use of images. Another crucial element was the rise of Islam, since Muslims ridiculed the Christian notion of God's Incarnation as well as the Christian use of sacred images, and accused Christians of idolatry and polytheism. Iconoclasm followed as a consequent reaction to this challenge. Last but not least, iconoclast theologians re-animated the ancient Greek tradition, which condemned matter as ontologically weak and considered intellectual reality as the only true.

Incarnation, the real issue

Through the iconoclast crisis, it became clear that the real issue behind the argumentation was Christology. The understanding of icons was directly related to the understanding of Incarnation and the nature of Christ.

Christological debates lead back to the first centuries of Christianity, when the first Christian communities saw themselves as the inheritors of Jewish monotheism. There was and could only be one and only God. However, as Christians, they accepted Christ as God too. This apparent contradiction worsened with the Christian Church's confession on the divinity of the Holy Spirit. Christians had therefore to face accusations of polytheism and inconsistency.

These contradictions were solved through a two-step process which determined the evolution of Christian theology from the 4th to the 6th centuries.

• At first, theologians dealt with the so-called Trinitarian issue: how can God be at the same time one and three? How can one be a monotheist and yet confess Father, Son and Holy Spirit?

• The second issue was the Christological issue per se. Its formulation could be the following: how can Jesus be both man and God, both a concrete human being and the Son of the Holy Trinity, without imposing the confession of two different and distinct individuals?

These problems involved the same conceptual distinction, between hypostasis and ousia, or personhood and nature.

• Nature is to be understood in the sense of an individual nature; it is the answer to the question "what?" and gives a concrete definition of the object.

• The hypostasis, or person, is, in its turn, almost impossible to define; it corresponds to what constitutes the ultimate individuality of the nature; it is what makes this nature a concrete individual and an incommunicable existence. In our world, each individual nature is a person, and each person is an individual nature. But in the Holy Trinity, one single individual nature exists in three distinct persons, or three persons share the same individual nature. What does this mean concretely? As they share the same nature, the three persons of the Trinity have the same will and the same energy. Whatever the Father wants, the Son wants, and the Holy Spirit wants. Whatever is accomplished by God is accomplished by the three persons. No person of the Trinity can act or want separately or differently from the others. What, in turn, distinguishes them is nothing more or less but the relations between them and their origins, namely that the Father is the ultimate source of divinity, that the Son and the Holy Spirit proceed from Him. The three persons of the Trinity are also distinguished by their manifestation in History. For instance, Jesus was not the incarnation of divinity in general but of the person of the Son.

Church theologians applied this same distinction when dealing with Christology to solve the apparent contradiction. Jesus could be one person and, at the same time, have two distinct individual natures, one divine and one human.

The issue proved, however, to be more subtle and complex than it seemed. A series of questions emerged, which divided Christians for centuries. If Christ is one person, where is this element of His concrete individual existence located? Is it the person of the Son? Is it a human consciousness? Or is it a new, distinct person? And if Jesus had two natures, what happens in specific issues where these natures have contradictory characteristics? For instance, as God, Jesus could not ignore his fate, but as human, he could not possibly know. As God, he was constantly free to choose his destiny, but as human, he could only pray to God, ask for compassion. As human, he suffered on the Cross. But as God, could he possibly have suffered?

As answers to these questions, two tendencies emerged, which solved the problem in an apparently rational way.

• The first was Nestorianism. For Nestorians, the two natures of Christ were completely distinct, and Jesus, as man, suffered all the limitations and imperfections of human nature. For Nestorians Christ was, one might say, a real, concrete man.

• On the other extreme, monophysites did not recognize that Christ had two natures. For them, Christ was God, and that ultimately meant that He had only a divine nature, his human form being mere appearance, without real consistence.

Between these two extremes, there lies, of course, a wide panorama of possible Christologies (PREVELAKIS, 2001, pp. 143-152). But none of these directions triumphed ultimately. Instead, the Council of Chalcedon (AD 451), which settled the Orthodox answer to these questions, confessed, in agreement with the monophysites, that the person of Christ was the divine person of the Logos, but accepted the Nestorian thesis that this person had two different and distinct natures, each maintaining, after the Incarnation, the totality of its characteristics, its own mode of being. To solve the problem created by a total separation between the two natures, the Church confessed the dogma of the communication of idioms. The divine person of the Logos decided to acquire a human nature; this human nature was somehow transformed, adopted by divinity, transfigured. Therefore, the two natures of Christ did not

live separately, but His human nature was subjected to and oriented by the divine one.

For instance, having two natures, Christ had two wills and two energies. If left totally alone, His human nature would exercise its free will independently of – sometimes in contradiction to – His divine nature. But because of the communication of the idioms, Jesus' human nature was oriented in such a way that its wishes followed the guidance of His divine nature.

The argumentation

What is the relevance of this issue to the question of the sacred images, or icons? If the humanity of Christ was real, this implied that, in some way, He could legitimately be represented, depicted. If, on the other hand, one considered that the humanity of Christ was nothing but an appearance, that His only true nature was His divine nature, then any depiction of Christ is the depiction of an illusion, and should therefore be banished.

On the ground, however, things proved to be more difficult for the defenders of the icons. The argumentation of Constantine V, the most famous among the iconoclast Emperors, appeared very strong: whichever way the sacred image is understood, it should be banished. For if the image depicts the sole humanity of Christ, this means that the two natures can be totally separated, and therefore Nestorianism is implied. If, on the contrary, the image depicts both humanity and divinity, therefore the totality of the person of Christ, then two interpretations are possible: either divinity is, in some way, circumscribed by humanity, which is absurd, or humanity and divinity are confused into a new kind of nature, which leads to monophysism (MEYENDORFF, 1974, p. 44).

The argumentation of the *iconodouls*, or the defenders of the icons, consisted in recalling the fact that "each nature preserved its own mode of being," that it does not merge with divinity, that it can therefore be depicted independently. As a response to the accusation of idolatry, they would argue that a representation is not to be understood as consubstantial – or of the same essence – as the object depicted, that an icon can therefore depict in material form something that overcomes materiality.

Most of the reaction to the imperial iconoclastic policy was directed by monks. The most significant and famous treatises on the defense of the icons were written by John of Damascus, a monk in the monastery of Saint Sabbas in Palestine, later acknowledged as one of the most prominent theological figures of the Christian East and a Father of the Church. For John of Damascus, the sacred image represents "God, the invisible One, not as invisible, but insofar as He has become visible to us by participation in flesh and blood" (John of Damascus, *Or.*I; P.G. 94:1236C; MEYENDORFF, 1974, p. 45).

In other words, not the sole humanity of Christ is depicted in the icon but God Himself. The depiction of a human form therefore aims at the depiction, through a human nature, of the person of the *Logos* incarnated.

The theory that the sacred image does not represent a mere nature but a real person is also stressed by Theodore the Studite (AD 759-826), who, as head of the Constantinopolitan monastery of Studios, wrote three *Antirhetics* against iconoclasts. For Theodore:

Christ was certainly not a mere man; neither is it orthodox to say that He assumed an individual among men but the whole, the totality of the nature. It must be said, however, that this total nature was contemplated in an individual manner – for otherwise how could it have been seen? – in a way which made it visible and describable ..., which allowed it to eat and drink (Theodore the Studite, *Antirhetic*, 1; P.G. 99:332D-333A; MEYENDORFF, 1974, p. 47).

It is therefore this human nature, individual because it is individualized by the person of its carrier, which is depicted in the icon. In turn, this humanity is new, transfigured and transformed by God. Does this representation bear the risk of idolatry? No, responds John of Damascus, since "the image is not consubstantial to its model" (MEYENDORFF, 1974, p. 48).

To stress this difference, the Byzantine Church adopted another conceptual distinction, between adoration (*latreia*), due only to God Himself, and veneration (*proskunesis*), a legitimate attitude towards the icons. Through the veneration of the icon the object of adoration is in fact God.

The immediate effect of this controversy was the restoration of the icons, which were re-considered as legitimate in worship. But the iconoclastic controversy revealed and reinterpreted a whole philosophical debate, which has its origins in ancient Greece, and which concerned, precisely, the nature of representation.

Representation as mimesis

The term icon comes from the Greek *eikon* and means reflection. The nature of the icon and its significance were very largely debated in ancient Greece. The icon belongs to the general category of what was called *mimesis*, imitation. An image is a kind of imitation, by definition some kind of resemblance: the image resembles the prototype as closely as possible – the ideal being, of course, a complete, though unattainable, resemblance.

For Plato, any image, any representation, is an imperfect therefore ultimately inadequate reflection of a prototype. It has worth only insofar as this prototype is absent or invisible.

This critique of the art of mimesis in general is followed by a critique of the image as such. An image is an imitation in material form. But for Plato, spirit is the primordial, the essential and purest form of reality, all others being far less noble, or, in Plato's terms, less real. Truth exists in ideas, in forms, of which material beings are imperfect illustrations.

We can see how an image – any image – is devoid of ontological nobility. If truth exists in ideas, if actual material reality is considered as an imperfect reflection of ideas, then what is left of representations, as reflections of material objects, thus reflections of reflections, copies of copies?

Man in the image of God: The image is alive!

The second revolution in the use of the word image lies in the doctrine that man is created in the image and likeness of God. This doctrine brings about a whole new understanding of what an image is. At first, theologians sought what particular element in humanity bears the image of God. Some saw it in the human intellect, viewing God, in the Aristotelian tradition, as pure intellect. Others saw it in the human "heart." But such ideas did not prevail, and the Church ultimately confessed that no particular part of humanity was divine, that somehow, each man, as a whole, was created in the image of God. But if no particular part of humanity resembled God, then how could man be seen as an image of God? In what sense does man resemble God? For the first time an idea is formed that there can exist an image of a prototype without resembling it in any concrete or definable way. Moreover, if man is, as a whole, created in the image of God, then it is as a living being that he is an image. He resembles God not in any specific feature but in his life. This idea is reinforced by the understanding of the notion of resemblance, which is often separated from that of the image. The resemblance to God, according to the Fathers of the Church, is to be understood in a dynamic way, as a project. It means that man is oriented to an imitation of the divine, and this constitutes his

goal in life, his project. Therefore, the doctrine of man created in the image and likeness of God brings up two major changes in the status of the image.

• The first is that the image is understood in a dynamic way, as a living imitation of God, as a project, as a tension.
• The second is that the notion of image is liberated from the debate on resemblance, since man is created in the image of God without having any assignable characteristic by which he would look similar to God.

The whole conception of artistic representation changes with icons. Religious art is not understood in the framework of *mimesis.* It does not aim at a close imitation to the model, nor is it perceived as a more or less perfect reflection of the prototype. An icon always aims at something beyond itself. Through the depiction of materiality, an icon points to the transcendental beyond. On the other hand, this does not transform an icon into a mere allegory. In an allegory, the material object depicted is an arbitrary sign, significant only insofar as it stands for an abstract idea. In the representation of wisdom by an owl, for example, the actual material sign has no importance whatsoever, only the abstract notion counts. In an icon, however, the actual human material reality is extremely important, because it is the actual material way in which the divine manifests itself, but also because, as a depiction of Christ, a sacred icon depicts not any human figure but a human nature which has somehow already become divine, which has been transformed and illuminated by the light of God. This humanity participates in the divine life.

Apophatism and realism: the ek-static nature of the icon

The same could be said of the icon itself. An icon is not conceived as a mere imitation or reflection of a person. It is supposed to participate in the life of the person depicted and derive its sacred character from its illumination by the figure of Christ, or the saint that it depicts. A common comparison is that of an icon to a planet. A planet does not possess its own light, but derives it from a star: it shines insofar as it participates and is illuminated by the star. If this contact were lost, or if the star disappeared, the planet would cease to shine. And, at the same time, it is the light of the planet which we contemplate; it is the planet which we see, and not the star through it. The icon, as a sacred image, is therefore contemplated and venerated in its actual form, even though one knows that the source of its light and sacredness lies beyond itself.

This characteristic of the icon is rendered by the theological term "apophatism." The apophatic nature of the icon means that an icon can never resemble its prototype, because of the substantial difference which separates any material representation from divine reality. On the other hand, the icon is supposed to transcend its nature, to point at something beyond itself, to lead the faithful to God, through it. This capacity of the icon to transcend its limits is rendered by Orthodox theologians by the term *ek-stasis* (YANNARAS, 1987, pp. 223-256).

The iconic art ceases therefore to be understood as an art of representation, of *mimesis.* The hagiographer, or, as the Byzantines would say, the iconographer, does not simply represent the saint. To create his image, he is supposed to fast, to lead an ascetic life, to enter into some kind of participation in the divine energies of God. It is a common belief that it is not really the hagiographer but the Holy Spirit that actually draws the icon, through the artist.

It is therefore not a coincidence if icons became a fundamental instrument in Orthodox worship. Their role is involved in their very theology, their initial understanding and the meaning of their triumph over the iconoclastic crisis in Byzantium.

The victory of the icons meant precisely that, if the reality of the Incarnation is accepted, then the idea that no part of human experience is to be despised or considered less noble has to be accepted as well. In the terms of one of the greatest Russian theologians of the 20th century, John Meyendorff:

> The victory of Orthodoxy (i.e. the victory of the icons) meant, for example, but also the idea that religious faith could be expressed, not only in propositions ... but also ... through aesthetic experiences and through gestures and bodily attitudes before the holy images. All this implied a philosophy of religion and an anthropology; worship, the liturgy, religious consciousness involved the whole man, without despising any functions of the soul or the body ..." (MEYENDORFF, 1974, p. 52)

Iconographies: A paradigm for social sciences?

Jean Gottmann's Iconography is a concept which cannot be understood outside his conceptual framework. It is part of a triadic system in which the *Partitioning* of Geographical Space is interpreted through the antagonistic and at the same time complementary interplay of *Circulation* and *Iconography.* Iconography is presented as a "self-defense mechanism" of societies in front of the threat of destabilization by Circulation.

Why Iconography, rather than Culture, Identity or Civilization? The recent renewal of Cultural Studies as well as the growing notoriety of Samuel Huntington's *Clash of Civilizations* has brought forth the debate about material and intellectual factors in social life. In what way can Gottmann's approach be considered different from recent intellectual fashions which challenge the more materialistic cold-war paradigms?

The term Iconography implies in fact the mobilization of various intellectual aspects. Language, Religion and History are among them. However, Gottmann offers us a clue as to other elements which must also be included in Iconographies. He indicates how to interpret even those aspects which we are accustomed to consider as purely "spiritual." Thus, Gottmann mentions "taboos" among other examples of iconographic elements (GOTTMANN, 1952, p. 221). The material dimension is introduced in this way; religion, language and history become related to regional and territorial characteristics. The landscapes or the taste of foods related to specific local or religious practices come to the surface of social consciousness. In the concept of Iconography, the relationship between the material and the immaterial is complex and synthetic. The distinction between the two is no more a dichotomy; it is transformed into a network of reciprocal influences. Iconographies express themselves through material objects, like flags, which convey highly symbolic meanings, meanings of such intensity that people sacrifice their lives for them.

Icons in the Byzantine and the post-Byzantine world were and are objects of this kind. The story of the Serbian villagers, migrating from the Ottoman to the Austrian Empire, always carrying their icons in front of the group while marching through mountains and woods, is highly significant. By the symbolic gesture of transferring the icon, they saved their most important political capital: territoriality. This symbolic relationship would guarantee their cohesion as a group and therefore as a polity.

The complex combination of material and intellectual factors in the concept of Iconography permitted a series of fundamental problems related to Modern Geography – and more generally to Social Sciences – to be overcome. The most important is the dichotomy between intellect and matter, between idealism and materialism. In Geography this problem finds an expression through the oppositional dialectics between Man and

Nature.

In 1967, Lynn White brought to the fore the "theological roots of the ecological crisis" (WHITE, 1967): contrary to paganism, which sees God scattered throughout nature, monotheism concentrates the whole of the divine in a spiritual essence outside the material world, and therefore separates nature from spirit. The significance of the iconoclastic controversy has been, precisely, to amend this dichotomy by bringing the divinity "back to earth": by stressing the incarnation of God into a concrete human being; by stressing the sacred nature of concrete material artifacts, icons. In one of his writings Jean Gottmann suggested that this essential flaw of Geography, which led to the dead-end discussion related to Geographical Determinism, had a "metaphysical" origin, a theological dimension (GOTTMANN, 1952, p. 48). Was he conscious that by introducing the term Iconography he was combatting this dualism with the weapons of the Eastern Christian tradition?

In fact, the relationship between Gottmann's Iconography and the Byzantine conflicts and debates is neither coincidental nor superficial. The force of Iconographies lies in their capacity to combine the visible with the invisible, the concrete with the abstract.

Abstraction can federate and lead to the creation of large territorial and political entities; it can animate complex networks like the bureaucracies which constitute the infrastructure of whole empires. The visible and concrete has access even to the illiterate, the simplest members of a community. The combination of abstract and concrete creates a extraordinary "cement" which can preserve a community from the worst threats.

Social Sciences need to contemplate the iconographic paradigm. They are going through a period of serious crisis. The tradition developed during the 20th century and based on imitation of the Natural Sciences touches its limits. Understanding, interpreting and trying to guide the tremendous social changes of our times create new challenges for Social Sciences. It is necessary to open the scope of the Social

Sciences by criticizing and overcoming stereotypes and artificial barriers. One of those barriers separates Social Theory from the heritage of the Humanities – to which theological debates belong as well. Such a project seems at first sight paradoxical. This is why Jean Gottmann's conceptual framework has a special significance, advancing much further than geographical theory. Through the concept of Iconography, Jean Gottmann not only managed to free Geography from its 19th century handicaps; he also offered to the Social Sciences an example of the way the intellectual capital of our civilization can be mobilized in order to address the tremendous challenges of our New World.

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Minorities in the trap of iconography

"In contrast to inherited nationalist groupings, political claims have emerged based on cultural, linguistic or religious identity, tending to produce a fragmentation of the nation-state. These processes, more or less violent in their expression, are nourished by representations, that is to say manifestations of the Imaginary, based often on myths which are variously understood outside, and conserved to a greater or lesser degree inside, the geographical entities to which they apply. Thus the situation lends itself to an analysis in terms of images, which may become icons when they are invested with the intangible values associated with the sacred, and may thus form iconographies."

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Introduction

The contribution of Jean Gottmann, in his elaboration of the concept of *iconography,* seems to me considerable, and extremely relevant today. Europe, whose national and ideological frontiers have been considered as fixed since the Second World War, has experienced during the last decade upheavals whose importance is yet to be determined.

Behind the apparent status quo which followed Yalta, forces were and are at work everywhere which eventually brought down the Berlin Wall, dismembered the Soviet Union and the Warsaw Pact, and Balkanized – more or less painfully – European countries with their widely varying histories. In contrast to inherited nationalist groupings, political claims have emerged based on cultural, linguistic or religious identity, tending to produce a fragmentation of the nation-state.

These processes, more or less violent in their expression, are nourished by *representations,* that is to say manifestations of the *Imaginary,* often based on *myths* which are variously understood outside, and conserved to a greater or lesser degree inside, the geographical entities to which they apply. Thus the situation lends itself to an analysis in terms of *images,* which may become *icons* when they are invested with the intangible values associated with the sacred, and may thus form *iconographies.*

It seems to me that a certain *narrowness of outlook* can be

detected in the images which different peoples have of each other, as revealed in their iconographies. And if it is admitted that the relations between peoples (or between nation-states) like interpersonal relations, are necessarily relations of *domination,* one may try to imagine how a dominated people may come to reverse this situation of domination in their favor, and how, in the case of success, they may be led to behave with respect to the people now dominated. The examples drawn from the two sides of the Pyrenees, of the situation of the Occitans and the Catalans in France, compared with that of the Catalans in Spain, seem to me to present a concrete case of what might otherwise seem a mere abstract hypothesis. I shall further try to envisage possible solutions to the spiral of exclusion.

Iconography, myth, and the relation of domination

Two examples of iconographies

● **The image of the Occitan:** There are in Europe micro-states – nations whose territory and population are tiny, but which are nonetheless clearly defined, and recognized by international organizations, as well as in the cultural representations of individuals on the continent and in the whole world. The same thing cannot be said of Languedoc, which has never existed as a sovereign state, but only as a group of territories where the "langue d'oc" – or Occitan language – is spoken and which is divided into six major dialects and an infinite number of sub-dialects. However, this region covers totally or partially 31 French *départements,* with a population of not less than 13 million.

This imaginary country has been controlled since the 13th century, first by the French Crown, and for the last two centuries by the French Republic. Its political domination has been accompanied by a linguistic and cultural domination, the principal milestones of which were the Edict of Villers-Cotterêts in 1539, the proclamation of the Republic in 1792, and the Education Acts of Jules Ferry at the end of the 19th century which have led, slowly but surely, to the near eradication of the use of the Occitan language today.[1]

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"Occitania," or Languedoc, is a country without a name, absent from the atlases, whose language – its cultural cement – is equally anonymous, since it is described as a *patois*, or simple deformation of the national language – French. This denial of its political and linguistic existence by the dominating power does not eliminate the recognition of a cultural otherness in which one discovers the residue of all which is most contemptible, in the form of *negative representations*, or *ethnotypes*.

Three such can be distinguished, at different periods, and corresponding to different regions. The oldest, dating from the religious wars of the 15th century, represents the typical Gascon, who accompanied Henry of Navarre to Paris when he gave up the Protestant religion and ascended to the throne as Henry IV. Boastful, cunning, ambitious, aggressive and superficial, he was a stock character in French literature of the 16th and 17th centuries. He survives in the popular expression, "promesse de Gascon" i.e. "an empty promise."[2] The 19th and 20th centuries have given a leading role, first in short stories, and then in the novel and the cinema, to the Provençal, effectively identical with the typical Mediterranean personality, also seen as a persuasive talker, but lazy into the bargain, supposedly spending most of his time taking siestas, playing *pétanque*, and knocking back the *pastis*.[3] Less well-defined, because closer geographically and less garrulous, the third Occitan ethnotype is the Auvergnat, known as the "bougnat" – a tight-fisted plodder, but crafty, who comes up to Paris to ply the trade of woodseller, coal or wine merchant, or proprietor of a bistrot.[4]

These three faces of the Occitan people manifest undeniable common traits, despite the disparities in time and place mentioned above: he is an anti-hero, or rather, a hero in reverse, seen from below. He is untrustworthy, cowardly in combat, and has an ambivalent attitude to work, either dodging it (the most common situation) or applying himself to it out of avarice. Always suspected of duplicity and hiding his true feelings, he is also devoted to the ignoble pursuits of excessive eating and drinking. The Occitan is certainly the Other for the Frenchman, and this otherness is systematically stigmatized.

● **The image of the Catalan in France and in Spain:** The Roussillonnais, or French Catalan, is regarded in a similar way as the Provençal, or Occitan.[5] The only things which distinguish him are his pronounced taste for grilled snails (the *cargolada*), and the local dance, the Sardane, which he dances in his traditional red bonnet or *barretina*. He is perhaps felt to be a little calmer in his bearing, but the confusion of stereotypes draws him towards the negative images of food and laziness.

On the other side of the Pyrenees, the Catalan is seen, curiously, not as an idle Southerner, but as a Spanish Northerner, and his image, while still stigmatized, changes completely. He is seen as cold, distant, and industrious, the man who *"de les pedres treu el pà,"* i.e. who can cultivate the desert and make it flourish. In terms of the rest of the Iberian Peninsula he is seen as a businessman for whom time is money.[6] The greatest pleasure for a Catalan – who, according to popular humor, gives even the Jews cause for envy – is to count the number of steps of his famous Sardane while he dances.[7]

The Catalan belongs to one of the richest regions of the Spanish state. One of only two (the other being the Basque region) to have gone through the industrial revolution, it has been profoundly affected by new currents of economic, cultural and social thought coming from Europe. Catalonia's nationalist and separatist ambitions were nourished by the region's wealth, which encouraged an immense inward migration. This in turn provoked considerable Spanish ill-feeling, a mixture of envy and anger.

Throughout its history, Catalonia's centrifugal tendencies have come up against the centralizing process developed in turn by the Catholic monarchy (1469), the Bourbons (1715), and the recent Franco dictatorship (1939-1975). In the 20th century, Catalan national sentiment, born out of the *Renaixença* of around 1833, found its expression during the two republics (1872, and above all 1931-1939), the second of which saw the enactment in 1932 of a Statute of Autonomy which was to be the basis of the creation in 1979 of the current Autonomous Region.

One can thus identify the objective elements which give rise to a negative representation in the minds of other Spaniards. And equally, one understands why, in comparison with the Occitans, or even the Northern (French) Catalans, psychologically depressed by the state of their oppressed and decaying regions, the Spanish Catalans may be seen as proud and boastful.

Iconography and intercommunal balance of power

The types of iconographies revealed by Gotttmann are underpinned by intercommunal balances of power. From this point of view, a comparison with the relations between the *dominant* and the *dominated* of the kind developed by Albert Memmi in the context of colonialism[8] seems to me likely to prove fruitful.

Memmi has clearly demonstrated the nature of the interaction between colonizer and colonized. The colonizer, in his role of protector, bearer of progress and culture to the barbarian native, disposing of power backed up by force, inevitably forges a negative representation of the colonized, aimed at legitimizing the act of colonization. In this context, the metaphor of the minority reveals its true sense: the *minority party* (in terms of numbers or power) becomes a *minor,* whose development is inconceivable without the presence of a *tutor.*[9] The immense field of action of Authority includes, as is well known, the power of naming the Other and his attributes. The definition attributed to other languages by the French State is, as I have indicated, an example of this type of action.

The originality of Memmi's work lies in his demonstration, in *Portrait du colonisé,* of how the discourse, or rather the image (the representation) applied by the dominator, may be integrated by the dominated. The self-devaluing alibi provided by the act of domination thus arrives at its ultimate stage in insinuating itself into the very consciousness of the minority party.

Psychology and psychoanalysis have much to teach us about the *self-representations* stemming from interpersonal relations, either in the child-parent relationship, or in the relation within a couple in its phases of acceptance and unconscious adjustment on the part of the victim.[10] In the course of such a process one may come across what the Catalan sociolinguist calls *auto-odi* or "self-hate,"[11] that is to say the hatred, which may manifest itself physically or psychosomatically, of one's cultural, religious, or linguistic identity. For there exists, either latently or manifestly, a conflict between the two images (the primary self-image and the reflected or imposed image of the self) which resolves itself in the same way as the concurrent socio-political, socio-economic, or socio-cultural conflict. An equilibrium of forces leads to an exacerbation of the phenomenon, rendering it perfectly visible, while an imbalance in the relation tends to conceal it and displace it from the social sphere to that of the individual.

Depending on the circumstances, one may find oneself faced with an equal exchange of representations, of which the most amusing example is the traditional *"català burro/gavatx porc"*[12] found at the Languedoc / Roussillon frontier, or, in other circumstances, a one-way representation of the dominated by the dominator. However, whatever the degree of "minorization," or of accepted domination, it turns out that the transaction always operates in both directions. The position of the minority party is

expressed "under its breath," as it were (and sometimes behind the back of the dominator) in the form of parody, and more generally in the form of a reversal of roles, with all the compensatory advantages which flourish in a carnival situation.

It is precisely this route which is offered to us by the Occitan movement, both based on, and militating against, a state of "infantilization," or reduction to the role of minor, which is at the same time imposed and accepted. Spanish Catalonia, on the other hand, at a more advanced stage of development, provides us with an example of a successful reversal (or one which is in the process of succeeding) of the roles of dominator and dominated, and of the exploitation of the latter.

From imposed representation to created iconography

The development of an iconography as counter-representation

From 1968 on, in the wake of the American protest song and the *nova cançó catalana*,[13] the Occitan regionalist movement chose to express itself in the language up till then reserved for folksong or traditional music. Thanks to his impressive physique and charismatic personality, Claude Marti became the unchallenged leader of this movement. Emotionally close to the Communist Party, he has a pragmatic approach, putting his professional experience as a primary school teacher to good use in an artistic activity deliberately popular in form.[14]

In his teaching job he is in theory obliged to project a vision of French history which is schematic and determinist, limited nowadays to a succession of clichés aimed at celebrating the supposedly inevitable process of the unification of the French Nation.[15] The History of France, as it is taught in primary schools (from "our ancestors the Gauls" to "the good Monsieur Thiers," taking in on the way "St Louis dispensing justice under the oak," "Joan of Arc burnt by the English," "Louis XIV, the Sun-king," "The storming of the Bastille," and "Napoleon on the bridge at Arcole") constitutes a veritable *iconography* representing the dominant point of view of the Republican nation-state, but also a veritable negation of history for the outlying populations – originally non-indigenous, and sometimes, up to quite recently, non-French-speaking. However, this is not the place to demonstrate how France was formed otherwise than by unanimous and spontaneous assent, or that the nation-republic is founded on the basis of a citizenship which is both integrationist and assimilationist.[16]

Marti *deconstructs* the conventional history of France, indicating, from the Occitan point of view, its serious loopholes and distortions. He turns the insidiousness of the cliché – source of alienation – against the negator of an "alternative history," in order to conduct a veritable *subversion* of the official representation.

Montségur, which has been elevated, in the wake of the romantic re-emergence of regional nationalities, to the status of symbolic sacred site of the resistance to the oppression of the invading Crusaders,[17] was the place where the pacifist doves of the Occitan movement met the black French crows, defenders of law and order, blood and property, with the burning of the Cathar heretics on 16th March, 1244. The Commune of 1870, although originally a Parisian movement, created an example which had its followers in Languedoc, and it is invoked in order to pillory, in the person of Monsieur Thiers, the timeless oppressor of a people in justifiable revolt. Nearer to our own time, the episode of the winegrowers' revolt in Narbonne and Béziers in 1907 rendered legendary the figure of their leader Marcellin Albert, and the mutiny of the soldiers of the 17th line regiment, who sided with the demonstrators whose rebellion they were

supposed to quell.[18]

The deconstruction undertaken leads to the formation of an Occitan iconography essentially anti-French in nature. In turn invader and oppressor, the French deny the right to exist to an Occitan nation of which the cultural specificity is essentially libertarian and consensual, that is to say, tolerant. But it is above all the Republican state education system, secular and compulsory, which is denounced by Marti as the vector which is supremely efficient (because of its insidious nature) in destroying the Occitan identity. It is an irrefutable fact that *acculturation à la française* is accompanied by an obvious *deculturation*, which only a *regenerative iconography* can prevent.

An iconography of a Manichean kind thus operates, enveloping everything in its confusion of times, places, and the fracture-lines – both social (opposing people against power structures), and cultural (opposing the Occitan and French people) which run through society. It is fundamentally simplistic, and the case of Marti shows both its strengths and its limitations. Having passed through the institutional machine and having become one of its cogs, Marti refuses to deliver what Bourdieu has described as "*reproduction*,"[19] and turns against the education system the very arms of which he and his Occitan comrades deem themselves victim. The impact of his songs shows how representation/iconography may be a formidable weapon, though a double-edged one: the instrument of domination may become the tool of liberation.

The nation in images

I would like to spend some time discussing a leaflet (fig. 1) from the exhibition *Simbols de Catalunya*, put on by the regional council of Spanish Catalonia, la Generalitat de Catalunya.[20]

The first page shows, below the title divided by the wavy Catalan flag (four red stripes on a gold background), nine square vignettes themselves arranged in a square. Below is the logo of the "autonomous region" and the name of the organizer of the exhibition. The vignettes are reproduced again on a second double-sided page, with a title and a column of explanatory text. Of the ten which figure on this page, one has been omitted on the first page, apparently for reasons of space and because of its relatively secondary importance.[21]

The second page summarizes and develops the information given more briefly on the panels which constitute the exhibition itself. This page is intended to inform the visitor, as well as constituting a permanent testimony, since it is distributed free. The commentary on the symbols which are in the form of icons, i.e. stylized drawings, is historical in nature. It covers the time from the region's origins up to the recent past, namely the "restoration" of Catalan autonomy at the time of the end of Franco's régime (1976).[22]

The attentive reader cannot help being struck by the heterogenous nature of this series of symbols, both in terms of the origins of the symbolic objects depicted (national, religious, political or ethnographic) and in terms of their dates (from the 11th century[23] to the beginning of the 20th), and also by the hazards of history which lead them to be chosen today. Throughout Catalonia's thousand-year history,[24] duly celebrated in 1989, these symbols have reflected the varying fortunes of Catalonia. For the 20th century, constant mention is made of the key moments of freedom of expression (the second republic and the constitutional monarchy[25]) and of repression (the dictatorships of the generals Primo de Rivera and Franco[26]) in an opposition which, while conforming to the historical truth, is nonetheless treated in a somewhat Manichean fashion.

But let us return to the nine icons on the first page of the document and their organization. The top row is structured around the national emblem, shown as a flag waving in the wind (the gust of wind symbolizing liberty) held aloft by an arm represent-
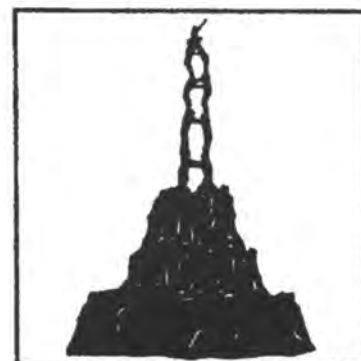
Fig. 1: Symbols of Catalonia.

ing strength and human willpower. In the center of the iconic arrangement sits the Catalan parliament, representing the seat of autonomous power.[27] Note that it is not a royal palace, but the seat of the collegial representation of the nation. A horizontal reading of this second row places the seat of the Generalitat between two religious symbols, one essentially legendary – St. George slaying the dragon – and the other spiritual, though largely rooted in the temporal, since it shows the abbey of Montserrat.[28]

A diagonal structure, in the form of a hexagon, connects four icons depicting a variable number of doves, symbolizing the pacific intentions of the Catalan state and its inhabitants. Finally, the iconic whole is given stability by an isosceles triangle whose summit is the central element of the top row, and whose base is formed by the two outer elements of the bottom row. These three points of equilibrium represent the group as a fundamental value: the determination of the open mouths singing, no doubt in unison, the national anthem is thus linked in a geometrically perfect fashion to the circle of the sardane dance and the vertical acrobatics of the human tower of the "castellers."

The national consciousness represented by the people united and the seat of their power, and the religious symbolism coupled with a desire for peace, are factors of equilibrium and harmonious growth, figured also in the most recent symbol (which is also the most mythically charged, since it is derived from the poetic fiction of Jacint Verdaguer[29]) namely the "three-branched pinetree."

The way the nine icons chosen are presented in function of their semic charge is thus never a matter of indifference. The attentive visitor to the exhibition is of course able to decode it, but most frequently this order is imposed on the viewer, for a procedure of this kind is deliberate and truly significant with respect to the motivations of the exhibition's promoter. The construction which is offered to the reader, and which in fact imposes itself, is truly that of an iconography, of a positive value: from a mass of objectively disparate elements, a significant whole is constructed, that of a national – even nationalist – iconography.

Collective identity and Otherness

The ambiguity of a textual formalization

The introductory text defines the motivations and the contents of the exhibition. To this end, it seems to have been prepared with as much care as the set of icons, and its analysis is even more revealing as to the intentions of the organizer, and their ambiguities.

The text fits into a chronological dynamic, within the thousand-year history of Catalonia, first expressing a set of national symbols constituted over time, then deciphering them. The existence of modern Catalonia finds its legitimacy in the past (the term "heritage" appears twice). Its beginnings are described at length, with the aid of a rich lexical arsenal based on verbs implying a result ("developed, redeveloped, recovered, recognized, constituted, create a synthesis"), with an emphasis which suggests, on the one hand, the obstacles overcome in the course of the country's historical development (explicitly mentioned in the expression "in good times or in bad times"), and on the other hand, the unremitting determination of those whom one might call the midwives of the nation's history.

From this point of view, it is worth noticing the subjects of the verbs mentioned above. Note the variety of actors named, and a subtle division between the third and first persons. The subjects mentioned in the third person are, in order, "Catalonia, the Catalan movement (twice), (all) the citizens (twice), the Catalan people," treating on the same level the historical/social/political unit; the totality of the inhabitants of that unit; and the militant driving force of the national consciousness.

The passage from this third person left vaguely defined – apparently deliberately – to the first person is effected by the repeated affirmation of the collectivity ("collectively, common, collective, all") implying a presumed unanimity. The personal pronoun and the possessives are equally ambiguous (from "his own, theirs" to "us, ours, our"). Standing out from the rest is a final "you" addressed to the visitor which, in a certain fashion, invites him to unite with "us". The process of bringing together, even of substitution, of subjects is even more subtle for the linguistics expert, in that Émile Benveniste has clearly insisted on the clear break defined in the universe between the "scene of locution" (the "I" of the speaker and the "you" of the person addressed, who is his reflection) and the person referred to, absent from the place of discourse.[30]

The constitution of a unifying iconography (of a positive sign) must necessarily rest on an artificial base, which passes from "he/she/they" to "we", incorporating surreptitiously the "you" in the "we", and creating, on the basis of disparate elements, the support of a collective imagination. The items assembled for this purpose consist, not only of objectively recorded events from the historical record, but also sometimes those from the legendary heritage. History and myth live side by side, enriching each other (as one can see in the textual development devoted to icons), the former imparting its authenticity to the latter. The amalgam, in fact a historical fabrication, is the work of the militant nationalist avant-garde, "which is capable of synthesizing and re-elaborating this iconographic material," and whose role is comparable, with respect to the community, to that of the guide or pilot-fish.

Identification, integration, assimilation, or refusal? The temptation of "reproduction"

Iconography reveals the "structurizing" elements of "Catalan-ness," which presupposes the existence of the Catalan nation. What is at stake is, as is stated in the text, the "belonging" of the individual to this community, to the extent that he recognizes himself in these elements, because they make up part of his identity ("he recognizes them as his own"). The question which is at the same time proposed and resolved is the exact meaning of the "we" envisaged.

The "we" presented as open to all citizens resident in the Catalan region admits the diversity and the coexistence between the groups (native and diverse immigrants) which form a mixed society, and leads one to think that the respect for social pluralism, both linguistic and cultural, is an accepted fact. The text, however, says nothing about those immigrants who do not wish to see themselves reflected in the mirror held up to them by the exhibition, through the accumulated symbolic material. The document invites consensus, but presupposes the integration by the individual of Catalan values of self-identification.

Now, precisely as black Africans found it difficult to recognize themselves in "our ancestors, the Gauls," in their educational acculturation, so it is for immigrants from Southern Spain. Are they ready to swap their Our Ladies of Rocío, of la Cabeza, or of Guadeloupe for "la Moreneta" of Montserrat? Are they ready to drop their own identifying signs for those which they are generously offered? Is not defining what it means to belong, at the same time to define the meaning of marginality and exclusion? The step taken, in appearance open and generous, means in fact leaving the individual the free choice to decide, while washing one's hands in a sense of the possible consequences of that choice: the exclusion which is a necessary consequence of the refusal to join.

The autonomous authority, insofar as it considers a certain level of consensuality to have been reached among the native population of its territory, seeks, in order to accomplish

its purpose fully, to win over those "on the edge." It proposes to immigrants an integrational procedure which will lead in the end to their assimilation.[31] But this invitation presents to the immigrant, for good or ill, an *alternative*. It may be useful to look beyond the inter-regional confrontation of immigrant and Catalan, towards the wider national, Spanish picture.

The claims which Catalonia tends to put forward as a nation put it on the same level as the Spanish state. Spain, however, is supposed to fit together the different regional components, and one may ask oneself whether adhesion to the former does not preclude adhesion to the latter. It may be objected that most of the symbolic elements which constitute the iconography shown in the exhibition, from the symbols of popular tradition to the flag itself, may turn out to be compatible with the Spanish state, and permit adherence to the two entities, one within the other. But is an arrangement of this kind compatible with the Catalan anthem, which is (on the grounds of legitimate defense[32]), anti-Castillian in origin? Or with the Catalan national holiday, which, in commemorating the forced submission to the Bourbons, perpetuates at the same time the cult of the martyrs and the condemnation of their persecutors?

In any case, the day-to-day life of immigrants in Catalonia is not entirely free from antagonism. The *socio-linguistic confrontation* is complex, since the relations between dominator and dominated tend to reverse themselves according to the context: the Spanish speaker, who is the dominant party on the national Spanish level,[33] is in the position of the dominated in Catalonia,[34] while the Catalan speaker, on his own ground, takes his revenge by a social domination of the immigrant. For the latter, the image of Catalonia, which has always been branded by the mark of Otherness,[35] is influenced by the traumatic experience of having been uprooted, and frequently, by social marginalization.

In the field of fiction, two works by the Spanish-speaking Barcelona writer Juan Marsé, published 14 years apart,[36] describe, through the relationship of a couple in the process of breaking up, the antagonism between a member of the local Catalan-speaking upper class and a Castillian-speaking social inferior. The relationship is described sometimes dramatically, sometimes ironically.[37] The relations between the individuals and between linguistic groups are interlinked since, beyond the question of individual incompatibilities, it is their *membership* of antagonistic groups, in social as well as in linguistic terms, which dooms their relationship. The attempt at *interculturality* personified by the narrator of *El amante bilingüe* is presented unambiguously by Marsé as doomed to the same fate.

What is in question, therefore, is the possibility of transcending one's origins, of escaping from *categorization* and even *iconographic determinism*. The Catalan example seems to indicate the inevitable nature of *iconographic reproduction*. For if the immigrant, by his attitude, perpetuates in a country which is not clearly his own[38] an attitude of superiority which is in constant conflict with the daily reality of his new environment, and elicits in return a dominating attitude just as violent in the form of rejection and marginalization, is one not faced with a veritable *vicious circle* of exclusion in which, leaving aside the reversal of roles, intercommunal relations remain unchanged, since yesterday's victim becomes automatically the aggressor?

Is the attempt at assimilation on the part of the regional authorities any different? Certainly, it offers a helping hand, but, insidiously, only takes the Other into consideration by denying his identity: *the Other* is, in fact, *only worthy of interest* from the moment that he agrees to accept a new identity, in other words, from the moment he renounces his Otherness, or at least his *claim to Otherness*. The offer of assimilation is

an avoidance of conflict, or at least a state of balance of power, in which the image of power imposes a resolution without the necessity of having to use force. But it is not any more consensual: it is the *pacifying version*, which still remains an alternative.

Alternatives to iconographic imprisonment

From an imposed iconography, experienced as a subjection by the oppressed minority, to the reversal of the balance of forces which generates a new iconography, which becomes in turn an instrument of discrimination and oppression, it seems that one is functioning inside an inexorable *vicious circle*. How can it be broken? How can the coexistence of individuals and peoples be organized otherwise than in terms of negative principles? Two attempts at an answer are offered here, coming not from the sphere of politics but from that of culture, from two writers: the French-speaking West Indian Edouard Glissant, who teaches English Literature in Louisiana, and the well-known Czech opponent of the communist regime Milan Kundera, who accompanied another literary figure in his ascent to power, Vaclav Havel.

Edouard Glissant, or, the West Indian Utopia

Edouard Glissant, like all Caribbean intellectuals and artists — more so than those from the American continent — has had to face the complex problem of West Indian identity. The history, and in particular the cultural and linguistic history, of the region places the writer in a formidable state of disequilibrium. The West Indian is at the same time, but to a widely varying extent, depending on the place, social class, and even on the individuals themselves, the native, that is to say either an American Indian, a black slave torn from Africa, a European who has expropriated the land, or an American conforming to a certain continental logic.

What is more, the linguistic tool at his service is either a language of the colonizers – Spanish, English, or French – or a form of Creole. It is thus either the language of the dominator, the negator of the Other whom he exterminates and/or reduces to slavery, or a kind of multiform all-enveloping non-language, integrating into itself a variety of contributions from the history of the Caribbean. The writer confronting his West Indian-ness and his Creole-ness is in a certain fashion faced with an ultimatum to choose between a language which denies a part of his origins, and one which is elusive in its very essence, inextricably bound to its oral nature, and difficult to transmit.

Edouard Glissant, the most theoretically-minded of French-speaking West Indian writers, attempts to turn what could be handicaps into advantages and openings, by developing what he calls the Poetics of Relationships.[39] This relationship is imposed by the territorial dispersal of the archipelago, as well as by the process of racial mixing inherited from history. He gives it a name: Creolization. Glissant considers it as "a new dimension which allows everyone to be there, and at the same time somewhere else, rooted, and free." He then states that: "If we understand racial mixing as in general an encounter and a synthesis between two different beings, 'Creolization' appears to us as a racial mixing without limits, whose elements are multiplied, and whose results are unforeseeable." Such a process is typical of "the Creole language, whose particular genius lies in its openness ... Creolization thus wins out in the multilingual adventure and in the unprecedented breaking-up of cultures. But this cultural explosion does not imply their dissipation, nor their mutual dilution. It is the violent manifestation of a sharing out which

is not imposed, but willingly consented to."[40]

Such a perspective, formulated with the aid of poetic rhetoric, brilliant and fiery, coming from a writer decorated with literary honors, may seem excessive, unrealistic or even utopian. Nonetheless, it is based on a rigorous analysis of the concept of identity, which is linked, as we shall see, with our interest in *iconography.*

For Edouard Glissant opposes two forms of identity, one characteristic of the Old World, the other of the New. The former defined by roots, the latter *by relationships.*[41] The first, which concerns us Europeans, is, according to Glissant, "founded on a vision, a myth of the creation of the world." It is, above all, confirmed by the claim to legitimacy which allows a community to proclaim its right to the possession of a terrain, which then becomes a territory. It follows that "When secular cultures clash because of their lack of tolerance, the violence which ensues provokes mutual exclusions of a quasi-religious character, for which it is difficult to envisage a future conciliation."[42]

It is, so to speak, on the rights of the original occupant, the possession of territory, that the iconography – whose attributes will be easily recognized – is based. The "identity by relationship" on the other hand, put forward by Glissant, "is linked [...] to the conscious and contradictory living experience born of the contact between cultures," based on the circulation of "place" in the sense of the place where one "gives into" instead of "takes in,"[43] that is to say, on "*movement,* and *wholeness.*"[44] Here we are very close to Gottmann's concept of *circulation,* the counterpart and reworking of *iconography.* However, Glissant is quite conscious that this type of identity, which gives rise to composite cultures, "is extremely fragile" when it enters into contact with a "root-based identity" of the European type.

Milan Kundera and the "Czech Wager"

With Milan Kundera, there is a change of continent, and therefore of tone and of perspective. The Czech writer, who has accompanied the process of democratization of his country, expresses himself in terms which are more realistic, because they are political. The text published almost a year ago, just before the anniversary of the proclamation of the Czech Republic, on the 28th October, 1918, by the *Nouvel Observateur* under the title "the Czech Wager,"[45] deals with the right to independence of the "small countries" of Europe, and the relations between the different European peoples.

On the subject of his own country, "which had lost its independent statehood at the beginning of the 17th century, and disappeared from European consciousness," Kundera treats this reappearance, at the end of the First World War, in the form of a "shocking novelty on the map of Europe," as an illustration of the "celebrated wager of Pascal." Quoting the text, written in 1886 by one of "the most lucid Czech intellectuals of the 19th century," Hubert Gordon Schauer, he poses the question of the necessity of independence: "If we had linked our spiritual energy to the culture of a great nation (i.e. Germany) which is at a far higher level of development, would we not have contributed more to humanity than in giving birth laboriously to our own culture? Is the value of the latter so great as to justify the existence of our nation?" and he concludes that "there is no definite response to these questions. The existence of the Czech Republic *is,* and *will remain,* a wager."

Assuming the responsibility for such a wager for oneself, that is to say, for one's own country, may lead to the reproduction of the iconographic isolation that I have illustrated above with the Catalan example.

However, Milan Kundera shows that it is not without positive consequences, to the extent that it leads to a different assessment of nationalist movements, outside as well as inside one's

own state, in accordance with the principle that: "One cannot refuse to accord to the other what one has previously claimed for oneself. One has no right," he says "to be arrogant, when one knows what it is to be the victim of arrogance."

He expresses his sympathy for the Baltic states, Slovenia and Chechnya, and is proud of the way the partition of Czechoslovakia into the Czech Republic and Slovakia was managed, a partition which one could describe as a "velvet independence," similar to the painless withdrawal from Soviet domination. From the grey period preceding independence, what stays in his mind is the song by Ludvik Vaculik in favor of the right to free speech and the construction of a collective identity for all peoples, for, "even if their ideas are not in themselves particularly extraordinary, the fact that they are different is in itself supremely extraordinary."[46]

Furthermore, Kundera encourages the reader to treat the word "greatness" without respect, but rather to praise the word "diversity," insofar as, he believes, "the Czech wager is becoming today a European wager" and, in any case, "from now on this wager can be neither won nor lost, because Europe *is* the wager."

In comparison with Edouard Glissant, one notes the almost inevitable reference to the nation and its territory, rejected by the West Indian, but also, a greater pragmatism in the European context. The solution suggested by Milan Kundera certainly allows one to escape from the vicious circle of iconographies, but it is at the price of the Balkanization of Europe, which the larger countries are scarcely ready to allow. Kundera criticizes their taste, or nostalgia, for greatness, so deeply rooted in their collective minds. Given his enthusiasm for the cause of national liberation, inherited from republican principles, he expresses "astonishment and disappointment" to see this idea "shared so lukewarmly" in France.

Conclusion

We are not, therefore, about to see the disappearance of the damaging effects of iconographies on the European continent. The different events of the drama in former Yugoslavia, which is still not over,[47] are there to remind us. I have tried here to demonstrate the modalities of the perpetuation, on the part both of the majority, interested in the maintenance of the status quo, and of the minority, which, hoping to overthrow it, finds itself however, whether or not it succeeds, in a veritable iconographic trap leading it to a reproduction of the same situation.

Are we forced, therefore, to repeat inevitably the same scenarios? Intellectuals are continually endeavoring to propose more satisfying solutions, and different peoples manage sometimes to offer the world promising counter-examples. Can they, however, be imitated on a large scale? The complex, the generous, the open model will always be, unfortunately, more fragile than the simplistic, the reductionist, and the narrow-minded. Should one therefore renounce all effort to improve the world? The useful instrument for the analysis of *iconographies* that Jean Gottmann has provided us with allows us in any case to put our finger on the problem, and to decipher the modalities of its functioning and its perversities, the better to denounce and combat them, and the better to defend the idea of *circulations.*

Notes and References

1. See A. Armengaud and R. Lafont (eds.), *Histoire d'Occitanie* (Paris, Hachette, 1979).
2. See, among others, J. Marty, "Conflits linguistiques et ethnotypes occitans dans le théâtre français du XVIIème siècle," *Lengas,* 1, 1977.
3. Already to be found in the works of Alphonse Daudet and Paul Arène, it is to be found in its purest form in the films of Marcel Pagnol, whether adapted from his own works or those of Jean Giono.

4. It is to be found, curiously enough, in the work of the Argentine writer Hector Bianciotti, who writes in French. See his novel *Sans la miséricorde du Christ* (Paris, Gallimard, 1985).

5. It is well known that the mythification, even when it is negative, tends towards the generalization: the ethnotype ignores social differences, and is uninterested in geolinguistic subtleties.

6. The novels written at the beginning of the Franco regime by Ignacio Augustí (*Mariona Rebull*, etc.) show him in this light. He can also be found in *La ciudad de los prodigios*, a panorama of Barcelona at the end of the 19th century by Eduardo Mendoza.

7. The iconography one sees here is on the borderline of racism.

8. A. Memmi, *Portrait du colonisé*, preceded by *Portrait du colonisateur* (Paris, Corrêa, 1957).

9. The Guatemala writer Miguel Ángel Asturias, among others, has shown this situation clearly in his novel *El papa verde*, in the confrontation between the corrupt military putschist, the *gringo* aid worker, and the people reduced to the role of spectators of the shady transactions to which they are subjected.

10. See H. Wallon, "Le rôle de l'Autre dans la conscience du Moi,» *Enfance*, 1959, 3-4, pp. 279-286; R. Perron, *Genèse de la personne* (Paris, P.U.F., 1985); R. Perron (ed.), *Les représentations de soi* (Toulouse, Privat, 1991).

11. See R. Ll. Ninyoles, *El conflicte linguistic valencià* (Valencia, Tres I Quatre, 1969), pp. 96-108.

12. Catalan donkey/Norhem (i.e. Languedoc) pig.

13. The protest song movement, led by Bob Dylan and Joan Baez, was a reaction against "Middle America" and the Vietnam war. The Catalan *nova cançó*, exemplified in turn by Raimon, Joan Manuel Serrat and Lluís Llach, acted at the same time as a spearhead of the movement for national identity, and as a redoubtable weapon in the struggle against the Franco regime, which refused to accept this movement.

14. Claude Marti, who comes from Carcassonne, has twice obtained the international record prize awarded by the Charles-Cros Academy. For 15 years he has lived a double life as a rural primary school teacher during the day, and a committed singer/songwriter in the evenings and during the holidays.

15. The song "*Mas perqué m'an pas dit?* » (Why didn't anyone tell me?) denounces the role of the education system in the denial of national identity.

16. See e.g. M. De Certeau, D. Julia and J. Revel, *Une politique de la langue: la Révolution française et les patois* (Paris, Gallimard, 1985).

17. On the creation of the Montségur myth by Napoléon Peyrat and its later development, see Ph. Martel, "Les cathares et leurs historiens," in R. Lafont, et al., *Les cathares en Occitanie* (Paris, Fayard, 1982), pp. 411-483.

18. See F. Napo, *Les révoltes viticoles du Midi rouge* (Toulouse, Privat, 1970).

19. P. Bourdieu, *La reproduction* (Paris, Minuit, 1970).

20. *Símbols de Catalunya*, travelling exhibition (Barcelona, Generalitat de Catalunya, 1993).

21. This is the *barretina*, or Catalan bonnet. When the exhibition was presented at Perpignan, the symbol of the *flama del Canigó* (the flame carried in relays, on the feast of St. John, from the summit of Mount Canigou to the Castillet in Perpignan) was added.

22. In fact, following the enactment of the 1978 constitution. The years between are known as the years of the democratic transition.

23. It was in the 9th and 10th centuries that the Romance languages came into being, together with the first documents written in the vernacular.

24. See the exhibitions and the publications *Mil anys d'història de Catalunya* (Barcelona, Generalitat de Catalunya, 1989).

25. From 1931 to 1939, then from 1976 onwards.

26. Respectively, from 1924 to 1930, and from 1939 to 1975.

27. The Generalitat is the descendant of the mediaeval *Consell de Cent*, and was also known in the 20th century as the *Mancomunitat*.

28. The subject of St George and the Dragon was part of Gaudí's decorative project for the *Casa Batlló* on the *Passeig de Gràcia* in Barcelona, only partly carried out. The Abbey of Montserrat played an important role during the Franco dictatorship as a Catalan cultural and spiritual centre, due to its important library, and the publication of the review *Serra d'Or*.

29. Poet (1845-1902), author of two epic works: *L'Atlàntida* (1877) and *Canigó* (1886).

30. E. Benveniste, *Problèmes de linguistique générale* (Paris, Gallimard, 1966), vol. 1, pp. 225-285; vol. 2, pp. 197-214).

31. Since 1996, Spain – as has Catalonia– has had to face new forms of immigration, not national but from Africa. Former problems, which had in part been resolved, have been growing.

32. In this sense it resembles the Marseillaise.

33. In terms of political power, with all that implies administratively.

34. As an unskilled worker, the Southern Spaniard is at the bottom of the social ladder.

35. In Spain as a whole, Catalonia is generally perceived as separatist and lacking in solidarity with the rest of the country.

36. J. Marsé, *Últimas tardes con Teresa* (Barcelona, Seix Barral, 1966); *El amante bilingüe* (Barcelona, Planeta, 1990).

37. In the first novel, a young Murcian, near-deliquent, falls in love with a student, a girl from an upper-class family, while the second, a Castillian-speaking Catalan whose origins are not specified, is the parasitic and rejected husband of the daughter of a rich Catalan industrialist who holds the post of sociolinguistic counsellor in the bureau dealing with language policy in the Generalitat de Catalunya. For an analysis, see C. Lagarde, "Une tragicomédie interculturelle en Catalogne espagnole: *El amante bilingüe*, de Juan Marsé," *Lengas*, 37, 1995, pp. 115-135.

38. Is Catalonia to be considered as part of the Spanish territory, or as a completely autonomous territorial entity?

39. E. Glissant, *Poétique de la Relation* (Paris, Gallimard, 1990).

40. *Ibid.*, pp. 46-47.

41. Glissant developed the Gilles Deleuze and Félix Guattari theory. See their *Mille plateaux* (Paris, Minuit, 1980).

42. *Ibid.*, pp. 157-159. Italics added.

43. The original French has "... où on 'donne-avec' au lieu de 'comprendre'."

44. E. Glissant, *Poétique de la Relation, op. cit.*, pp. 157-159.

45. M. Kundera, "Le pari tchèque," Le Nouvel Observateur, 1616, 26 octobre-1er novembre 1995, p. 54. The text is dated "Paris, October, 1995."

46. *Ibid.* Extract from L. Vaculik, *Mon Europe*, quoted by Kundera.

47. Let us remember that the text was written in 1996. It has not been changed. Nevertheless, some notes have been added to remember the writing context.

From Gottmann to Gottmann: Testing a geographical theory

"The concept of iconography raises two questions for me. If the use of iconographies has its fullest expression at the level of national States, what happens when an iconography can no longer count on the strength of national States to nurture it? This question also applies both at supranational levels, that is at levels that reach the dimensionality of world cultural areas, and at lower levels, that is at the scale of the smallest communities. How are iconographies induced and maintained at these other levels?"

Calogero Muscarà

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Introduction

I want to start from the conclusions of the eighth chapter with which Jean Gottmann ended his book on the relations between international policy and the geography of States. The great geographer wrote "geography's essence cannot be sought in scholastic materialism: then it is not at all a living and daily reality."[1] This is a radical conviction of his thought, which he came back to time after time, and which he also pointed to when he asserted that "the most important boundaries are in minds and it is in this sense that iconography is the Gordian knot of the national community."[2]

The concept of iconography raises two questions for me:

• If the use of iconographies has its fullest expression at the level of national States, what happens when an iconography can no longer count on the strength of national States to nurture it? This question also applies both at supranational levels, that is at levels that reach the dimensionality of world cultural areas, and at lower levels, that is at the scale of the smallest communities.

• How are iconographies induced and maintained at these other levels?

Iconographies beyond and below the national state level

The present note is intended to clarify these features of Jean Gottmann's thought with the help of quotations from his writings, particularly his book of 1952.

Asking these questions today arises not by chance. The question of iconographies of areas larger than national States, for example, arises in one context because of the birth of a militant Islam claiming a larger territory than that of any one State that gave rise to the terror attacks of September 11, 2001 in the USA and continues to be evidenced today in the conflict in Iraq. Conflict over Islam's domain is also the order of the day in Iran and it has been at work for decades between Israel and a Palestinian State which, until a few years ago, did not even exist.

Samuel Huntington, as is well known, arrived at the conviction that the main clashes within world politics will be cultural. His work is thus entitled *The Clash of Civilizations* (HUNTINGTON, 1996). In the case of Europe the question arises also in the context of the recent draft of the European Constitution and from the impact of efforts to push towards a federal organization for the European Union. In fact the European Union has recently been faced with an expansion to include a significant number of new States.

This is part of the aftermath of the fall of the Berlin Wall, the collapse of the Soviet Empire and the disintegration of Marshall Tito's Yugoslavia. Of course, all the existing members of the Union understood at once that they could not respond negatively to all of the applications of the various States in Central and Eastern Europe requesting entry to the EU. But the difficult economic consequences of the unification of the two Germanies could not be neglected during the accession process. Similarly, the major difficulties in creating a common European military and foreign policy and a Constitution that is not yet able at the time of writing to overcome the possible veto of any of the member States stand in the way of achieving anything like substantial unification. The preferred solution has been to space out entry into the Union in time and under certain clearly specified conditions. But this has been a provi-

sional, diplomatic approach that has slowed the process of integration as it has also slowed down expansion.

Regarding the problems of the levels below that of the national States, they are not particularly those of an accentuation of regionalism. In Europe regionalism is very important only where, like in France, the effort of centralization was very strong. It is also lively in the United Kingdom, in Belgium in the case of Flanders, in Spain in the case of the Basques, and in Northern Ireland. In Italy, where the effort of making a unitary national polity began only about a century and a half ago, the reputation of regionalism suffers from the problematic uses to which it was put under Fascism and by the negation of the meaning and value of the State's unitary form that accompanied the two ideologies which dominated Italy after the collapse of Fascism: the communist and the catholic (MUSCARÀ, 2001). At the subnational level elsewhere the problem is illustrated by the situation in the ex-Soviet Empire and in the ex-Yugoslavia where the recovery of political stability is pursued, even if not yet reached, through the reassertion of central governments.

Not by chance, Gottmann, in the first chapter of the previously quoted work, maintained that "Man adds to these differences (differences of a physical nature); more by reason of his instincts of social organization and of his need of logic, he tries constantly to rearrange the differentiation that nature left complex, with shades and transitions."[3]

Gottmann himself helps us understand the first case, that of a supranational Europe, when he goes back briefly over the history of medieval Europe and recalls the hypothesis of the geographer E.F. Gautier regarding the Mozabites of North Africa. We can examine these ideas before examining the situation regarding the relations between the West and Islam.

For Gottmann, iconographies of the State stand on symbols of three orders:
- the religious,
- the political coming from the history of each State and, finally,
- those connected to social organization.

"That modern national States," he writes, "are beyond doubt the purest type and the perfection of these divisions testifies to an evolution that seems to reach maturity."[4] And he also writes that the iconographies are endowed with a strong imprinting because "they pass on through families and schools" and " they impress strongly on the still malleable minds of children and adolescents."[5]

But if the national States are the point of arrival for the stabilizing game of iconographies (even if today they are put in doubt by the rise of so-called globalism, a theme to which I must return) national State iconographies do not always reflect symbols drawn from all of the three orders. In the case, for example, of the Mozabites, a people of a particular Islamic sect living in the oases of the Sahara Desert, the reference could be only to the distant political past. For the geographer E.F.Gauthier this Islamic sect that lives divided among the communities of the different oases of the Sahara "could be the remainder of the ancient Ibadite Empire that knew its hours of greatness and power in these regions. Many sects that divide the peoples of the East," continues Gottmann (and the discourse seems of extreme topicality with reference to the picture in present-day Iraq after the defeat of its dictator), "could reattach their origins to the pages of past political or military glory."[6]

In the case of medieval Europe, to Gottmann the iconography seems substantially religious, since the political authority of the Roman Empire was "scattered" in a myriad of authorities, "leaving each surviving carrefour [crossroads] and each city to its own devices, establishing its own rules."[7] The level at

which this iconography operated was the one born at the borders between Christian Europe and Islam, where it reappears as a religious phenomenon. "In the medieval age the great freedom of political organization in the Christian space was the result of the unity of the faith, of a uniformity of civilization whose iconography was at this time practically entirely religious. To divide this space and arrive at a political division completely different needed the religious wars and victory of the maxim 'cuius regio eius religio'."[8]

Gottmann admits the existence, therefore, of iconographies at both a higher level and at a lower level than that of national States. So, it is necessary to ask about the iconography that today manifests itself and represents the East and, above all, if we can accept the thesis of Huntington that the future will be of clashes between discrete civilizations. For example, the contents of the section of this special issue of Ekistics devoted to the geopolitics of the great areas of civilization of the world today indicates that such an activity is very alive even if it is divided between elites pursuing different objectives. One interesting case emerging from this analysis is the example of Southeast Asia where a formal unity – originating in military worries by United States about the development of a "new" Vietnam and, more generally, the development of communism in the Pacific – aims at being transformed into a political entity without any relationship to these older origins, looking even towards the prospect of political independence (Dell'Agnese). The case of India also appears very interesting because according to Chaturvedi there we face two opposing lines of development. For the Indian "nationalists" the actual political entity of the South Asian subcontinent must forget the colonial experience in which it was born and focus instead on the iconography of a mythic unitary India. In the case also of black Africa, south of the Sahara, Alessia Turco points out the political alignment of recent elite with European education, aiming at an autonomous Africa. These leaders pursue neither a return to tribalism nor a development of what remains of colonialism, but aim at self-assertion, with a new identity renewed by their embrace of democracy.

A recent article by Amartya Sen shows that democracy should not be understood solely in the literal meaning of formal elections, which would apply only in the Western world. Democracy is more common than we think also in countries which have been outside Western influence and can be found in history whenever polities evince public discussion and make choices of a communitarian or collective character (SEN, 2003). Following the events of September 11, 2001 in the United States, Huntington seemed to change his opinion as to the clash of civilizations he had predicted in the book that made him famous (HUNTINGTON, 2002). Not always need opposition between large areas of civilization give rise to a clash. People who aim at turning them into such clashes take advantage of the fact that conflict is inherent in cultural difference but needs invidious comparison to radicalize it. Shirin Ebadi, winner of the Nobel Peace Prize in 2003, is the first Islamic and Iranian woman to serve as a judge since the Khomeini Revolution of 1979. The arrival of Khomeini to the leadership of Iran involved a return to a strict and puritanical Islamism: no woman could be sanctioned as a magistrate because "women are much too emotional." Ancient habits like that of the cutting-off of hands for theft or the stoning of adulterous women, etc. were reinstituted. Shirin Ebadi never left the country, changed her profession to that of lawyer, and became defense counsel in all the lawsuits in which the new Bench aimed at introducing an Islamism that was opposite to the civil laws prevalent in the modern world. The Nobel Peace Prize was given to Shirin Ebadi for the courage with which she has tried to make Islamism compatible with the rule of law. She lives in a country where the achievement of official Islam has coincided with a

collapse of civil law and an official enthusiasm for terrorism as a strategy against political enemies.

In a recent essay prepared for a meeting on the perception of the Mediterranean Sea, I had the possibility to ascertain, in the light of the studies of Bernard Lewis, that the roots of the difficulty of contemporary cohabitation between Islam and the West are profoundly contradictory (LEWIS, 2002; MUSCARÀ, 2003).

● On the one hand, the Islamic world emerged at the end of the 7th century, based on the deep-rooted conviction of the superiority of Islam either in comparison to the world at large or in relation to the other monotheistic religions of the Mediterranean Sea. This sense was both (not only?) of a religious nature, of course, for which the Islam of Allah and Mohammed was superior to either Judaism or the Christian faith: a perfect religion in relation to which non-Islamic peoples were considered unbelievers. And the unfaithful must be always defeated and always considered inferior and ignored.

● On the other hand, these convictions received an important confirmation in the history of Islam, after its rapid expansion around the Mediterranean Sea as far as the Pyrenees and to the gates of Vienna, as well as by the scientific, technical and cultural achievements of those important centuries. Put together, all this reinforced the tendency to take no interest in what happened outside the Islamic world. The voyage of Magellan and the circumnavigation of Africa or the European discovery of the New World happened without the interest of the Islamic world and without Islamic valuation of the capabilities these events indicated or the consequences for the rest of the world. Over the past two centuries Islam has emerged from this paradoxical situation of absence in relation to the rest of the world. But the contemporary context now feeds into either a radical tendency of terrorism and frontal opposition to Israel or a moderate tendency that aims at the rediscovery of reasons for a cohabitation in the world of today without demanding the destruction of different cultural, social and political realities or a return to an isolated reality that can no longer be reproduced. In the Middle East today a new iconographic reality is maturing that could lead to a reconciliation with the West rather than to a frontal clash but without the annulment of the differences that would undermine the convictions of Jean Gottmann and of Fernand Braudel of a still varied future world but with a prospective pacific cohabitation at a global scale (GOTTMANN, 1952; BRAUDEL, 1963).

Jean Gottmann also added many other forms of spatial compartmentalization to the division of the world along lines that coincide with the great civilizations and with national States. He not only wrote that "many other boundaries existed before the present day national ones: the Roman *limes* or the Great Wall of China for the empires, fortifications for the cities, boundaries of bishops' domains, of parishes, of feudal domains, of grounds where for grazing flocks, of zones of nomadism for primitive tribes, etc."[9] There also exist "compartmentalized systems that involve overlapping areas within the same territory and that do not necessarily coincide, but that are oriented to different objectives: administrative, economic, legal, university, etc."[10]

It is interesting to record that, in his lectures on human geography, Gottmann emphasized that the stabilization produced by iconographies operates on all levels and in various ways. But it is to the compartmentalization of accessible space that Gottmann gave most attention because it involves two different forms of division. To his way of thinking, *circulation*, i.e. the continuous flows of every type that animate the earth's surface along substantially stable itineraries or that change only slowly, is at the origin of both the continuous changes affecting everything, and of the general tendency to the articulation of ac-

cessible space. "This circulation," he writes, "depends very much on what happens at the crossing (*carrefour*): cities are born as a result of the *carrefour* and its role is to be a place of contact, of exchange and of transformation."[11] Since the localization of phenomena in space consists of putting them in juxtaposition to the systems of relationships that are brought to life by circulation, we can maintain that it is the circulation that permits the organization of space and that it is in this organizing process that space is differentiated.

It is now necessary to make a clear distinction between the transformation-differentiation-compartmentalization coming from *circulation* and that coming from iconographies. Because these are invariably political expressions presided over by systems of symbols, Gottmann saw iconographies as stabilizing the general tendency of *circulation* towards change. Otherwise, we would be in the continuing presence of the work of "Penelope" aimed at undoing continuously what was previously built with something new and different. For Gottmann, that is – if I understand what he is saying – this process is always one of compartmentalization. But, whereas the pressures coming from *circulation* are only the result of the human tendency to centralization, those coming from iconographies are more the result of the need of humanity to organize itself in communities, in groups. It is this type of compartmentalization that becomes the fundamental subject of political geography, resulting as it does, i.e. "from the constitution of humanity in individualized societies and communities" over which preside the iconographies. In the first case, *circulation*, the central event is the *carrefour;* in the second, that of the group, it is the iconography. The two modes of territorial division co-exist, but are of a very different nature.

Conclusion

This long and detailed analysis of Gottmann's writing is not exhaustive but is done with the aim of checking out its relevance to the different levels at which iconographies can operate. It is not entirely necessary to take into account the origins of compartmentalization around the *carrefour*. The advantage in doing so, however, is that it helps in understanding, for example, that the feared disarticulation of space produced by the dissolution of the Soviet Empire and of Tito's Yugoslavia, was countered by the newly created States rapidly coming into existence soon after the fall of the Berlin Wall, and did not give rise to a "Penelopian" situation of perpetual circulation. The political picture could instead have degenerated (and this happened in cases such as Chechnya, Kosovo and Bosnia) in a situation comparable to that of a "colloidal" Europe of feuding domains, held together perhaps only by a anti-communist iconography or a nostalgic communist one.

The final point in this discourse recalls the interesting essay of John Agnew, written a few years ago, regarding the neglect of geography as a key to political analysis (AGNEW, 1987). Although Agnew did not have recourse to the ideas of Jean Gottmann, it seems to me that his reflection on the relationship between geography and community and, above all, his sharing the point of view of certain sociologists on the dimension of place as a way of relating the sense of membership to that of the identity integrates nicely with Gottmann's theory of the compartmentalization of space and of the iconographies this produces. Agnew maintains that the diminished scientific interest in the geography of politics can be put down to the presumed disappearance of the communities that for many students of social sciences, especially sociologists, are connected to the end of rural society and the appearance of industrial society. Of course, this theme is not directly connected with the present paper about Gottmann's iconographies. But in the confutation of this thesis, Agnew deepens the concept of com-

munity and, with evidence from the work of other sociologists, proposes and supports a theory of politics very close to that of Gottmann regarding the "instincts" that push people in the direction of the compartmentalization of accessible space. Agnew emphasizes the thought of those sociologists convinced of the persistence of territorialized human communities into and beyond industrial society. In other words, the reasons that people group together do not simply characterize rural societies: in industrial society (and today in the tertiary of the developed countries) people still answer to the requests that are the outcome of the collaborative work of community. The concerns of Jean Gottmann directed to this purpose clearly offer reinforcement to the contribution of John Agnew. This is also a test, if we needed it, of the continuing fertility of the thought of Jean Gottmann, whose observations of the geographical world advanced results which are still being supported today by other geographers and by many students in the social sciences starting out from different points of theoretical departure than his.

Notes

1. "La géographie ne doit pas chercher à être matérialiste dans les écoles: elle ne l'est point dans la réalité vivante et quotidienne." (Gottmann, 1952, p. 224).
2. "Les cloisons les plus importantes sont dans les esprits. C'est pourquoi l'iconographie est le noeud gordien de la communauté nationale." (Gottmann, 1952, p. 220).
3. "L'homme vient ajouter à ces différences; bien plus, par ses instincts d'organisation sociale et son besoin de logique, il cherche constamment à mettre de l'ordre dans cette différenciacion que la nature avait laissée complexe, toute en nuances et en transitions." (Gottmann, 1952, p. 5).
4. "Les Etats nationaux modernes sont sans doute le type le plus net, le plus parfait de ces compartiments, témoignant d'une évolution qui semble arriver à maturité." (Gottmann, 1952, p. 5).
5. "Les iconographies se transmettent dans la famille et à l'école: elles s'impriment fortement sur les esprits encore malléables des enfants et des adolescents." (Gottmann, 1952, p. 221).
6. "E.F. Gautier signale que les Mozabites, secte islamique d'Afrique du Nord, isolés dans leurs oasis au Sahara, pourraient bien n'être qu'un résidu de l'ancien empire ibadite qui connut ses heures de grandeur et de puissance en ces régions. Beaucoup des sectes qui se partagent les populations du Levant peuvent ainsi rattacher leurs origines à des pages de gloire politique ou militaire révolue." (Gottmann, 1952, p. 220).
7. "Si la circulation avait été maîtresse sans partage de la scène politique, elle aurait sans doute abouti à un éparpillement de l'autorité presque à l'infini, chaque carrefour, chaque ville agissant à sa

guise, établissant ses propres règlements." (Gottmann, 1952, p. 219).
8. "La grande liberté d'organisation politique dans l'espace chrétien était bien due en cette époque médiévale à l'unité de la foi, à une uniformisation de la civilisation dont toute l'iconographie à l'époque était pratiquement religieuse. Il fallut pour morceler l'espace et arriver à un cloisonnement politique tout différent les guerres de religion et la victoire de la maxime *Cujus regio, ejus religio.*" (Gottmann, 1952, pp. 219-220).
9. "Mais il a existé bien d'autres cloisons avant les frontières nationales d'aujourd'hui: *limes* romain ou grande muraille de Chine pour des empires, fortifications de villes, limites d'évêchés, de paroisses, de fiefs féodaux, de terrains de parcours pour les troupeaux, de zone de nomadisme pour les tribus primitives etc." (Gottmann, 1952, p. 5).
10. "On connaît des systèmes de compartiments qui se recouvrent, divisant en circonscriptions qui ne coïncident pas nécessairement le même territoire, mais à des fins différentes: découpages administratif, économique, judiciaire, universitaire, etc." (Gottmann, 1952, p. 5).
11. "Cette circulation dépend beaucoup de ce qui se fait au carrefour: les villes naissent d'un carrefour et ont pour fonction d'être des lieux de contacts, d'échanges et de transformation Gottmann." (Gottmann, 1952, p. 216).

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Territory and territoriality in a globalizing world

"In his book *The Significance of Territory,* Jean Gottmann explored the importance to evolving societies of the division of the earth's surface into bounded territories associated with sovereign states. He identified the contemporary situation as one of considerable fluidity, with territory losing its importance at some scales but retaining it at others. His treatment focused almost entirely on the scale of the nation-state, however – on the significance of territory for nations. In this essay, I build on Gottmann's ideas, 30 years after they were presented, to suggest how that fluidity has developed and how different scales have become important in the use of territoriality strategies."

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Introduction

In his book *The Significance of Territory,* Jean Gottmann (1973) explored the importance to evolving societies of the division of the earth's surface into bounded territories associated with sovereign states. He identified the contemporary situation as one of considerable fluidity, with territory losing its importance at some scales but retaining it at others. His treatment focused almost entirely on the scale of the nation-state, however – on the "significance of territory for nations" (GOTTMANN, 1973, p. ix). In this essay, I build on Gottmann's ideas, 30 years after they were presented, to suggest how that fluidity has developed and how different scales have become important in the use of territoriality strategies.

Theories of territory and territoriality

Despite it being a key geographical concept, territory – or bounded space – has not attracted the degree of attention accorded to other aspects of space and spatiality (JOHNSTON, 1997; STOREY, 2001). Few followed Gottmann's lead, for example, and only a small number have explored the related strategy of territoriality. In this first part of the paper, Gottmann's work is summarized, along with that of the two geographers who have done most to build on the foundation that he laid.

Gottmann and bounded territories

In the Preface to his book, Gottmann (1973, p. ix) defines territory – from the standpoint of a political geographer – as "a material, spatial notion establishing essential links between politics, people and the natural setting". It is important to geographers, he argues, because it is "the unit in the political organization of space that defines, at least for a time, the relationships between the community and its habitat on the one hand, and between the community and its neighbors on the other": those relationships are viewed as "closely related to the human striving for security, opportunity and happiness" (p. x).

Security is the foremost purpose for which territory is divided into bounded spaces, Gottmann argues (1973, p. 7), both security against outsiders (the prime purpose) and security within the community, which are provided respectively by the nation-state's foreign and domestic policies. The second purpose is accessibility, fencing "a territory off to control the access of outsiders to its land, people, and resources" (p. 8), while at the same time allowing its own citizens access to all parts of the territory. With greater accessibility comes greater diversity of the space within the bounded territory. Gottmann (1973, p. 14) sums up these purposes as follows:

> ...the space accessible to human activities may be described as continuous but partitioned, limited though expanding, diversified but organized. The reasons for accessibility and organization, both willed by man and largely controlled by him, are rooted in the desire to provide as much opportunity as possible – to pursue the "good life." However, organization also intends to regulate access and opportunity, avoiding the threat of situations that may be contrary to the accepted interests of the community. In this respect, it concurs with partitioning in an over-riding concern for security.

Thus the division of the earth's surface into bounded territories endows such spaces with two main functions:

> ... to serve on the one hand as a shelter for security and on the other hand as a springboard for opportunity. Both security and opportunity require an internal organization of the territory as well as a subsequent organization of its external

relations. An element of conflict is built into the functions of the territory, and behind them looms a contradiction in the purposes of territorial sovereignty and of political independence: the search for security will often clash with the yearning for broader opportunity. The former calls for relative isolation, the latter for some degree of interdependence with the outside.

Such a division of the functions of territory into prospect and refuge has been developed in other theories of space – as in Appleton's (1975) work.

Much of Gottmann's discussion of these functions of territory concentrates on the evolution of the system of territorially-defined sovereign states and their growing importance in the regulation of "national economies" (p. 86) – undertaken in order to promote "national happiness". This necessarily followed the achievement of national security within those bounded territories:

> Before economic aims could be emphasized in constitutional laws, the states of western Europe needed to achieve a fair degree of internal security: security in the physical sense both for individual inhabitants and for the political structure of the country. This required enough protection in the daily routine of life and work to assure survival and the reaping of the produce of the land: it meant, therefore, some order and policing (p. 92).

Thus the state had to ensure control over its territory, and stamp its authority thereon, before it could create the conditions wherein economic growth could take place: once people felt secure, they could focus their lives on the "search for happiness" through wealth-creation. States increasingly became involved in this: having ensured security, they then could become involved in activities which assisted wealth-creation – such as education and public health (the foundations of the welfare state, p. 100).

Security could never be taken for granted, however. Conditions changed, and territorial sovereignty was challenged – not least by developments in military technology and aviation (p. 127). Attitudes to the bounding of territory altered – as with changes to the law of the sea and the zones around nation-states' shorelines that became recognized internationally as within their spheres of influence (STEINBERG, 2002). Boundaries became increasingly important – and frontiers less so: the former were more likely to be demarcated and defended. They were increasingly used as screening devices, where entry to and exit from a state's territory is controlled, but such control became increasingly difficult with the expansion in trade and in population movements (both permanent and temporary).

Sack and territoriality

Gottmann's treatment of territory and spatial partitioning was significantly extended in a seminal work by Sack (1986) on territoriality.[1] For Sack, bounded territories have significant advantages that make them very important – perhaps even necessary – for the exercise of power (by the state and other institutions), hence his focus on the concept of territoriality (a term not employed by Gottmann). Territoriality is defined as (SACK, 1986, p. 19):

> ... the attempt by an individual or group to affect, influence, or control people, phenomena and relationships by delimiting and asserting control over a geographic area.

Territories are bounded spaces, for which features of the "natural landscape" may or may not be used in the definition of boundaries: territoriality becomes involved when those boundaries are used to mold behavior. Modern states need to do this in order to facilitate the major functions as identified by

Gottmann – providing security and advancing happiness. And such molding – which involves regulating what people can and cannot, must and must not, do – is much facilitated by three characteristic features of territoriality:

- it involves a form of classification by area;
- it can be communicated through territorial markers; and,
- its boundaries can be used as a means of interrupting interactions.

Power can be exerted over a defined area by a territorial nation-state using such strategies, with that power applying to all persons within the area. The exercise of power over people is very substantially assisted by the application of territorial strategies – hence its universal adoption by nation-states and its widespread use by a wide range of other organizations, which deploy it as a means of facilitating their organization/control of people widely distributed over space. Territoriality is a spatial concept that is fundamental to state operations – and hence to contemporary society, given the apparent necessity of the state (JOHNSTON, 1982 and 1990).

Taylor and containers

Taylor (1994 and 1995) examined the importance of territoriality to the contemporary state, in the context of four main functions:

- *Waging war* – what he terms the *state as a power container;*
- *Managing the economy* – the *state as a wealth container;*
- *Stimulating national identity* – the *state as cultural container;* and,
- *Delivering welfare* – the *state as social container.*

Until the late 20th century, the arena for these four functions largely coincided in space – the territorially-defined nation-state undertook them all for the same area. But modern developments have fractured that simple map of territoriality and power. As power containers, states continue to be the main actors in a world of warring states – but individual states rarely go to war alone now, choosing to do so in alliances with others; events in the USA on 11 September 2001 led to the declaration by its president of a war on terrorism in which the focus was only on territorially-defined states to the extent that they were seen as the loci within which terrorism was organized and fostered (JOHNSTON, TAYLOR and WATTS, 2002).

As *wealth containers*, however, individual nation-states are becoming less important; they are being replaced by groups of states, containers at larger scales incorporating a number of separate states – to which they have ceded some of their national sovereignty, the better to promote wealth and happiness (as with the European Union) within a secure geopolitical base. At the same time, there is a growing sub-state movement, whereby global city regions are assuming quasi-independent powers in wealth-promotion (SCOTT, 2001). Some of the state's functions as social containers are passed to such super-states also, though others are retained with the "traditional" containers. Culturally, however, individual states are being fragmented into smaller *cultural containers* – a trend which is less discussed, and is the focus of a later section.

Taylor thus identifies what he terms a triple-layered territoriality, with the different functions operating at separate spatial scales:

> ... the state as power container tends to preserve existing boundaries; the state as wealth container tends towards larger territories; and the state as cultural container tends towards smaller territories (TAYLOR, 1994, p. 160).

The social role merges with the cultural. (Nevertheless, as Paasi (2002) argues, this cession of some economic and social functions to a higher-order "government" can create problems of regional identity.) In his second paper, Taylor (1995) con-

centrates on the larger scale operations of territoriality, and its contemporary restructuring. In the economic sphere, for example, larger new (quasi-) states are being created to enable producers within individual states to compete more effectively in regional and global markets, whereas in the cultural and social spheres, smaller states are being created (as in the partitions of the former Soviet Union and Yugoslavia). States still exist and deploy territoriality as a major strategy for control and regulation, with power elites continuing to exercise their domination over bounded territories (the only model of power that they recognize!). But, says Taylor (1995, p. 14), the system of bounded nation-states will eventually wither away:

> ... [they] are sure to be abolished in any viable sustainable world. The competition engendered by states in their territories is ultimately a route to doomsday.

As actors in the economic sphere, therefore, states may disappear – and en route to that disappearance will experience major declines in their power and influence – but the division of the earth's surface into bounded spaces where territoriality continues to be exercised – what Taylor terms internationality – may be sustained:

> In the past, cultural differences have been maintained without political and growth imperatives, so that internationality need not be compatible with a sustainable world.

> There are now many hundreds of nationalist movements claiming separate territories in order to sustain their cultural identity.

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The cumulative work of Gottmann, Sack and Taylor has led to greater appreciation of the role of space, and in particular of bounded spaces or territories, in the exercise of power (JOHNSTON, 1996 and 2001). Territoriality is a strategy adopted by all of the nation-states which have claimed sovereignty. Possession of a bounded space has been a sine qua non of their sovereignty, and establishing power over that space, through territorial strategies. Without it, they have been unable to ensure their security and hence their ability to work with and for their citizens to promote wealth and happiness; but of course territoriality is a necessary though not sufficient condition for that success. Not surprisingly, therefore, the mosaic of states became the major set of actors in world affairs – exercising political, military, social and cultural power (MANN, 1984) – and much social science focused on that mosaic: for geographers, the most important world political map was that showing the boundaries of the recognized sovereign states, which between them – by mid-20th century – had exhausted the habitable earth and were spreading their power onto the oceans (STEINBERG, 2002).[2] So extensive has this focus on states as territorial containers become, that Agnew (1994) has argued persuasively that geographers have fallen into a territorial trap, over-emphasizing the division into a mosaic and under-playing the other ways in which space is mastered and manipulated.

New containers and cultural territoriality

Territoriality remains an important strategy for nation-states in a variety of contexts, however, and new ways of employing the basic strategy are being devised in response to changing contexts. For example, in early 2002 the United States decided to use its military base at Guantanamo Bay, Cuba, as a prison camp for those suspects captured in Afghanistan and elsewhere during its war against terrorism. Guantanamo Bay is not part of the sovereign territory of the United States (i.e. it is not part of one of the federal states), and so the US Consti-

tution does not apply there. Nor do the Constitutions of any other nation-states – including Cuba – and this has allowed the nature of the detention to differ from what would be permitted under the American or any other national legal system. International law – such as the Geneva Convention on the treatment of prisoners and the Human Rights Convention – does apply, but the nature of its provisions is highly contested and, like most other international law, there is no effective mechanism in place to ensure that a state adheres to those provisions. Thus a bounded space is being deployed by the US administration with a territoriality strategy outside the mosaic of nation-states, setting an important precedent which other governments wishing to ignore national and international laws may well follow.[3]

Another recent example of the use of territoriality to create "safe areas" wherein people can be isolated – though created in very different circumstances – is Srebrenica. This Bosnian town was one of six declared a "safe area" in 1995 by the United Nations in its efforts to end the civil war there, but the Bosnian Serb army was able to extract more than 7,000 Muslim males from within the territory, almost all of whom have not been traced since. This was one of a number of "safe havens" proposed in the 1990s at a variety of scales as a counter to policies of ethnic cleansing (another, much larger, was in the Kurdish-occupied areas of Iraq and Turkey). They were presented (Ó TUATHAIL, 1999, p. 126) as:

> ... demilitarized areas which require the prior consent of the combatants in order to be established. Safe areas were conceived as humanitarian islands of relative peace and security in a sea of warfare ... [which] required that the international community be politically and militarily neutral in their establishing and administration of these zones ... [comprising] territories of UN-governmentality ... [where] the international community could avoid taking a side ... [strengthening] its ability to carry out its "humanitarian mission" yet without imperiling its neutrality and the supposed moral authority that derived from this.

In the six Bosnian safe areas designated by UN Security Council Resolution the role of the UNPROFOR forces was to be peacekeeping only; their task was not to oppose aggression, but simply to "deter" it, and they could only use their arms in self-defence (indicating to Ó Tuathail (1999, p. 127) that the UN's mandate was "to itself and not to the refugees, civilians and soldiers fighting for their lives in the besieged enclaves"). The policy failed, because the Serb army was able to achieve its goal of ethnically cleansing the Bosnian Muslim males, despite the presence of a Dutch force in the town – and in 2002 an independent report concluded that the Dutch army, along with other UNPROFOR forces, failed to make the "safe area" safe, because of a flawed policy. The Dutch cabinet resigned en masse as a consequence of this failed attempt to apply a territoriality strategy: they lacked the ability (and/or will?) to deploy the power which a successful strategy provides.

Territoriality strategies have rarely extended beyond the land borders of individual nation-states, in part because of the difficulties of enforcing power over oceanic areas (and also over air space, especially at high altitudes) and in part because there has been little incentive to do so, as long as freedom of peaceful transit through ocean spaces was feasible. Increasingly, however, states have been treating the oceans as not just spaces to be traversed but also as sources of resources, animate and otherwise. Through the UN Conventions on the Law of the Sea they have been able to extend territorial control beyond their shorelines into the adjacent seas into Exclusive Economic Zones (EEZs), initially occupying a 12-mile band out from the shore but now extending for 200 miles. Management of the resources in these areas, notably the fisheries but also

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mineral resources on and below the sea-bed, has involved what Steinberg (2002, p. 172) calls the "territorialization of ocean-space," and recent international agreements give the relevant states the power to regulate the exploitation of highly migratory species and straddling stocks, not only within their EEZs but also in the adjacent areas of the high seas. Slowly, therefore, the oceans are being incorporated within state territories, and activities there are subject to territorialization strategies – although this is contested by some states, which prefer an international regime rather than a further mosaic of national regimes (JOHNSTON, 1992; CASTREE, 1998).

Within the oceans, too, there are new quasi-territoriality strategies. For some decades, small countries have attracted wealthy immigrants because of their low rates of taxation: they act as "tax havens". There is now an ocean cruise liner, "World", which comprises a set of "apartments" that are bought by individuals at high prices (£1m plus). They can join and leave the liner as it cruises around the world as they wish; if they live on it for long enough each year, they avoid being liable for tax in any country. This development was foreseen more than two decades ago (KEITH, 1977).

Territoriality remains a control strategy exercised by nation-states in a range of spheres, therefore. And this viability extends to a range of sub-state scales, where the strategies are deployed by other actors. Indeed, it is increasingly used to sustain and promote differences within societies.

The new suburbia and cultural containers

One of the arenas in which there has been considerable creation of new cultural-social containers in recent years is suburbia – especially, though far from exclusively, in the United States. The nature of that country's main agglomerations was the subject of one of Gottmann's most cited works – *Megalopolis* (GOTTMANN, 1961) – although this particular aspect of its spatial organization received little attention from him in the chapter on "Sharing a partitioned land". He noted the proliferation of local governments and discussed some of the proposals for overcoming the problems created (or exacerbated) by administrative fragmentation, but no more.

One of the enduring features of cities over the last two centuries has been the segregation of various social groups into different parts of their residential fabric. Some groups of people wish to distance themselves from others, for a variety of cultural and social reasons – which are frequently translated into economic rationales too. In particular, high status social groups try to distance themselves from their assumed social "inferiors", to avoid contact with them in their neighborhoods – both informally and through formal institutions such as churches, clubs and, especially, schools. They want a purified social space, where they can escape from the "unwanted" (and, often, largely unknown) and instead live among those they wish communion with (TUAN, 1998). They do this by developing separate residential areas, from which the "unwanted" are excluded by the operations of the housing market: their social "inferiors" cannot afford to live there. Such distancing has been particularly marked with regard to ethnic groups. Members of dominant groups (economically and politically if not numerically) wished to live apart from those with other ethnic identities – a process much assisted by housing market operations if the different ethnic groups were unevenly successful in the labor market – whereas some members of disadvantaged groups (who may also have been discriminated against in the labor markets and elsewhere) chose to cluster together for security and community protection.

But the operation of the housing and labor markets was sometimes insufficient to achieve the degree of segregation desired, and so further mechanisms were sought, using

bounded spaces and territoriality strategies. Certain groups were denied access to particular areas and were confined to living in certain districts only. Such a strategy was not new: Jews had long been prescribed to living in defined ghettos in European towns and cities – with the markers on the streets indicating the boundaries of such ghettos still visible in some (such as Dubrovnik); and the South African apartheid policy allocated every individual to a racial category and then clearly indicated which spaces that person could and could not enter, let alone reside in (CHRISTOPHER, 1994).

In the United States, segregation of racial groups has been a particular goal of the majority of members of the dominant – white – group for much of the country's history. In some cities this was initially achieved by explicit ghettoization: blacks were confined to prescribed areas only. But this was illegal after the passage of the post-Civil War amendments to the Constitution which comprise the Bill of Rights, and other stratagems had to be devised. One was the use of restrictive covenants: property owners in an area would agree neither to sell nor to let their homes to black persons, thus creating zones from which blacks were excluded (GOTHAM, 2000). Such covenants had a legal status: they were not unconstitutional, since the Fourteenth Amendment to the Constitution only prevents the state apparatus from treating races unequally ("... nor shall any State deprive any person of life, liberty or property, without due process of law; nor deny to any person within its jurisdiction the equal protection of the laws"). But the country's courts could not be used to enforce such covenants – and sanction those who broke them – since that would involve the state acting unconstitutionally.

Restrictive covenants had only limited value, however, and so for much of the 20th century an alternative stratagem was employed, using the planning powers devolved in most states to local governments, and the balkanization of such governments that was typical of most states and their metropolitan areas. This was a territoriality strategy: bounded spaces were used to promote the goals of a section of urban society only (JOHNSTON, 1984).

In most metropolitan areas – as Gottmann showed – expansion of the built-up area was for some time linked to expansion of the local government unit serving that area, resulting in authorities with extensive areas and large populations. But as the richer elements in the population (virtually 100 percent white) began to move away from the high density, increasingly polluted and crowded, inner cites into the suburbs – a shift facilitated by transport developments – they opposed these extensions of the urban local government, and instead used the liberal incorporation provisions in most states to create new, totally independent, municipalities. Thus the original authorities became encircled by a ring of separate municipalities, many of them small: expansion was blocked, and the original urban local authorities were "fossilized" as the "central cities" – invariably the largest all-purpose local government units within the metropolitan areas, but slowly decreasing in their relative (and then, with depopulation, absolute) size. Furthermore, the central city and the suburban ring became clearly differentiated socially and culturally: the former contained the metropolises' concentrations of the poor and the blacks; the latter contained the rich, who were predominantly white.

This territoriality strategy involved more than just the all-purpose local governments – the municipalities. Other local government units, most of them serving individual purposes only, were involved, including the school districts, the separate local governments which provide public education for the population within their territories. In most states, the areas beyond the central cities would have comprised a mosaic of such districts, many with only small populations, created to serve a dis-

persed rural population. While the central cities were expanding, many were amalgamated into the metropolitan area's main school district, but with the creation of the suburban municipal ring, such amalgamations became much rarer. Instead, the suburbanites either decided to retain the existing, small districts, or created their own, separate from those serving the central city areas.

The suburban areas thus became a complex mosaic of overlapping, small local governments, and they were joined by a range of other special districts, created to provide a range of particular public services, such as fire fighting. In all of these, the rationale was strongly linked to a territoriality strategy: the separate areas were used to promote the interests of those who lived within their boundaries to control not only who, if any, could join them there but also what their tax contributions should be, as well as what it could be spent on.

The core of these territoriality strategies involved the municipalities' planning powers. In most states, control over land use is devolved to local governments, which use this power to determine what activities can and cannot be practiced on any piece of land. Thus, for example, the residents of high income suburbs could prevent any industrial or commercial development in their territories, simply by not zoning for areas where they could operate. Furthermore, they could use the planning regulations to influence strongly what sorts of people were able to purchase properties within their territory (or major components of it), and so engineer its social composition. They did this not by explicitly excluding blacks – or members of other "undesirable" groups – since that would be unconstitutional. Instead they used the zoning provisions to create residential environments which were low density and thus unaffordable to large segments of the population – including blacks, most of whom were relatively poor.

Such exclusionary zoning brought advantages other than those involved in manipulation of the density and costs in local housing markets. The governments of the various municipalities could also decide what services they would provide to their property taxpayers. Many decided to provide few, on the grounds that people should be able to make their own choices through market provision; some provided none at all directly, but contracted with either other municipalities or private companies to provide those considered desirable (such as garbage collection and public utilities). In this way, their tax rates were low. Furthermore, their residents were not required to contribute through their taxes to the costs of providing a wider range of services across the full metropolitan area for those poorer than themselves, who tend to take more out of the public purse than they put into it, the classic redistribution of wealth from rich to poor which characterizes most welfare states. And, because of the social engineering of their residential mosaics, they were able to ensure that the local schools were characterized by the children of high income, white families only – considered a very desirable goal in the process of child socialization.

The balkanization of American suburbia was thus deployed to promote the cultural and economic goals of high income Americans, who were able to optimize their tax bills relative to their demands for public services, opt out of contributing to the wider provision of public goods, and engineer the social milieux of their neighborhoods and schools.[4] Such behavior was idealized as the public sector equivalent of the market economy for private goods and services (TIEBOUT, 1956), although the choices available to those able to afford suburban America were denied to many of their poorer counterparts. Territoriality was used to create white-only, high-income residential areas, promoting the perceived interests of those groups through residential separation – and also in free-riding on others' taxes; those who lived in the suburbs but used cen-

tral city facilities (and perhaps worked there too) were able to do so without making any contribution to their provision through the local tax base, so that the poor subsidized the rich.

Exclusionary zoning and its associated consequences – such as segregated schools – has been challenged in a variety of ways, notably through the Courts (JOHNSTON, 1984). Some successes have been achieved, but the white citadels of American suburbia have certainly not fallen to an invasion, other than where the residents have been prepared to sell up and move on – and out (POULSEN, FORREST and JOHNSTON, 2002). Furthermore, new stratagems have been devised, again using territoriality, to sustain the cultural separation that characterizes suburban America.

Fortified communities

Those new stratagems involve what is becoming increasingly referred to as "fortification", the creation of communities – with or without separate municipal status – that are walled- or fenced-off from their neighbors, with gates on the access roads, many of them manned to allow the careful control of entrance and exit which Gottmann associated with the creation of borders around sovereign nation-states. Again, such "gated communities" are not new, as Luynes (1997) shows,[5] but the form has become extremely common in recent decades, especially in the states with above average rates of growth – Arizona, California, Florida and Texas, for example. Security and accessibility characterize such communities, just as they did sovereign states employing territoriality strategies, with these two characteristics being associated with privacy and exclusivity. Of these, security has come increasingly to the fore in the rationale for such communities: the fear of crime and the breakdown of civic trust lead households to seek greater protection, which the spatial separation of a territoriality strategy offers, especially when the boundaries are not only marked but also difficult to cross and policed (as with closed-circuit television as well as manned gates). They offer residents control over their social milieux, security in the face of concerns about crime, sustained property values (and thus enhanced marketability), and distancing from the areas where civic society has apparently broken down: they are sold by realtors as offering privacy and seclusion, safety and security, a sense of community, and a prestigious image for their neighborhood (LUYNES, 1997, p. 191).

Such communities have been given the hybrid term Privatopia by McKenzie (1994) to reflect their combination of the privatism so characteristic of American suburban life styles with the utopian ideals of garden cities. A great number of them have their own governance additional to that provided by local governments. Such governance involves what are usually termed homeowners' associations; these not only manage the communities – upkeep of the landscaped public spaces, for example, as well as providing the surveillance and other services – but also set a range of conditions on what residents can and cannot do with their homes (some of them apparently trivial, relating to the keeping of pets, the hanging out of washing, where cars can be parked, even public kissing) (BLAKELY and SNYDER, 1999). All are designed to ensure a high quality of life according to criteria set by the management companies – and the householders involved in their management. They offer a response to the increasing culture of fear – and whether they are safer places "objectively" matters little if their residents (potential as well as actual) believe them to be so, and they are prepared to pay to live in them. Thus, as Blakely and Snyder (1999, pp. 153-154) summarize the situation:

> Neighborhoods have always been able to exclude some potential residents through discrimination and housing costs. With gates and walls, they can exclude not only

undesirable new residents, but even casual passersby and the people from the neighborhood next door. Gates are a visible sign of exclusion, an even stronger signal to those who already see themselves as excluded from the larger mainstream social milieu.

So such places "... wall out crime or traffic or strangers as well as ... lock in economic position".

For Knox (1994, p. 173), they involve the creation of a "caste society with utter social separation of the rich"; to Harvey (1996) they are "a form of contracted fascism"; and to McKenzie (1994, pp. 186-187) they suggest the emergence of "a gradual secession from the city ... [by the] ... successful ... [leaving] places of squalor for which ... nobody will accept responsibility". All of which adds up, according to Luynes (1997, p. 201), to "a cancer in the body of the city". That cancer, according to Blakely and Snyder (1999), is multi-functional. Whereas the main rationale for some gated communities is security, for others it is either prestige (living in a high income enclave) and/or lifestyle (living in a county club enclave, for example, or a retirement community where there is segregation by age as well as income). But in all cases, high incomes are necessary, and they buy a purified space, clearly demarcated from the remainder of society.

Gated communities may be the main locales of suburban development in the contemporary United States (so much so that they become the dominant urban form in science fiction: Stephenson (1992) termed them "Burbsclaves", city-states with their own constitutions, borders, laws and police-defence forces). But they are certainly not peculiar to that country – as perusal of the property pages of the higher status ("broadsheet") newspapers in many countries will show. For the UK see, for example, "Private property, keep out" (The Times, 28.11.1998); "Location, location ... security" (The Times, 27 March, 2002); and "It's the great gate debate" (The Sunday Times, 13 January, 2002). And in South Africa, similar communities have emerged to replace the legalized residential segregation that characterized apartheid. Hook and Vrdoljak (2002, p. 196) call them security-parks, developments which combine the prestige, security and life-style characteristics of US communities in:

> ... walled-in "community" living space that accommodates the homes of a typically elite and homogeneous group ... combining the luxury amenities of a high-class hotel with paramilitary surveillance and protection technology in an effort to separate off exclusive and desirable living areas from the city at large.

They – like counterparts in Brazil (CALDEIRA, 1996a and 1996b) and elsewhere – offer secure "socially homogeneous environments for upper-class citizens, upon whom they are seen as conferring high status" (HOOK and VRDOLJAK, 2002, p. 196).

Northern Ireland example. A new cultural territoriality?

The importance of the map of sovereign nation-states is changing. Those states are no longer the secure containers for separate development that they once were, as distance is continually annihilated by time, as technologies for the transmission of messages and the delivery of weapons make their boundaries increasingly impervious, and as the emergence of a new neoliberal world economic order challenges nationally separate strategies.[6] Thus, according to Dalby (1998, p. 134):

> Boundaries and identities are not what they once supposedly were. Lines of demarcation around precisely defined sovereign states are an increasingly unconvincing description of contemporary political life and an unconvincing answer as to how politics ought to be thought and practiced.

States persist, often violently, but trans-national flows of trade, communications, media, finance, crime and culture suggest that in the information age politics can no longer be understood in terms of locations, places, boundaries and state sovereignty.

As Taylor (1994 and 1995) has argued, however, this argument is valid insofar as it refers to the state as a power container and as a wealth container, though for a caution not to take the dissolution of those containers too far, see Dicken (1993). But the state is a social-cultural container as well, and in this context it continues to operate very much as a well-bounded space when this is seen as in its "national interests" – as exemplified by the Australian government's refusal to accept "boat people" refugees in 2001,[7] and the contemporary concern over asylum-seekers in the UK and other parts of the European community. Territoriality is still a major strategy available to states when and if they choose to employ it – which they do, especially though not only in the cultural-social spheres.

Furthermore, as argued here, territorial strategies are increasingly used within states by powerful groups as means of promoting their social-cultural interests – and often their economic interests too – by creating mosaics of bounded places. Los Angeles is often cited as the archetypal metropolis where this is most advanced (SOJA, 2000), but it is far from uncommon in a wide range of countries. In many of these new containers, forms of governance are practiced which are independent from those of the sovereign states (and their constituent local and regional governments): they are, in effect, private governments accepted by and not contravening the major principles of national governments. People, in much smaller groups than Gottmann thought feasible in his discussions of the power-wealth containers, are creating their own complex mosaics of separate territories, within which behavior is controlled and to which entry is carefully monitored. As Massey (1999) argues, they are part of a strategy of "sameness" by which individuals and groups counter the promotion of difference in many explicitly multi-cultural societies by withdrawing into their own homogeneous enclaves socially and culturally – if not also economically. To Marcuse and van Kempen (2000, p. 249) these are exclusionary enclaves, part of a new spatial order characterized by "strengthened structural spatial divisions with increased inequality among them and increasing walling between each". The residents of those enclaves operate in a global economic system and, apart from the separate workplaces that most of them move to, are independent of other geographical locations in their "home" cities: they live "in" those cities, but are not parts "of" them. Marcuse and van Kempen expect the absolute and relative importance of such enclaves to increase rapidly in coming decades, containing individuals who are part of a global economic community but who live increasingly secluded social and cultural lives – despite their commitment to the national identity developed within the larger space of which theirs is but a small part, and in many cases (notably the American) a commitment to a form of democracy from which they have significantly withdrawn.[8]

Conclusion

Territoriality continues to be a widely-deployed strategy, therefore, in an increasing range of contexts and situations. Gottmann was a pioneer of the examination of bounded spaces, and other theorists such as Sack, Soja and Taylor have built on that foundation. The potential for further work is great – given the importance of the strategy in the spatial structuring of a globalizing world.

Notes

1. Interestingly, Gottmann is not referred to in Sack's (1986) book.
2. The one part of the earth's surface excluded from this exhaustive

coverage has been Antarctica, for which there is an international treaty that recognizes state's territorial claims but over which there is very little exercise of state power.

3. An interesting other, though very different, example of this is the ocean cruise liner "World," which comprises a set of "apartments" that are bought by individuals at high prices (£1m plus). They can join the liner as it cruises around the world as they wish; if they live on it for long enough each year, they avoid being liable for tax in any country.

4. Although such strategies were most commonly used by groups promoting exclusive residential suburbs, they were not confined to such uses. In Los Angeles, for example, there are municipalities zoned almost entirely for commercial and/or industrial use only, thus allowing their owners to avoid contributing to the costs of the wider metropolitan infrastructure (Soja, 2000), and conflicts over municipal extensions often involve issues relating to the desirability of some commercial uses being within a municipality (and contributing to the tax base there: Walton and Johnston, 1989).

5. I live in one, created in the 13th century.

6. Although those challenges are always being countered by states, especially the more powerful – as with the US decision in February 2002 to place large tariffs on steel imports from many (especially Third World) countries in order to protect its own industry.

7. This refusal was clearly popular with the Australian public, and undoubtedly assisted the country's right-wing government unexpectedly win re-election in 2001. The refugees were sent to a number of small Pacific Island states, with the Australian government in return agreeing to pay off part of their national debt.

8. It may be, too, that the citadels in which they work are increasingly secluded. This has happened in the past, with the "sealing off" and surveillance of all would-be entrants to the City of London during times of enhanced terrorist threats, a practice that could spread to many other cities after 11 September 2001.

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The identity of modern Chinese migrants from Hong Kong to Vancouver, Canada

"Even more than Shanghai, Taipei or Singapore, Hong Kong is diffusing its sociocultural models to overseas Chinese communities, while its economic performances, even if they have recently slowed down, still make this city the hub of the diaspora and even of the Chinese world. And regarding the apparent exile of the Hong Kong elite, it would seem today to correspond more to a reinforcing of a global presence, all the colonies forming that way a *Hanse* of modern times revolving around this Asian major pole. At the same time, these migrants, approaching the planet from a supra-national way and according to their habits no matter their country of residence, could foreshadow a globalizing and multi-residential trend which will more and more characterize behavior of a fortunate ubiquist elite in a close future."

Thomas Fournel

The author was raised in rural Southern France. His passion for geography was revealed very early listening to his grandfather's African adventures or exploring the gorgeous surrounding nature. After graduating (maîtrise) in geography from the University of Montpellier-III, and before teaching briefly in High School, a year of study abroad (USA) changed his life as he started to explore a different culture than his own and ended up writing his Ph.D (University of Paris-Sorbonne) on the new Asian immigrants in North America, living and experiencing both the Far West (Vancouver) and the Far East (Hong Kong). Therefore, analyzing different ways of life and of thinking through complete immersion has became a real passion for him and, after having recently discovered South America, he is willing to keep on interacting with the Other to fully understand the world on a global and multicultural level.

Introduction

In a single generation of baby-boomers only, themselves descending from refugees (from the neighboring Province of Guangdong and, to a lesser extent, from Shanghai) who left China during the civil war of the mid-20th century, a parallel Chinese identity and culture have been developing in the Sino-British enclave of Hong Kong to become an example for the Chinese of all around the world. However, in the 1980s, the delicate political climate of the colony ended up in an exile without precedent, in particular in the metropolitan area of Vancouver where the global context was going to meet the local one. It is precisely this Hongkongese particularity, the motivations for these "luxury refugees" to move and, more than anything else, their consequences on the concept of migrant that is the issue and the focus of this short exploration.

Chinese both peripheral and central

A cultural mix between East and West

The identity of the people of Hong Kong is the fruit of an original mix, born from the meeting of Eastern and Western ways of thinking. However, in order to be fully understood, it is necessary to approach this crossing from two overlapping dimensions, the bicultural one and the multicultural one. On the one hand, their society is a hybrid of colonial and local traditions, marrying British institutional and juridical strictness to Cantonese discipline and pragmatism, in particular through professionals educated according to an Anglo-Saxon way. On the other hand, one must think of Hong Kong as a place of permanent stir between Sino-Asian and Anglo-European cultures because of its hub position vis-à-vis both the diaspora and the global economy (HAMILTON, 1999). Today the inhabitants of the Special Administrative Region (SAR) are proud of this singularity which differentiates them from their Mainland "brothers." In other words, like the ambiguous identity characteristic of their overseas compatriots, even if they are ethnically Chinese, they first feel Hongkongese. In a way, historical, linguistic, familial or sentimental bonds with the country of origin are obvious, especially regarding old generations who grew up there, where they still have their roots. But the ones who spent their entire life in this city that they made themselves, identify with "her." At the same time, for them and even more for their descendants, the ancestral land is a *terra incognita.* Indeed, eternally marginal vis-à-vis their spiritual mother, they built another Chinese identity, more flexible and more open to foreigners. For instance, their system has been founded on values (like individual freedom, economic rationality or gender equality) and languages (Cantonese and English), quite different from those of the Communists. This identity switch can even be felt in the terminology used by the Pekinese to name those

former "Compatriots of Hong Kong and Macao" *(Gang Ao Tongbao)* who slowly became "Hongkongese" *(Xianggang Ren)*. Moreover, its location of enclave-hub gave this place a unique culture admired by the whole diaspora.

A model for the diaspora

More specifically, starting in the early 1980s, the sudden opportunities that this financial hub offered, suited the colony's young professionals and business people who developed a real cult of materialism there (SIU, 1999). The capitalist lifestyle started by these *nouveaux riches* is based on two principles, the obsessive search for profit and, at the same time, for novelty. They themselves structure the two fundamental and related aspects of their existence, work and consumption. This demand made the creation of parallel cultural models possible, in regard to high-tech leisure or ready-to-wear for example. And, even adapted from imported styles, the avant-garde spirit of the Hong Kong designers, like the Japanese ones, goes further than only copying. Furthermore, in particular through the diffusion of its culture within the diaspora, Hong Kong became part of the world giants in fashion and moviemaking, while reinforcing the ambiguity of its position both peripheral and central in the Chinese world. On the one hand, even in the hands of the Mandarins, its "re-sinization" should go with its affirmation as a major ingredient of the socio-economic models valued by the People's Republic. On the other hand, this island outskirt of Beijing is really one of the main engines of modern Chinese culture, a popular ultra-urban and ultra-consumerist culture which ties siblings up in a virtual global China.

A modern and capitalist Chineseness

Just thinking of the concept of Chineseness testifies to an outsider approach, mainly Western and academic. However, Chineseness generally refers to cultural aspects legitimized by history characteristic of the country named China, but also to the less concrete common points existing among all ethnic Chinese worldwide (WANG, 1999). Regarding current Hong Kong, describing what is Chinese, and what is not, is not an easy task. First, its citizens have a double face, apparently more modern and less traditional than their "cousins" of Formosa. Notably, mass consumption as a reason of being, base of their professional and recreational culture, would touch Hong Kong society more than the Taiwan one. Furthermore, even if its very British side was for long opposed to the plurality of colonial Shanghai, its Westernization is more noticable today than in its northern neighborhood. For example, more than its system, its strong Christian minority differs from Buddhist Chinese land. Moreover, contrary to what is spoken in Taipei, the English language is definitely part of the ex-colony's daily life (at school or at work in particular), even if less than in the admired independent state of Singapore. Finally, this city shows little interest in the issue of Chinese unity. However, we saw how the "Fragrant Harbour" *(Heung Gong)* recently built a second model of universal Chineseness founded on free enterprise, creativity and the privileged location of a world economic hub. As a result, Hong Kong seems to be keeping the role its spiritual mother was holding before World War Two, projecting to overseas Chinese the image of a desirable modernity. On the other hand, according to Pekinese elites, the greed of those ignorant superurbans certainly does not help erecting the monument of "pure" Chineseness, the one of art and literature. But Cantonese people, now envied middlemen, did not forget Confucius' moral and if it was not for them and the diaspora networks, intellectual Chinese milieux would not have survived the Cold War between Taipei and Beijing (MAKIO, 1998). And, by the way, this thirst for possession is

even truer of the current People's Republic of China crowds than its capitalist outskirts, which have already partly reached the stage of the necessary to enter the superfluous one. Also, in the rest of the country, the language spoken in Hong Kong is not considered more than a simple dialect. But in reality Cantonese is in many respects a national language, on which a global life model has been built. Consequently, the Chineseness of Hong Kong, like the one of its peripheries (Overseas China) defines itself essentially by a capitalist global way of functioning and a certain modernity. By modernity is meant an anti-traditional Chineseness, as opposed to a Western partial imagery still often persuaded of the archaism of so-called Chinese norms. Therefore, after having described Hong Kong Chinese cultural identity, it would seem now legitimate to question ourselves on the why of their recent emigration.

Migrations between Hong Kong and Vancouver

A massive exile in the pre-handover climate

The emigration of Hong Kong capitalists during the 1980s and 1990s needs to be replaced in the context of the British colony of then. Especially, the officialization of its handover (BASIC LAW AGREEMENT, 1984) and, more than anything else, the "Beijing Spring" were the events provoking a massive exile. Indeed, the idea of belonging to a communist country after 1997 did not seduce business people still living with the memories of the 1949 revolution. To a certain extent, Hong Kong people were becoming stateless since, differing from other "dissident" Chinese identities, they would not reach sovereignty. Furthermore, if their particular political status was not really recognized by the new rules, they themselves did never identify with a China that they never belonged to (SIU, 1999). However, their fear was first an economic one, since they were viewing their businesses as in danger, and even more fortunes earned during the 1980s in the very lucrative local real estate (OLDS and YEUNG, 1999). That is why they developed a strategy announcing a new geopolitical era, consisting of making multiple investments in more reassuring political and economic horizons. At the same time, some English-speaking new countries were desperately seeking willing investors who could "dope" their economy.

In particular, during the 1980s, in response to the recession their country was going through, a lot of Canadian decision makers were thinking that the long-term growth key was to look for a capital and an entreprise spirit of Hong Kong synonymous with economic prodigy. This is how, in 1987, Ottawa and the Provinces started the new version of their Business Immigration Program, allowing anybody who would invest about half a million Canadian dollars to settle in Canada with his family and obtain citizenship after three years of residence only. This passport attraction for the "modest" cost of a middle-class flat in Hong Kong was going to be prolific since Canada was chosen by the major part of these rich people in exile, i.e. more than 250,000 of them between 1987 and 1996 (CITIZENSHIP AND IMMIGRATION CANADA, 1990-1998). That way, three times more of them were tempted by Canada than by nearer Australia or prestigious United States (fig.1).

It is true that not all the newcomers from the colony belonged to this "business class." However, from 1987 to 1996, nearly half of them immigrated to Canada under this label (CITIZENSHIP AND IMMIGRATION CANADA, 1999). And in absolute numbers, Toronto comes slightly ahead of Vancouver as a receptacle of this migration as a whole. But since the population of Great Toronto is two times bigger than that of Great Vancouver, the capitalist wave seems to have marked off the Western metropolis in a more ostentatious way, especially be-
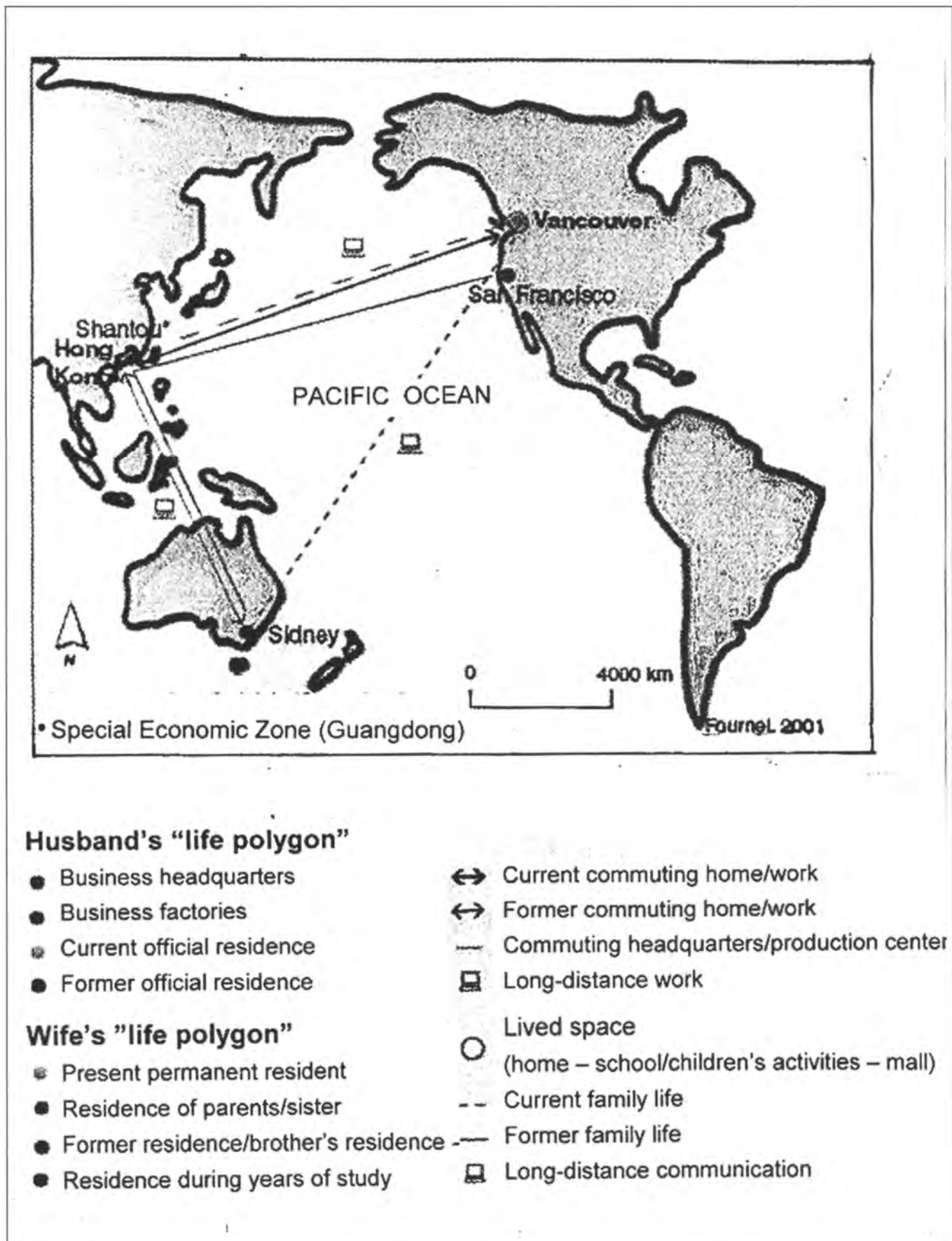
Fig. 1: Life polygons of a Hong Kong "astronaut" family. (*Source:* Interviews Vancouver 2001).

The legend for the figure reads:

Husband's "life polygon"
- Business headquarters
- Business factories
- Current official residence
- Former official residence

Wife's "life polygon"
- Present permanent resident
- Residence of parents/sister
- Former residence/brother's residence
- Residence during years of study

↔ Current commuting home/work
↔ Former commuting home/work
— Commuting headquarters/production center
Long-distance work

○ Lived space (home – school/children's activities – mall)
-- Current family life
— Former family life
Long-distance communication

Map labels: Vancouver, San Francisco, Shantou, Hong Kong, PACIFIC OCEAN, Sidney, N, 0 4000 km, FourneL 2001
• Special Economic Zone (Guangdong)

cause the last one received the biggest amount of "yacht people" of the entire country – two times more Chinese business immigrants than Toronto (CITIZENSHIP AND IMMIGRATION CANADA, 1988-1998; STATISTICS CANADA, 1997). And it is not chance but the result of seducing publicity from the politicians of this region, specifically during the World Expo of 1986, which showed the natural and multicultural advantages of a Pacific city relatively closer to the Far East than the Ontarian giant. Therefore, the biggest part (around 40 percent) of economic migrants entering Canada between 1987 and 1997, coming in their majority from Hong Kong, chose British Columbia (and even the Vancouver area to be more exact), representing in our case almost 50,000 business men and their families (CITIZENSHIP AND IMMIGRATION CANADA, 1988-1998). Moreover, their "flashy" concentration in the suburban municipality of Richmond reinforces the reality of the pioneer concept of "ethnoburb," created by the geographer Wei Li to label the Taiwanese suburb of Los Angeles (Monterey Park), and more generally cultural enclaves emerging in the outskirts of the Northern American metropolis (LI, 1998). The new Richmond is characterized by the growth of shopping malls where owners, salesmen, but also products and customers are mainly Chinese, and even Hongkongese. However, this flow was meant to dry up as fast as it happened, forcing the researcher to think of the concept of migration under a more global angle.

Return migration and the life polygon

The inversion of the migratory trend between the Sino-British archipelago and Canada concerns more specifically "expatriated" business immigrants who, after having officially stayed in the country just long enough to obtain citizenship, returned to the city still haunted by its reputation of building fortunes in one night. The Hong Kong trend of the late 1990s would indeed correspond to the return of the *Huayi* or "foreign citizens of Chinese descent." The exact number of people involved in this move is difficult to tell since, owning both Canadian and Hongkongese identification cards, they can come and go as they please without any strict means of control for the authorities of each political entity. However, according to three approximations made by three organisms of the SAR (the Immigration Department, the Canadian Consulate and the Chinese-Canadian Association), there would be between 150,000 and 200,000 Chinese there holding Canadian passports. In other words, at least half of those who left for this trans-Pacific state would now be officially Hong Kong residents, at least part of the year. It seems reasonable to think that in this number are certainly included businessmen living between both sides of the Pacific Ocean and those who came back for good. Anyway, all together with all the ones holding foreign citizenship, they represent a latent potential for a new exodus in case of a drastic change of Beijing's politics. No matter what happens, the destiny of these people, in particular during the last 50 years, is noticeable for its hypermobility and a global presence fairly amazing, both easier to understand through the concept of the life polygon, created by the French geographer Jean-Baptiste Humeau about the Gypsies in France (HUMEAU, 1995). Regarding Hong Kong migration, it could define itself like the main hubs structuring the space of the Hong Kong diaspora. The understanding of this virtual territory is quite appropriate for Chinese dynasties scattered all around the world to enter. On the other hand, thinking their life only at a local scale would give a partial and wrong view of their reality. In this supranational country, it is easy and relatively common to slide from one region to the other according to possibilities sought and the diverse political and economic situations. Then state borders do not signify much for an ethnic group following opportunities offered by the different poles of "its" territory.

To clarify our purpose, I will take the case of a woman born in Hong Kong in the mid-1950s with parents coming from Guangdong Province. Part of the upper-class, both her father and mother working in publishing, she naturally studied computing in the United States before getting a job as an engineer in her native city and becoming rich doing property speculation during the 1980s. A few years later, following the fashionable trend in the colony, she and her husband moved to Vancouver, after a disappointing stay in Australia. Today, she is well-off, living in an upper-class neighborhood of Vancouver where she takes care full-time of her children's education, while her husband, when he is around, manages his Hong Kong business through the web.

A migrant elite above political borders
Trans-Pacific household and capital accumulation

Indeed, the huge human move occurring in the British possession of the Far East during the 1990s was meant to be more ambiguous than it seemed, since typically the business people left while staying at the same time (WONG, 1999). In fact, one of the first goals of this emigration was to obtain the citizenship of an English-speaking developed country, i.e. a political status and a certain social prestige which would allow them to return to Hong Kong in a position of superiority vis-à-vis local institutions under communist domination. Therefore, having to make an impossible choice between safety and profit, a lot of Chinese capitalists built a global strategy in which they would keep their job in Asia while moving overseas. This phenomenon became rapidly common within Hong Kong Chinese communities of Canada, Australia or New Zealand. The commutings resulting from such an arrangement, in which the family money earner spends his time between Vancouver and Hong Kong for instance, made these migrants receive the different nicknames of "astronauts: (or *tai kong*), "transnational cosmopolitan" or "transilient migrant" (RICHMOND, 1991; MITCHELL, 1995) (fig. 2).

However, this family spreading seems to be simply following Chinese traditional work migrations and reminds us of the bachelor migration to the New World of a century ago. But at least three fundamental characteristics differentiate this one from the old one:
- First, in the contemporary scheme, it is not the man who is migrating but his family;
- Second, the current one concerns by and large an elite migration;
- Third, modern communication and transportation means make the two sides of the Pacific Ocean "closer."

The prolific and recent literature about this topic insisted mainly on the global mobility, the flexibility and the economic power specific to these Hong Kong middle and upper classes (MITCHELL, 1995; ONG and NONINI, 1997; OLDS and YEUNG, 1998). Consequently, Vancouver is not only a long-term resort for Chinese stockholders but also a dorm-city for this jet set of entrepreneurs commuting between their Oriental headquarters and their official trans-ocean residence. This is the reason why the majority of business immigrants living in British Columbia would not work there and a fair amount of them would work in the country of origin (LEY, 2000). But in reality, this attitude would be the result of a planned strategy (WATERS, 2001).

In order to understand this purpose, let us put the notions of financial and human capital in perspective. Indeed, it is necessary to keep in mind that the haemorrhage Hong Kong society suffered in the 1990s first touched the business bourgeoisie
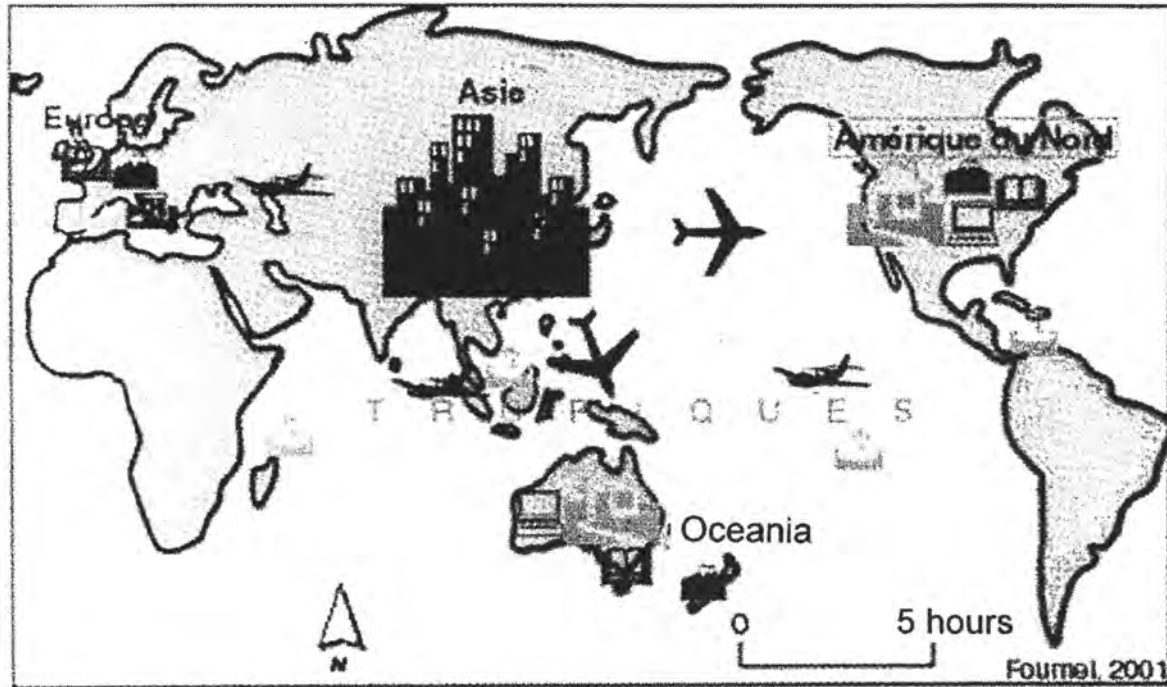
Neighborhoods

	Business
	Residential
	Academic

"Amusement Parks"

	Beach resort (M: Mediterranean)
	Snow resort
	Cultural resort

Means of transportation/communication

✈	Shuttle downtown/suburbs
✈	Shuttle work area/leisure area
💻	E-work (at home)/Virtual presence somewhere else

Fig. 2: A futurist "world city." (*Source:* Fournel, 2001).

and the "brains," meaning the richest and most educated people, and also the ones its future was depending on. More precisely, typical fugitives were yuppy families moving to North America, and not the Chinese guest worker caricaturally rural, uneducated and single. Surely, such quality immigration in the new countries was not exclusive to the Hongkongese. More generally, this was the growing trend of newcomers from comparable Asian nations, regarding either their level of development, their governmental fragility or the pressure existing on workers. Also those nations, in particular Taiwan, Singapore or South Korea, share a Confucian culture specific to Chinese civilization. But, Canadian or Australian seeking of a miracle suited particularly well the profile of entrepreneurs whose political and cultural specificity, of British pupils kicked out by a red dictatorship, was just emphasizing. Indeed, they already had capital which made them safe anyway, no matter their final destination. In particular, holding geographically diversified investments, Anglo-Saxon degrees internationally recognized and elite professional relations all over the world (*guanxi*), they possessed what the French sociologist Pierre Bourdieu (1979) calls respectively economic capital, cultural capital and social capital. It is then quite easy to imagine that the one owning simultaneously these three forms of capital has got multiple residential options allowing him great territorial adaptability. So, the main issue would seem to be regarding the territorial identity of those families transplanted from one side to the other of their *mare nostrum*.

What spatial and national belonging?

Facing such a moving skill, it seems quite difficult to extract fundamental principles about the relationship of Hong Kong people with their national space.
- First, they are simultaneously proud of their Chineseness, their material achievement and their "domestication" of distances or of the Earth's political dimension, allowing themselves to travel from one entity to another as they please.
- Second, even if they are Chinese, they do not identify with their Motherland, either the traditional one which is "back" again or the adoptive one.
- Third, this eternal moving around, which does not seem to be slowing down, is obviously hindering any sort of permanent settling inside a unique land and a unique culture.

On the contrary, by joining the transnational capitalist world, not only borders but also national identities make less sense. This is why one needs to admit the existence of a migrant identity in itself, emanating from a deliberate strategy of repeated migration and, consequently, not tied to one but several places at the same time. To a certain extent, this migrant identity would witness a lifestyle based on geographical mobility and family global dispersal. In a way, it is a little as if nomadism (or more exactly multi-residency) would be preferred to sedentarity, until believing that these modern nomads possess ubiquity skills. Furthermore, the attitude of these transnational whole members fairly differs from traditional immigration and emigration concepts. In North America, these "sky knights" are neither economic immigrants nor "reluctant exiles" (SKELDON, 1994). It looks quite indispensable then to add to the immigrant/emigrant paradigm the idea of a migrant living above territories. In particular, belonging to strong international social networks makes optional integration at a local level perceived as transitory (HIEBERT, 2000).

However, there is a question remaining, the one concerning the national conscience of those multi-skilled beings. It is true that at a time when having simultaneously several cultural belongings is becoming a growing norm, collecting many identities should not perturb individuals too much. But these migratory birds do not develop this attachment to their country as much as inhabitants of nation-states. It is indeed fairly hard to define the "at home" concept of people descending from rural ancestors from Guangdong Province, having grown in the ultra-urban environment of Hong Kong during a period of great changes and now spending most of their time in a multicultural metropolis of an English-speaking new country, while travelling frequently all over the world for business. However, even though they are living on a different planet than the ordinary mortal, these Hongkongese would suffer an identity crisis related to the fragility of their allegiance to a precise land. In other words, even with their legendary capacity to juggle from one identity to another, these world citizens would suffer from a loss of roots. At the same time, this new sort of comers in rich countries is opposed to the usual perception of White people on "their" land, i.e. exclusively composed of poor people attracted by the hope of better days.

Another North-American identity

A postmodern Asian

Breaking with the conventional hypothesis of the American Dream, the attraction of Hong Kong immigrants in North America could have two main explanations:

● On the one hand, their move needs to be conceived as the logical next step of half a century's exemplary social and economic climbing, a form of crowning of their success. They would correspond to what Morikawa Makio calls postmodern Asians, i.e. individuals who, after having succeeded on the financial level, are now seeking a better quality of life for themselves and their children (MAKIO, 1998). Their new preoccupations include especially access to a more balanced school system for their children and also a bigger and healthier living space. Indeed, one needs to be aware that in Hong Kong owning a house is no more than an impossible dream for the middle-class. Therefore, differing from the usual immigrants, these ones do not come to Canada to achieve the American Dream any more since the majority either do not need to work to live, because they are retired or rich enough, or continue their professional activities in the Far East (LEY, 2000). For them, Vancouver (and even more the city of Richmond hosting an international airport connected several times daily to their native city) has become a sort of residential upper-class suburb of Hong Kong, even if remaining a very particular one. In other words, in Hong Kong waiting to migrate to one of their English-speaking country communities first signifies crossing a superior rank in the social scale. Moreover, during the 1990s, their society was affected by the move to Vancouver, a little like a chic fashion seducing the local bourgeoisie. However, in their mind, this Canadian top did not imply leaving their habits or their belongings. It would then remain, to a certain extent, an overseas extension of their base camp.

● On the other hand, in Canada, these quite extreme Orientals find themselves in a society with a lot of aspects similar to theirs. So there they can follow a lifestyle close to the one they had before. In particular, for middle-class families of the island city, living in a suburban residence, shopping in malls, going around driving or spending nights eating out or watching television at home do not represent either a change or a cultural shock. Here is another reason for them not to feel the need to adapt to host country norms. They then contribute to building a modern Chinese identity in Canada. And if for many North Americans such an adaptation seems extraordinary, putting their motherland in its contemporary economic context and as a center of an ultra-developed community helps to relativize their so-called feat (MAKIO, 1998; HAMILTON, 1999). More generally, this phenomenon is only the reflection of a new era where modernization is not completely synonymous with West-

ernization since advanced societies do not only exist in Europe or in North America but also in Asia. Furthermore, their global tropism is revolutionizing notions of "here" and "there" since their "somewhere else" fairly resembles their home.

Living in Vancouver like in Hong Kong

Considering Vancouver like a simple extension of Hong Kong, the migrants took with them their cultural models. Therefore, even though millionaires, educated and migrants in their soul, they paradoxically keep a strong attachment to their lifestyle overseas. More exactly, they obviously prefer the commercial atmosphere or the gastronomy of their homeland to the one conventionally offered in their host country. It could be interesting then to explore the significance lying behind such strong consumption habits. Especially, this importation in the metropolitan landscape of ultra-urban island practices is obvious through their frequentation of recently erected shopping malls of Richmond. Comparing them with the original ones is quite amazing acknowledging the fact that this transplantation sticks out with a strong desire of reproduction, either way in the toponymy, the type of goods or services offered, the modest size of the shops or even the visual, audial or sweet-smelling environment. This mimetism seduces Sino-Canadian customers who feel at home in those malls since they represent a universe in which they have their unconscious landmarks. And consumerist mass culture or the centrality of malls in their leisure, both specific to Hong Kong people, have their foundation in the uniqueness of the capitalist enclave. Many complementary hypotheses can explain such behavior:

• First, Hong Kong people work hard and a lot earn as much money as possible. Therefore, the few rest hours of the night or of the weekend are spent shopping or going out, overspending money, allowing in a certain way the permanent stress to be overcome.
• Second, the crampedness of private space makes any sort of social life at home very difficult.
• Third, shopping malls made in Hong Kong concentrate at the same time stores, restaurants, karaoke-bars and video game temples, that way satisfying any generation. Notably, it is in those places that people meet friends or family at night or on Sundays around an appetizing dinner. It would by the way seem that Chinese in general, and Hongkongese in particular, appreciate eating out even more than any other nation. French geographer Emmanuel Ma-Mung even sees in those places of conviviality a key function in keeping alive the ethnic identity of these people (MA-MUNG, 1992).
• Fourth, one needs to add to this a certain pragmatism which consists in taking advantage of rare free time.
• Fifth, this attitude is the direct reflection of purely urban habits as, differing from most of global cities, the lack of space in Hong Kong makes the escape to the countryside at the weekend almost impossible without flying.

However, the purpose is not to justify the shopping trend by natural determinism; evidently it also reflects the aspirations of this bourgeoisie. One needs to keep in mind indeed that the ex-colony's economic success is quite recent, a few decades at the most and that it was mostly achieved by descendants of refugees. So, the values they admire are mainly *nouveaux riches* ones and it is not so surprising that they are first concerned with material well-being and image. Under those conditions, spending one's free time seeking the newest electronic gadget on sale is often perceived as the only exciting thing to do, showing also a certain herd mentality characteristic of a society where people are very preoccupied with being as fashionable as the others.

Conclusion

This long but enlightening digression being closed, the reader understands better why, even in a Vancouver context completely opposed to the one of the Hong Kong crowd, migrants continue to prioritize values they received and that they think are best, i.e. materialistic values contributing to the apology and the cult of social image. And it would not be too wrong to assert that mass consumption is a cultural feature most exacerbated among overseas Chinese than North Americans themselves whom sociologists call shopaholics. And many witnesses report that being immersed in a climate similar to their little motherland would be one of the main reasons why Vancouver is favored by many of those Asians, vis-à-vis Chinese San Francisco, judged too traditional for instance.

Even more than Shanghai, Taipei or Singapore, Hong Kong is diffusing its socio-cultural models to overseas Chinese communities, while its economic performances, even if they have recently slowed down, still make this city the hub of the diaspora and even of the Chinese world. And regarding the apparent exile of the Hong Kong elite, it would seem today to correspond more to a reinforcing of a global presence, all the colonies forming that way a *Hanse* of modern times revolving around this Asian major pole. At the same time, these migrants, approaching the planet from a supra-national way and according to their habits no matter their country of residence, could foreshadow a globalizing and multi-residential trend which will more and more characterize behavior of a fortunate ubiquist elite in a close future.

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Changing sovereignty and changing borders: vox dei or vox populi?

"The world is becoming more integrated, it is becoming increasingly tightly linked by communication systems, and yet, at the very same time, it is becoming more fragmented. Since Jean Gottmann wrote his seminal *The Significance of Territory,* the friction of space on communication has been lessened by the greater speed of train and air travel, by a better connected and less encumbered telephone system, by satellite transmission of radio and television signals, by the instant run around the globe of the e-mail and the web; but during that period many new sovereign states have been created; many more international borders have appeared. Distance – physical and perceptual – as well as boundaries that protect and divert communication remain major factors in international relations. ... Will the 21st century reverse the process of fragmentation of the world system of states? ... We should thus anticipate that new nations will appear. ... How will these new states be created, how will their boundaries be determined?"

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Introduction

The world is becoming more integrated, it is becoming increasingly tightly linked by communication systems, and yet, at the very same time, it is becoming more fragmented. Since Jean Gottmann (1973) wrote his seminal *The Significance of Territory,* the friction of space on communication has been lessened by the greater speed of train and air travel, by a better connected and less encumbered telephone system, by satellite transmission of radio and television signals, by the instant run around the globe of the e-mail and the web; but during that period many new sovereign states have been created; many more international borders have appeared. Distance – physical and perceptual – as well as boundaries that protect and divert communication remain major factors in international relations (HENRIKSON, 2002). True, the EU and Schengen type of agreements lower some of these borders, but for the world as a whole the century just ended marks a triumph of the movement of nationalities expressed in the juxtaposition of sovereign states with juridical control over separate territories.

Will the 21st century reverse the process of fragmentation of the world system of states? The formation of large economic and military blocs capable of measuring up to the super powers of the time will push the system in that direction; but, ethnic and national conflicts will continue to have an opposite effect. We should thus anticipate that new nations will appear, especially so if economic markets and political "markets" become decoupled from each other, thus allowing very small states to find a viable niche in the global economy.

How will these new states be created, how will their boundaries be determined?

One of the rhetorical questions that political science likes to put to itself asks whether regime matters, whether a state's system of government influences its behavior at the international level. The obvious answer is, of course, "yes and no,"

• yes, for example, in as much as democratic states practically never go to war against one another;

• no, in as much as the same democratic states have no qualms in forming alliances with dreadful abusers of human rights.

But this "yes-no" is in effect a "yes" answer since it says that there is some spillover from internal ideologies and politics to the outside, a spillover of the "good for the self" unto the "good for others."

An area of the spillover, much overlooked by students of international relations, concerns the involvement of the people who inhabit a given territory in a decision concerning its sovereignty and boundaries. Is the decision to come from above or from below. Vox dei? vox populi? or a blend of the two?

Before giving an answer to the question, let us replay a partition game suggested by the following boundary setting typology (LAPONCE, 2001a).

Consider a population of Os and Xs distributed as follows in physical space:

```
o o o o x x x x
o o o o x x x x
o o o o x x x x
o o o o x x x x
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Assume now that we are boundary makers having to run a continuous separation through the whole set. Where shall we run that separation? Four major solutions are offered to us. To facilitate their identification, let us give them names.

- **Solution 1,** a Woodrow Wilson type of solution, creates homogeneity by separating the Os from the Xs;
- **Solution 2,** a solution that made multireligious England attractive to both Voltaire and Montesquieu, maximizes internal diversity by maintaining the original pattern thanks to the running of the division horizontally after the second row.
- **Solution 3,** a mix of the Wilson and Voltaire solutions runs the line in such a way that a few Xs are attached to the bulk of the Os, and a few Os to the bulk of the Xs.
- **Solution 4,** a kind of experimental solution, runs the line so that the Os are a solid block of Os, while the Xs have a few Os on their side. It sets Wilson on one side against Voltaire on the other.

Solution 1	Solution 2	Solution 3	Solution 4
oooo xxxx	ooooxxxx	oo ooxxxx	ooo oxxxx
oooo xxxx	ooooxxxx	ooo oxxxx	ooo oxxxx
oooo xxxx		xxxx ooo	oxxxx
oooo xxxx	ooooxxxx	ooooxx xx	ooo oxxxx
	ooooxxxx		

The leader as international boundary setter: Vox dei or vox populi?

What we have been doing in sorting out the Os and the Xs is what leaders and governments have been doing from time immemorial. We have played God, we have been the vox dei. We have decided where the line should run on the basis of our own ideological or practical preferences. We have not consulted the Os and the Xs.

If we were to pick at random any boundary in the world, we would have an extremely high chance of having selected a boundary that was set by rulers as gods of the map. Many are the examples of the vox dei approach, few are those of a vox populi involvement. I shall give examples of each type.

● After the Second World War the Allied Council of Foreign Ministers met to determine the boundary between Italy and Yugoslavia (SCHECHTMAN, 1962). They agreed that the division should be along ethnic lines (our solution 1). In fact, when it came to drawing the line, the USSR proposed a boundary that would give close to half a million Italians to Yugoslavia and no Yugoslavs to Italy (our solution 4); the USA proposed a line further to the east that would give a minority of 300,000 Yugoslavs to Italy and 50,000 Italians to Yugoslavia (our solution 3); Britain and France wanted to put a rough balance of Italians and Yugoslavs on each side (our solution 2).

This unusual attempt at using a Wilsonian principle of national allocation of space (unusual for a Second World War border settlement) was soon abandoned and most of the ground (Trieste excepted) was given to Yugoslavia.

The simple point I wanted to make from this example is that although the negotiation started with an agreement that the ethnic cleavages should lead to the solution, the people concerned were never consulted. The leaders were playing international chess. It could be that they had no choice since the Cold War had already begun. I am not passing ethical judgment on their intentions but on their behavior. It was undemo-

cratic and unethical to dispose of a people's right to sovereignty without consulting them.

● As examples of the second type, let us consider two vox populi cases:
• that of Klagenfurt (1920) and
• that of Upper Silesia (1921).

• The Klagenfurt basin which is now the most southwestern of Austria's provinces was claimed by Yugoslavia after the First World War on the ground that it had a large population of Slavic origin.

The Peace Conference decided to hold a plebiscite in an area with about 125,000 inhabitants. According to the Austrian census of 1910 the southern part was 68 percent Slovene (more precisely "Windisch") while the northern part had only 8 percent Windisch speakers. The whole area was Catholic since the counter reformation (WAMBAUGH,1933).

The Klagenfurt referendum had one very distinctive feature. The voting area was divided into 2 zones which were each administered by the claimants, the northern zone by Austria, the southern zone by Yugoslavia. An Allied International Commission organized and supervised the referendum. Although Austrian and Yugoslav troops had withdrawn before voting day, the arrangement clearly favored Yugoslavia in the zone it administered. Yet, in that zone, it obtained only 40 percent of the votes for 18 out of 51 communes.

The referendum regulations specified that the electors of zone 1, that closest to Yugoslavia, would vote first and that the vote in zone 2, that closest to Austria would be held only if a majority of zone 1 had decided to secede from Austria. That second vote was not held since the first referendum had rejected the secession option.

Yugoslavia had made a major mistake in wanting too big a zone 1. Had the zone been restricted to its southern portion, it would have produced a majority in favor of Yugoslavia who tried indeed to convince the Allied Peace Conference that it should get the southern communes of zone 1 that had voted for separation. The Commission ruled that the electoral regulation, which expected the decision to be made at the zone level, could not be changed ex post facto. A different set of rules could have given satisfaction to the southern Slovenes; for example the rules used a quarter of a century later in Switzerland when Jura seceded from Bern. The Swiss procedure, the most democratic among secession rules, specified that a region could, on a second referendum, dissent from the whole and remain with Bern, and that on a third referendum the local communes located on the boundary determined by the second referendum could, by referendum once again, switch side and join either Bern or Jura (McRAE,1983; JENKINS, 1987, LAPONCE, 1987, 2001a and 2004).

The Klagenfurt case offers a textbook illustration of the difference in outcome that results from consulting a population rather than deducing its interests and loyalties from purely objective criteria. Most Windisch speakers may well have been 'objectively' closer to Yugoslavia than to Austria by language and culture but not by other criteria, and decided, on balance, that they preferred to remain under Austrian sovereignty.

• Our second example of a vox populi case concerns Upper Silesia after the First World War. The region had belonged to German rulers for five centuries but had a majority Polish-speaking population. Woodrow Wilson wanted to give it all to Poland (for the Wilsonian criteria of national distinctiveness see AMBROSIUS, 1987). It took the insistence of Lloyd George, who proved to be more Wilsonian than Wilson, to obtain that a referendum be held. The plebiscite was supervised by an allied commission, backed up by French, English and Italian military forces (WAMBAUGH, 1933; LAPONCE, 2001a).

Notwithstanding a very tense situation marked by frequent

clashes between Poles and Germans, voting day was relatively peaceful. The result was 60-40 in favor of Poland. But, unlike in Klagenfurt where there was a geographical gradient of separatist opinion, no such gradient obtained in Upper Silesia which offered on the contrary a checkerboard mix of ethnicity, especially in the industrial east where central cities would often have large German populations surrounded by Polish suburbs.

Rather than count the vote by areas, as in Klagenfurt, the votes were tabulated at the local level of the commune and submitted to the Plebiscite Commission whose task it was to select a boundary. The French, English, and Italian commissioners were unable to agree. The selection of a boundary was thus referred to the League of Nations which instructed a committee to give priority to ethnic over economic considerations. The final boundary satisfied that condition but could satisfy, according to Wambaugh (1933), little more than 60 percent of voters. If the whole of Upper Silesia had been given to Poland, a roughly similar percentage would have been pleased with the outcome; but, in that last case, only Poles would have been among the satisfied. The boundary of the League, obtained after consultation of the populations concerned, offered a more balanced outcome, hence a fairer division. Lloyd George gives us here an example of rational as well as ethical leadership. He set aside the vox dei, not entirely but enough to make room for the vox populi. He blended the interests of the Allies (to weaken Germany) and the interests of the German residents, at least a large number of them.

From vox dei to vox populi

The principle that populations should be consulted in matters of sovereignty and boundaries was introduced to international relations in 1791. The events are worth recalling since they mark a revolution in the relation between people and states. For the first time "They, the people" voted in a referendum to change sovereignty.

● The French revolutionary Assembly, which had renounced conquest, was embarrassed if pleased when in 1791 a delegation from Avignon, which had belonged to the Holy See since the 14th century, came to the bar of the Assembly to request joining France. To reconcile the principle of non-expansion with that of popular will, the Assembly requested a referendum. As expected, the vote favored France in what appears to have been relatively fair election. Of particular interest to our vox populi/vox dei alternative is the debate that followed the Avignon vote in the French Assembly. Among those favorable to Avignon joining France, a minority, unwilling to transfer power of decision to the people, argued for annexation on legal grounds, on the ground that the Queen of Naples, who had given Avignon to the Pope in the 14th century, had been a minor at the time, hence had transferred it illegally. The majority said: never mind the legal imbroglio, what matters is the will of the people of today (see a selection of the debates in the Assembly as well as a description of the vote in Avignon in Wambaugh (1920)).

● Since Avignon, some 150 odd referendums concerning sovereignty have been held (WAMBAUGH, 1920 and 1933; FAIRLY, 1986; BUTLER, 1994; LAPONCE, 2001a). Among those, a handful transferred from the rulers to the people not only the right to choose a sovereignty but also the right to determine where the international boundary would run (see the list in LAPONCE, 2001b)

In the years which followed the Avignon "revolution," the referendum was used again in Savoy and in Nice to obtain union with France, but it soon degenerated into manipulated procedures to justify the annexation of Belgian and Rhine valley cities, and then disappeared from the diplomatic scene during the first half of the 19th century, a politically conservative era. It reappeared after the democratic revolutions of 1848. It was used systematically throughout the process of Italian unification, either to build the Italian state from mid-century to 1870, or to legitimize paying the political debts (Savoy and Nice) that Sardinia "owed" France.

The plebiscite was also used by Sweden and France for the transfer of the Island of Saint Bartholomew, it was used by the Ionian local assemblies to obtain unification to Greece, by the European powers to obtain autonomy for what later became Romania, by Norway to obtain its independence from Sweden, and by Natal to join South Africa. All these referendums were successful in obtaining what the majority had supported.

● The high period of the sovereignty referendum occurred after the First World War (WAMBAUGH, 1933: LAPONCE, 2001a) mostly to redraw the borders of Germany and Austria, but also to settle the claim to self-government by Southern Rhodesia, the claims of Sweden and Finland over the Aaland Islands, the union of Iceland to Denmark, the attempts of the Vorarlberg to join Switzerland, the attempt of Salzburg and Tyrol to join Germany, and the attempt by Western Australia to separate from the Australian federation. The success rate of these referendums in satisfying the voters was not as high as in the previous century. Western Australia did not separate, the Aaland Islands did not join Sweden, the Vorarlberg did not become Swiss, the Tyrol and Salzburg did not trigger the Anschluss; some referendums had to be abandoned, as in Teschen 1920, Vilna 1921, and Taca 1925; some were plebiscitary frauds, such as Vilna 1922, but these total or partial failures are of less significance than the successes, and in particular the success in introducing a new type of referendum, one that was intended not only to transfer sovereignty but also to divide the contested ground, notably in the cases of Schleswig, Upper Silesia, Allenstein, Marienwerder, and Klagenfurt. In those five cases, the voters were asked to decide or share in the decision concerning the location of a boundary between contesting states (LAPONCE, 2001a).

● The fourth period of the referendum, which extends from the end of the Second World War to 1990, coincides with the Cold War. The democratization of sovereignty determination started in Avignon suffered a major setback (DEFRANCE, 1996; KEYLOR, 1966; LAPONCE, 2001a). If the sovereignty referendum was still widely used in the process of decolonization, it was almost never used in Europe, the referendum of 1955 in the Saar being the exception (I do not count the manipulated plebiscite by which Poland agreed to her new boundaries in 1946); and nowhere was it used to offer a split of the voting area except in the case of the British Cameroon that was divided in 1959 between Nigeria and the French Cameroon.

Post-World War Two diplomacy, as well as the international law built on that diplomacy, marked a drastic reversal in the evolution. Typically, after the Second World War, the Allies, rather than consulting people in matters of sovereignty, chased them from their homes, more or less forcefully, in order to homogenize the ethnolinguistic composition of the European system of states. Great power diplomacy practiced then, on a large scale, what it condemned 50 years later as ethnic cleansing. The winning powers who, during the First World War, had agreed to the principle of self-determination, decided during the Second World War, to reorganize the map by other means, by agreeing for example to Benes's request that Germans be expelled from Czechoslovakia (SCHECHTMAN, 1962).

The map resulting from these practices was subsequently frozen by what Jackson and Zacher (1997) call the "territorial covenant," the covenant which guided Western diplomacy, a covenant which says that, former colonies excepted, state boundaries are unchangeable unless it be with the expressed

consent of the states concerned (among the many studies of the ambiguous position of international law on the question of self-determination see BUCHEIT, 1978; ROURKE et al, 1992; CLARK and WILLIAMSON, 1996; LAUWERS and SMIS, 2000; WALTZ, 1959; WALTZER, 1986; FALK, 2000).

● The fifth and most recent period starts with the fall of communism. From Slovenia to Timor the referendum re-emerged as a means of deciding transfers of sovereignty, especially so in Europe. That period marks a partial revision of the "territorial covenant." Revision in the sense that the new states that emerged from the USSR and the former Yugoslavia were recognized eventually by the international community even when the former sovereign did not agree to the secession; but a partial revision since the conservative "covenant" was moved down from the level of the whole state to that of its internal governing units, for example from the level of the USSR to that of Moldova or from that of Yugoslavia to that of Bosnia-Herzegovina.

This partial revision worked relatively well in the USSR, except in the case of de facto secessions such as that of Transnistria; but in Yugoslavia it is likely to have fanned ethnic wars, notably in Bosnia-Herzegovina where the referendum procedure was most dysfunctional because of the use of majority decision at the level of the whole republic instead of using a zone by zone count as in Klagenfurt or an advisory referendum as in Upper Silesia or a Swiss type of sequential referendums down from the whole areas to the local level.

The problems posed by the ill-fitting boundaries of the ex-Yugoslavia divided the members of the European Union. To its credit, Holland wanted that the boundaries of Bosnia Herzegovina be modified. But the Dutch found no support among the other members of the Union (OWEN, 1995).

In addition to arguments pointing to the difficulty of changing an international boundary, the conservatives often defend the status quo by saying that "civic citizenship is better than its ethnic variety" and that people who live in systems akin to Voltaire's ideal (our game solution 2) live in a better world than those akin to the Wilsonian ideal (our solution 1). That is often true; however, to make it a universal truth is not justified by events. Multi-ethnic societies may well be better civil societies when the groups of which they are composed are civil to one another, but why expect such civility when the ethnic antagonism is very high, when the people are on the verge of civil war? Separating antagonists is the first rule of action from bar brawls to street fights to international conflicts.

Politically, such separation may take a variety of forms that are grouped under the name of "consociationalism" in the study of comparative politics (for example the territorial separation of languages in Switzerland), and may signify, in international relations, the drawing of new protective boundaries, preferably with the help of the populations concerned. If "love thy neighbor" is always good advice, "Share your home with that neighbor" is not always a good prescription (LAPONCE, 2001a). It is sometimes easier to love or at least to like at a distance than at too close a range. And, if in doubt, why not ask the people?

Conclusion

Let us conclude in two steps; first a wish à la Grotius, then the appropriate counterpoint.

Grotius and his followers based their *jus gentium* on the argument that, since man has to live in a community of men, pure egoism is as irrational as pure altruism (MAGNETTE, 2001). Love of self has to be tempered by the love of others in order that the self be able to survive. That applies to the relations among communities as well as states. The consideration for others is both ethical and self-motivated. Our wish is thus,

now that the Cold War is over, for a return to the democratic practice started in Avignon and refined after the First World War, a return to the practice of giving voice to the people in matters not only of sovereignty but also in the determination of international boundaries.

The counterpoint, inherent to a Grotian position, is that asking for more vox populi does not imply that leaders should abandon their responsibilities as holders of authority. The wish is for inclusion of the people in the process of decisions concerning sovereignty and boundary, as much as advisable. I agree with Bucheit (1978) that the right to self-determination is subject to restrictive criteria that I narrow to viability, seriousness of the claim, world peace, and relatively good citizenship in the international system (LAPONCE, 2001a).

In matters of applied ethics, one must not be so ideologically committed to certain means of reaching desired goals that one would be blind to perverse effects. In some cases, the referendum will not be the best way of serving the populations concerned. In the 1920s, for example, a plebiscite intended to resolve a territorial dispute in Teschen between Czechoslovakia and Poland was abandoned when it increased dangerously the tensions between the two communities. The problem was resolved by arbitration. Similarly in Tacna and Arica, in 1925, in the case of a dispute between Chile and Peru (WAMBAUGH, 1933).

But these and other cases of non applicability of the plebiscite to the settlement of sovereignty and boundary disputes do not stand in the way of the general observation that there would be much to be gained, ethically and practically, if the evolution begun in Avignon were to be resumed and the people trusted to decide in matters concerning their sovereignty and their territorial boundaries. Even in the former Yugoslavia it is not too late to do so and there are a number of other locations where the boundary referendum might ease the way from violent conflict to peaceful solution: notably in Sudan, Kashmir, Sri Lanka, and Israel.

So, the wish stands, a wish for the continued democratization of international politics; the simple wish that, in matters of sovereignty and boundaries, the vox populi and the vox dei sing in harmony.... as much as possible; the wish that Jean Gottmann be remembered by the rulers of the map when he says (GOTTMANN, 1973): "the relationship between sovereignty and territory is built upon a connecting link: the people ..."

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Expansion of the frontier and city of freedom

"This paper illuminates how the development of central regions and the evolution of frontier regions in Japan have been closely interrelated with each other as Japan became incorporated into the modern world system. With particular focus on the basic structure and mechanism of center and frontier interaction, the present study examines the growth of Japan at five historical stages, at each of which the changing role of iconography is examined in relation with the expansion or contraction of Japan's orbit on the global scene."

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Orbit of the frontier and iconography of the region

Japan is a small archipelago with 6,852 islands, located between the Pacific Ocean and the Eurasian continent. Since the adoption of the UN Convention on the Law of the Sea in 1982 and its effectuation in 1994, peripheral islands on the border of Japan have become more important than before in territorial delimitation. Namely, according to this law, the territorial sea has expanded from 3 to 12 nautical miles from the standard shoreline of the country. Furthermore, over the territorial sea, the exclusive economic zone has extended to 200 nautical miles. Consequently, the Japanese exclusive economic zone (4,290,000 sq km) including her territorial sea (310,000 sq km) has become far larger than her territorial land (377,820 sq km), which in turn has resulted in the expansion and the evolution of the frontier.

The frontier is not merely a periphery viewed as physically contraposed to the center but a "locus" that has the potential to create new values and perspectives. According to Friedmann and Alonso (1964), a frontier is considered to be an area of growth in a virgin territory, while a periphery is a stagnant, quasi-colonial area lying beyond the fringe of a center. In this meaning of transforming process, the concept of "frontier" as a locus has both a temporal and a timeless meaning, indicating not only a place but also a particular place in its relations with other places. Moreover, a locus is an historical entity, still alive, active and responsive to man; man exerts a great influence on the metamorphosis of locus (MIYAKAWA, 1981). Namely, the spatial frontier is closely related to the expansion of territory of jurisdiction. It is the conversion of iconography and the progress of technology that have continuously promoted the evolution of the structural frontier, where man confronts the phenomenon of "creolization" that takes place at a crossroads (fig. 1).

The frontier is also considered to be a partition, that is, a screening instrument in the organization of accessible space.

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It screens and controls movement into and out of the territory. In other words, the frontier can be seen as a shelter for opera-

tion and receptacle of the means and opportunity for growth, although it has lost by international agreement much of its
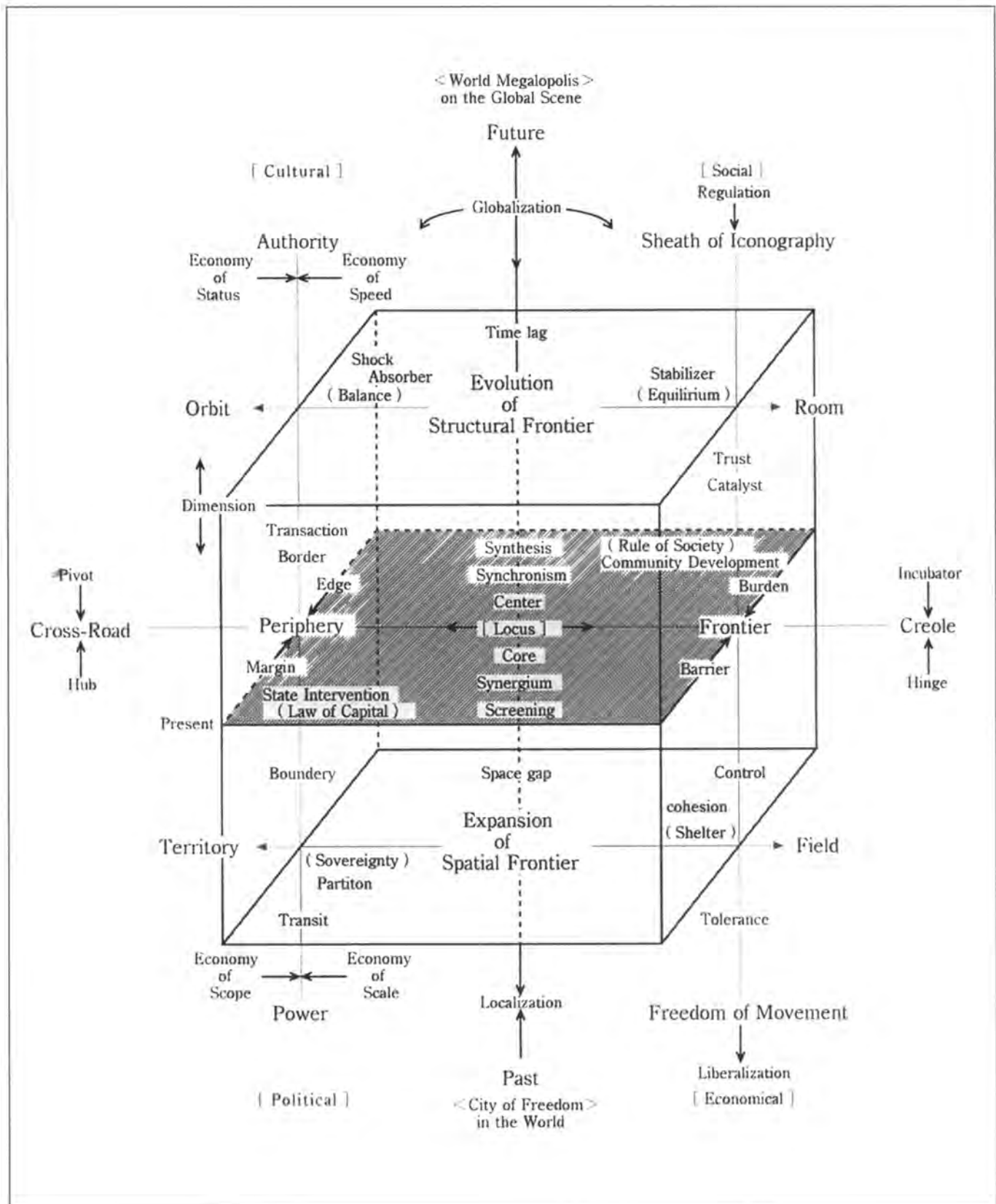

Fig. 1: Expansion of spatial frontier and evolution of structural frontier.

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power to control migration and the movement of goods as a result of liberalization, de jure or de facto. The relative stability of territory is a function of exclusive authority that the State exercises in it and of the co-existence beyond its frontiers of political entities endowed with similar prerogatives (GOTTMANN, 1973). It is a locus of socio-cultural change and synthesis as well as politico-economic growth and synergism. A similar process can now take place along the boundary that, although open, cannot be spatially moved. For this reason, the frontier often becomes a catalyst between two different civilizations and economies, like the former free city, Berlin, if it allows people freedom of movement under its sovereignty and promotes transactions on mutual trust. It also plays an important role in the synchronism of different civilizations and in absorbing shock caused by their conflicts and threats at the crossroads of international power scrambles.

These functions at a crossroads often promote a development of hub as well as an evolution of incubator, despite the isolation and remoteness of its locus. In turn, the growth of urban area, especially a city of freedom, on the border causes the expansion of frontiers over firmly delimited boundaries. Isolated states such as Japan during the Tokugawa period (1603-1867) and China during the Cold War were able to maintain a "frozen political geography" with a well-stabilized centrality and periphery, owing to the controlled loophole for feedbacks on the global scene. Such situations have been rather exceptional, even in their long history. At no time in the past could it have been the rule at least in recorded history (GOTTMANN, 1980). In order to subsist and flourish a city must link itself to other cities, thriving on proximity, physically or psychologically.

The physical quality of certain areas as obstacles to movement has had something to do with the stability of historical partitions, but there were other factors keeping some sort of balance of power on two sides of a belt of difficult crossing, whether a lofty range, or an arm of the sea. Ratzel stressed this point in his concept of *Lage* (location) and *Raum* (territory), whereas Gottmann emphasized the role of community and role of iconography in the partitioning of space. The tolerance of an open community to accept different cultures exerts an influence on the development of a hinge on the boundary and accelerates spatial mobility over the boundary as a pivot. Hence, in studying Japan, Ratzel was interested in the expansion of its spatial frontier, especially the role of two populations in peripheral islands, Ryukyuan in Okinawa and Ainu in Hokkaido at the Meiji Restoration. It was the time when Japan was becoming modernized by incorporating the Modern Industrial Revolution led by the UK and the Information Industrial Revolution led by the US. In contrast, Gottmann was more interested in the evolution of the economic and social frontier of Japan, that is, the mutation of the structural frontier from a primitive to a complex one in the core, the Tokaido Megalopolis. The driving force for this structural change is considered to be the Neo Industrial Revolution that Japan initiated. It is the great hub of relations between the center and the periphery in reining the direction of a nation (MIYAKAWA, 2001).

Concerned with the structural frontier in contrast to the spatial frontier, Gottmann emphasized the dynamics of urbanization and nebulous structure in the Megalopolis. Gottmann's extensive study of urbanized areas has enhanced our understanding of "central place." He argued that people using a central place must perceive the "centrality" of such a place and that their perception is not simply constructed on the basis of physical design apparent in highly urbanized areas; it must rather be influenced by other non-physical factors including the historical background, political organization, economic functions of the central place. Moreover, it is also pointed out that within a national territory there could be several centers; one could be the political center, another the major economic one,

still another the seat of higher justice, and perhaps another the locus of specialized cultural activities that complement those of other centers (GOTTMANN, 1980).

The diversified functions of centrality in a modern city are reminiscent of ancient components of a central urban district. Above all, the need for security in a large agglomeration, including the security of transactional activities, is found to be an essential aspect of "urbanity." When a city feels secure in its environment, it becomes more willing to open its borders and to establish relations with the outer world over its frontier; on the other hand, in a period of insecurity it becomes rather closed in isolation and attempts autarchy within its closed boundary. The central city is a more complex, interwoven body than that. A city undergoes evolution and erosion in some parts and fluidity, transfers, and sedimentation in others to balance between needs and resources. It must be looked upon as a process with some physical features, but the dynamism of it is animated by abstract transactions, by an interwoven network of linkage binding together in that place a variety of transactional activities. The role of cities must be to serve as hinges between the region and the country within their immediate orbit and the wider orbit in which the life of each city revolves in the world at large. The term "region" has the same Latin root as "regulation," "regent," and "regal." insofar as they are conditioned by rulers, laws and frontiers. Politics and police are both derived from the Greek word "polis" meaning "city" (GOTTMANN, 1990). The freedom of the city is an indispensable driving force for evolution and expansion of the frontier on its orbit to protect stability and to multiply prosperity in the malleability of the environment.

In fact, the study of frontier is an essential constituent of Gottmann's urban study in the sense that it helped link his urban geography with his political geography. It is evident from the two major books published in the last stage of his career, *Since Megalopolis* and *Beyond Megalopolis;* both studies tackle the question of core and frontier, though they approach it differently, from the perspectives of urban geography and political geography, respectively.

Based on these studies, this paper illuminates how the development of central regions and the evolution of frontier regions in Japan have been closely interrelated with each other as Japan became incorporated into the modern world system. With particular focus on the basic structure and mechanism of center and frontier interaction, the present study examines the growth of Japan at five historical stages, at each of which the changing role of iconography is examined in relation to the expansion or contraction of Japan's orbit on the global scene. Throughout the successive stages of development, freedom of movement and authority of iconography in frontiers are found to be the key factors in forming the basic structure of a nation, thus thoroughly discussed in the present study.

The formation of a dual political system and the relocation of the capital

The city that is a political capital has always attracted special attention. The capital function secures strong and lasting centrality, which exerts a great influence on the expansion of the spatial frontier and the evolution of the structural frontier. The commanding operations of political, economic, social and cultural affairs necessitate the gathering and processing of information. Institutionally, the capital is the center of regulation, which always expands its spatial frontier over the boundary to gather the latest information and advanced technologies. Instinctively, the capital is a center *par excellence* with authority, rituals, amenities and attractions, which plays an important

role in the improvement of lifestyles and in the evolution of modes of work, i.e. in the evolution of the structural frontier. The relocation of the capital in Japan well illuminates the role of the capital in the expansion of the spatial frontier and the evolution of the structural frontier.

Before the establishment of the first permanent capital in Nara (711-784), the capital in Japan had been relocated every time the emperor died, due to the traditional belief of after-life that had descended from Chinese and Korean cultures. Although capital cities were rather frequently on the move, they had remained within the Kinai region (today's Osaka metropolitan area), especially in the Asuka area on the southern periphery of the Nara basin, since 592, where most of the civil servants lived, notwithstanding the relocation of the capital, because of its better habitat. The orbit – the geographical area gravitating around the capital and under its dominance – is an essential component of the capital in extending its zone of influence. As a result, the heritage often remains in the city even after the seat of political authority has moved away. It is argued that in many cases the orbits of former capitals have endured for a long period of time and that they have extended their control over large spaces towards their frontiers (GOTTMANN, 1990). It was certainly the case in former capitals in Japan.

According to the Japanese myths of cosmogony, the chief priest of the imperial family claimed to be the descendant of the Sun Goddess, who established the Ise Shrine on the eastern tip of the Kii peninsular. It stored the Mirror of Three Sacred Treasures of the emperor, which reflects the sunshine from its inalienable frontier. Another Sacred Treasure as the symbol of military power, the Sword of Kusanagi, was stored in the Atsuta Shrine located in today's Nagoya city on the border between the territory of the Yamato regime and the northern territory of Ezo. The other Special Treasure, the Curved Jewels, symbolizing the authorized hinge of spirit between God and Emperor, was stored in the imperial palace of the capital, whose strong centrality evolved along with the expansion of frontiers within the imperial governance of Japan. Hence, the position of the capital in Japanese history reflects not only the political and symbolic status of centrality, but also iconographic elements such as religious aura.

In response to the growth of the national territory, at the southwestern frontier towards China and Korea, Dazaifu, located adjacent to today's Fukuoka city, was founded as a sub-capital, which governed Kyushu island and dealt with foreign and military affairs. On the northwestern frontier along the Japan Sea, a fortress called the *Nutari no Saku* was constructed at Niigata in 647 to provide maritime defense against Ezo and Pohai.

Largely due to the inland locus, the capital needed an outer port that could provide a gateway to Korea and China. Being located on the eastern end of the Inland Sea between Kinai and Kyushu, Naniwa (today's Osaka) soon came to assume the role of outer port for the capital city. In fact, Naniwa itself once became the capital in 645 as the result of a Taika coup d'état against the powerful Soga family in the Nara basin. After the defeat of Japan in Korea in 663, the emperor Tenchi relocated the capital from Naniwa to inland Otsu at the southeastern end of Lake Biwa. At the same time, in 682 imperial power extended to the small island of Tanegashima at the southern frontier of Kyushu island. As a result, the people of southern Kyushu gradually immigrated into the Kinai region, especially on its fringe, as craftsmen of bamboo and guards of the imperial palace.

With the growth of imperial power all over the country, the permanent capital Nara was constructed in 710 in the middle of Asuka, Naniwa and Otsu. In succession, a palisade fortress called the *Dewa no Saku* was constructed near Sakata on the Japan Sea in 712. Furthermore, in 724 the northern castle

Tagajo was constructed near today's Sendai, where a government office called *Mutsu Chinjufu* was stationed to control the expanding northern frontier, Tohoku. Emissaries from Pohai (727-920) had been accommodated at the guesthouses in Noto and Matsubara on the Japan Sea since 727, when the first emissary arrived at Dewa. These fortresses, castles and guesthouses played vital roles in expanding the spatial frontier of Japan. Moreover, the central government embarked on improving the second important local administration units, that is, improvement of ancient roads, *do*. Thus, Hokuriku-*do*, Tosan-*do* and Tokai-*do* were greatly improved along with the expansion of the frontiers, though the major cultural waves were still coming from China through Sanyo-*do*, which lay between Kinai and Kyushu.

With the expansion of imperial power, local provinces *Kuni* were settled in remote areas such as Dewa on the Japan Sea in 712 and Osumi on the southern tip of Kyushu island. The long-standing conflict of interest between the central seat of power and the outlying district was sharpened and broadened. Center-periphery geographical conflicts multiplied in response to the expansion of its territory, although the expansion of its spatial frontier at the periphery and the evolution of its structural frontier at the center often mitigated these conflicts and revitalized their inheritances.

After the rebellion of the court nobles against the supremacist monk, Dokyo, under the emperor Shotoku (764-770), the capital was relocated from Heijo in Nara to Heian in Kyoto in 794. After that, Kyoto occupied the seat of the capital until 1868, and played an important role in the development of the urban system in Japan. At the same time, Kyoto gradually became a symbolic capital for the imperial authority as the emperor lost his power over the country upon the rise of military regimes. A capital calls for a special hosting environment to provide what is required for the safe and efficient performance of the functions of government and decision-making characteristic of the place. And the capital will tend to create for and around the seats of power a certain kind of built environment, singularly endowed, for instance, with monumentality, stressing status and ritual, a trait that will increase with duration in contrast to the buoyant dynamic equilibrium and fluid frontier (GOTTMANN, 1977).

With the expansion of local military government led by the shogun appointed by the emperor, the aforementioned Chinjufu was relocated from Tagajo to Isawajo between today's Hiraizumi and Morioka in 802. It became the twin wheel together with Dazaifu in Kyushu for local areas in both frontiers to be governed directly by the imperial power. The capital is not only a hinge between the country it governs and the outside, but also a pluralistic hinge, articulating the various sections, networks, and groups of interest within the country. Especially, the formation of iconography in the new and old capital region were, are and would be important for the development of the capital region and the networks between the capital region and local urban areas, i.e. the orbit of the capital.

In succession to the Enryakuji (temple) founded by the monk Saicho in Hiei Mountain between Kyoto and the aforementioned Otsu, Kongofuji was founded by the monk Kukai in Koya Mountain between Nara and Tenjinsaki, the southern cape of the Kii peninsular, in 816. Both of these temples became two important icons of Japanese Buddhism and exerted their great influences on civil wars in the mutation of Japan. The embassy to the Tang dynasty (started in 630) was abolished in 894 and then the embassy from Pohai was not accepted in 920, which closed official international trade and changed the role of frontiers in a quasi-isolated country.

Rebellions which often occurred in the intermediate areas between the capital and the frontiers brought about large-scale clashes of the time, which were closely linked with the

fractional disputes on the imperial succession. In 1167, Kiyomori Taira, a warrior, became Prime Minister by means of the traditional novel Fujiwara's tactics of marrying his daughter to the emperor and putting his son on the throne in Kyoto, although he tried to relocate the capital from Kyoto to Fukuhara (today's Kobe), his power base on the Inland Sea in 1180 and relocated again within the same year to Kyoto. The idea of moving the capital to a new, virgin location and perforce a smaller, specialized city is not new. Direct access to sea navigation has for ages been a considerable advantage in the conduct of foreign policy and the gathering of information from abroad (fig. 2).

Meanwhile, the estate managers of the eastern part of Japan formed themselves into a new warrior clique centered around Yoritomo Minamoto, who was expelled to Kamakura by Taira. Kamakura was a traditional small coastal fortress town with a shrine established in 1086, which was developed by his relative and patron, Hojo, in the Izu peninsular. Learning several lessons from Taira's mistakes of government, Yoritomo left his new feudal sham civil government unmolested; he preserved the court government around the emperor in Kyoto and established the Shugo (constable) and Jito (steward) system in 1185 over the country which was controlled by the new administrative center of the shogunate in peripheral Kamakura established in 1192. It gradually developed a dual system of governing the country and constructed the twin wheels and the axis in-between, which would become the basic structure of the Tokaido Megalopolis. Thus, the web of capitals becomes the

foundation of the shaping networks of transactional cities to evolve and to expand the frontier along the main trunk to be the Megalopolis.

The administrative and political capital, Kamakura, played an important role in the development of new culture all over the country. It was led by the new Buddhism sects, especially at first Zen sects and then the Nichiren sect against the older Buddhism in Kyoto and Nara. They played important roles in the development of the spirit of feudalism, bushido, the way of life of warriors and the way of life of people respectively. Most of their temples also developed temple towns in local areas especially in the frontiers such as Hakata of Eisai in Kyushu, Echizen-Eiheiji of Dogen on the Japan Sea and Seichoji of Nichiren in the Boso peninsular on the Pacific. The locale of a city with a history of having been a brilliant capital often acquires a symbolic value for those who cherish the memory or retain a sentimental attachment to that past period in history.

Thus, the conversion of iconography accelerated the transformation of locus and the change of dimension, which often develop the new center in the frontier, even though at the periphery. The loci of center and periphery are very fluid and flexible. When circumstances excluded it from the predominant networks, an antiquity fell into ruins.

After the establishment of Oshusobugyou at Hiraizumi in 1190, a local governor of Oshu, Chinzeibugyou, was also dispatched to the other frontier, Dazaifu in 1185 and then Rokuharatandai of the Kamakura shogunate was established at the capital,
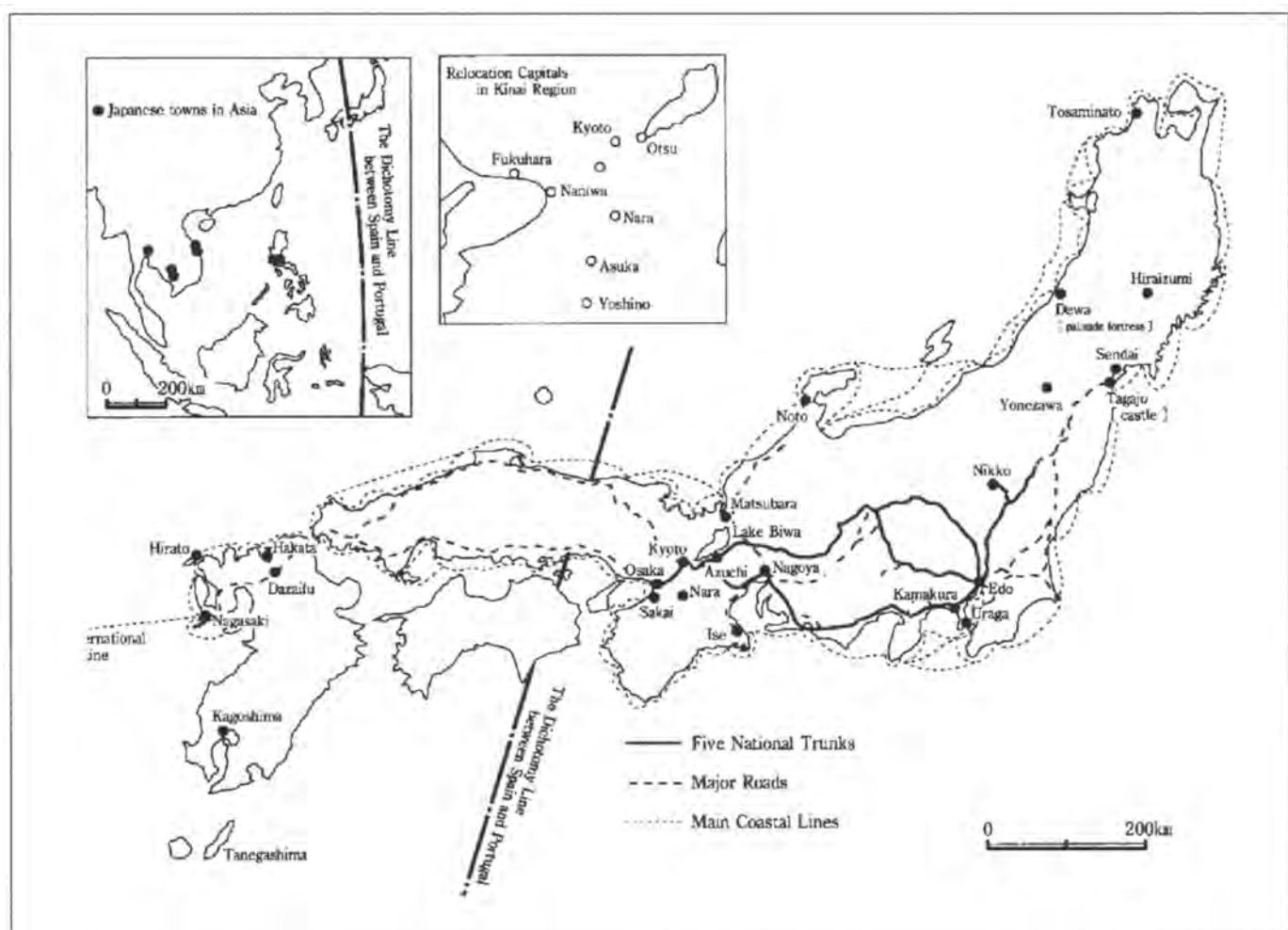

Fig. 2: The dichotomy and relocation of capitals.

Kyoto, in 1221. In Kyushu island, instead of Chinzeibugyou, Chinzeitandai was established in 1293 at coastal Hakata instead of inland Dazaifu to enlarge its power of defence and governance of Kyushu after the first (1274) and second (1281) Mongolian invasion. In the northern frontier, the Ezo Kanrei at Tosa port on the Japan Sea was appointed by the Kamakura shogunate in around 1325, which had the monopoly of trade with peoples in Ezo island (today's Hokkaido) and flourished as a city of freedom.

The socio-economic depression after these invasions gave the emperor Godaigo the opportunity to restore imperial rule in 1331. He had to establish his own government at Yoshino behind Asuka towards Ise, largely due to the politico-military struggle against the Ashikaga shogunate appointed by himself in Kyoto. Ashikaga elected Kogen emperor to the Throne (Hokucho) in 1331, which at last merged with the Yoshino Throne (Nancho) in 1392 in the same orbit of traditional imperial power and authority.

Mutations of iconography and freedom of movements

The Ashikaga shogunate had lost all semblance of political power and was a mere symbol of political authority in the capital Kyoto by 1573, when Nobunaga Oda took his seat. During this time, various kinds of local territorial lords, *daimyo,* gained their semi-independent politico-economic powers in an individual clan. They promoted the fragmentation of national land and national organization, even though they belonged to a particular politico-military group, like Hideyoshi Toyotomi. Largely thanks to political freedom, the local lords of the southern tip of Kyushu island, Shimazu, gradually exerted their influence on the Ryukyu kingdom in the southern frontier of Japan as well as the northern frontiers of Tsugaru and Nanbu in Honshu island. Furthermore, their military power reached to Hokkaido island, where minorities such as the Ainu still had power.

As the result of the Treaty of Saragossa of 1529, the world was completely divided into two geographical and political spaces between Spain and Portugal. It resulted in giving Japan a new locus on the border of dichotomy of the world. Largely owing to this locus, the Portuguese visited a small island Tanegashima near Kagoshima, where they introduced the latest technology of making firearms. The Japanese improved on this technology, first in Hirado, an international port near Nagasaki, and further innovated on it in Sakai, a free port city near Osaka as well as in Hakata adjacent to Fukuoka.

In order to accelerate the mutation of the national system, Nobunaga and his successor Hideyoshi established their new icon against the old Buddhism; they gave the Jesuits permission to propagate Christianity in Japan. Consequently, missionary activities began in 1549 at Kagoshima under the leadership of St. Francis Xavier, who had acquired some information on Japan from Yajiro, a Japanese Baptist living in Goa on the western fringe of India. The mutation of the religious icon in Japan led to the reorganization of the national system under a quasi-central military administration in rivalry with traditional Buddhism. Moreover, it made room for Oda to establish his central castle at Azuchi on lake Biwa between two powerful Buddhist groups in Kyoto and Hokuriku, which developed a free market system and free spirit on a frontier.

The quasi-free city of Sakai developed as an international port for trading with Korea and China in the Yamato regime. In 1469 Sakai became the mother port for dispatching embassies to the Ming dynasty. This enabled Sakai to monopolize international trade with China in rivalry with Hakata. With the growth of the private economy of international traders, Sakai gradually became an indispensable gateway and hinge, linking Japan to the surrounding countries, i.e. Korea, China and Ryukyu, and to Japanese towns in Southeast Asia. Largely owing to its prosperity, powerful local merchants in Sakai had abundant funds to develop its self-security and self-defence system. As a result, Sakai came to enjoy local autonomy as a city of complete freedom led by 36 powerful merchants, Egoshu.

Largely owing to its social security, Sakai became one of the most distinguished incubators for developing new cultural styles, such as the tea ceremony, with the patronage of the new military leaders. This resulted in the establishment of a new politico-economic icon. This iconography brought about a new tendency for retainers to work for an award of teacups or the honor to hold tea ceremonies instead of territorial integrity or new territory. This new iconography played a shock-absorbing role in economic and political frictions among political powers. More specifically, the evolution of the structural frontier helped to lessen the serious conflicts that had intensified along with the expansion of the spatial frontier.

However, it was and is still not easy to attain a balance between freedom of city and intervention of state, that is, to balance liberalization with regulation under a nation-state. In the case of Sakai, the new military leader, Nobunaga Oda, gave the order to fill up the moat to Sakai, when he marched into Kyoto in 1568. Furthermore, his successor, Hideyoshi Toyotomi ordered the merchants of Sakai to relocate themselves to Osaka, when he established Osaka castle in 1583. Ieyasu Tokugawa also put Sakai under his direct control as a special port, where the merchants of Sakai were given special permission to trade, together with traders in Nagasaki and Kyoto. The military governance of international trade lasted until the ban on travel abroad was imposed in 1636. Owing to its traditional ethos, however, Sakai was able to maintain its quasi-local autonomous status under the rule by the Sakai Bugyou (Director of Shogunate), and local merchants participated in its local administration.

The introduction of Christianity to Japan brought about a growth of Christian daimyos, i.e. local lords, who were keen to embark on international trade. They promoted their quasi-free trade ports and city of freedom in their clans, especially in the Inland Sea and Kyushu island, such as Hirado and Nagasaki. In 1569, most of the population (around 1,500) in Nagasaki became Christian, together with their lord, Sumikage Nagasaki, and built the Chapel of Santos. Nagasaki became a retainer of the Christian daimyo, Sumitada Omura, who contracted with a Jesuit to open Nagasaki port for Portuguese traders from its colony, Macao in China in 1571. In 1580, Omura donated Nagasaki and Mogi to the Jesuits, although he preserved the right to collect taxes and to judge politico-economic disputes. As a result, the bishop of the diocese of Japan was appointed in the next year and lived in this free port city, Nagasaki, guarded by a master-less samurai, Toujin. From this local autonomous city, Nagasaki, which had been ruled under the bishop, the Christian daimyo Otomo, Omura and Arima dispatched Christian boy missionaries (1580-1592) to the Vatican via India.

Because of this regional iconography and its strong orbit between Macao and Nagasaki, Hideyoshi Toyotomi expelled the missionaries in 1587, when he conquered Kyushu island and appointed Nabeshima of Saga as his magistrate of Nagasaki. Ieyasu Tokugawa also governed Nagasaki directly, although it developed its quasi-autonomous administrative system like Sakai, together with the participation of four machi-doshiyori and otona (community leaders) of each town. Nagasaki remained the only international port within the isolated country, Japan, after 1641, largely thanks to its traditional ethos and locus of frontier.

In contrast to Sakai and Nagasaki, Hakata lost ground in local autonomy. However, autonomy was socially preserved in the castle town of Fukuoka, which had been ruled by the local lord, Nagamasa Kuroda since 1600. Under the local Christian

daimyo Otomo, Hakata became an autonomous merchant town. Then, it became part of the castle town of Fukuoka, being linked at the hinge of Masugata-mon (gate). At the same time, it was able to remain a quasi-autonomous and free city ruled by local merchants. Its people preserved their strong icon and spirit of independence in the city of freedom under the power of the local lord and promoted the popular movement against the new city name of Fukuoka after the merger of these twin cities in 1889, symbolized in the name of the railway station of Hakata.

Masamune Date in Sendai on the Pacific was the most powerful local lord in the northern frontier against Oda, Toyotomi and Tokugawa, who governed the whole country after the civil war. In 1613, Masamune dispatched his retainer, Tsunenaga Hasekura, to the Vatican over the Pacific Ocean via Mexico City of Novahispania, where he was not necessarily received with the utmost cordiality due to the changing policy toward Christians in Japan. By 1620 the Tokugawa shogunate had limited international trade only in the aforementioned two ports, Hirado and Nagasaki, and began expelling Christians from Japan. The castle town of Sendai was also constructed in 1600 near Tagajo.

The balance of two forces, freedom of movement and sheath of iconography, is fluid, changing in locus, but this fluidity does not prevent the whole global system from carrying on. The dual eco-political system between governor and citizen, especially in the traditional ethos of frontier, mitigates their conflicts in the region and in the world.

Roles of the frontier and metamorphosis of locus

At present, Japan has two major frontiers, Hokkaido and Okinawa. The loci and the roles of these frontiers have been transformed in order to adapt to the changing phase of international power struggles (fig. 3).

In 1705, the Institute of Japanese Language was established in the Russian capital, St. Petersburg. With the further expansion of territory towards the east, the Navigation School for Japan and the Institute of Japanese Studies were established in the eastern frontier city of Irkutsk in Siberia, in 1764 and in 1768, respectively. In order to defend its territory, the Tokugawa shogunate dispatched Tokunai Mogami in 1786 to Iturup and to Urup, where he had them explore and make maps. Urup was originally founded by Holland in 1643, which was interested in developing the fishing business in the Sea of

Legend:
- ○ Basho
- —— Railways (Opened before 1897)
- - - - - Railways (Opened between 1897-1911)
- —·— Railways (Opened after 1911)
- ▲ Domestic Airports
- ▴ Local Airports
- ● Special Important Ports
- • Important Ports
- ▨ New Industrial City

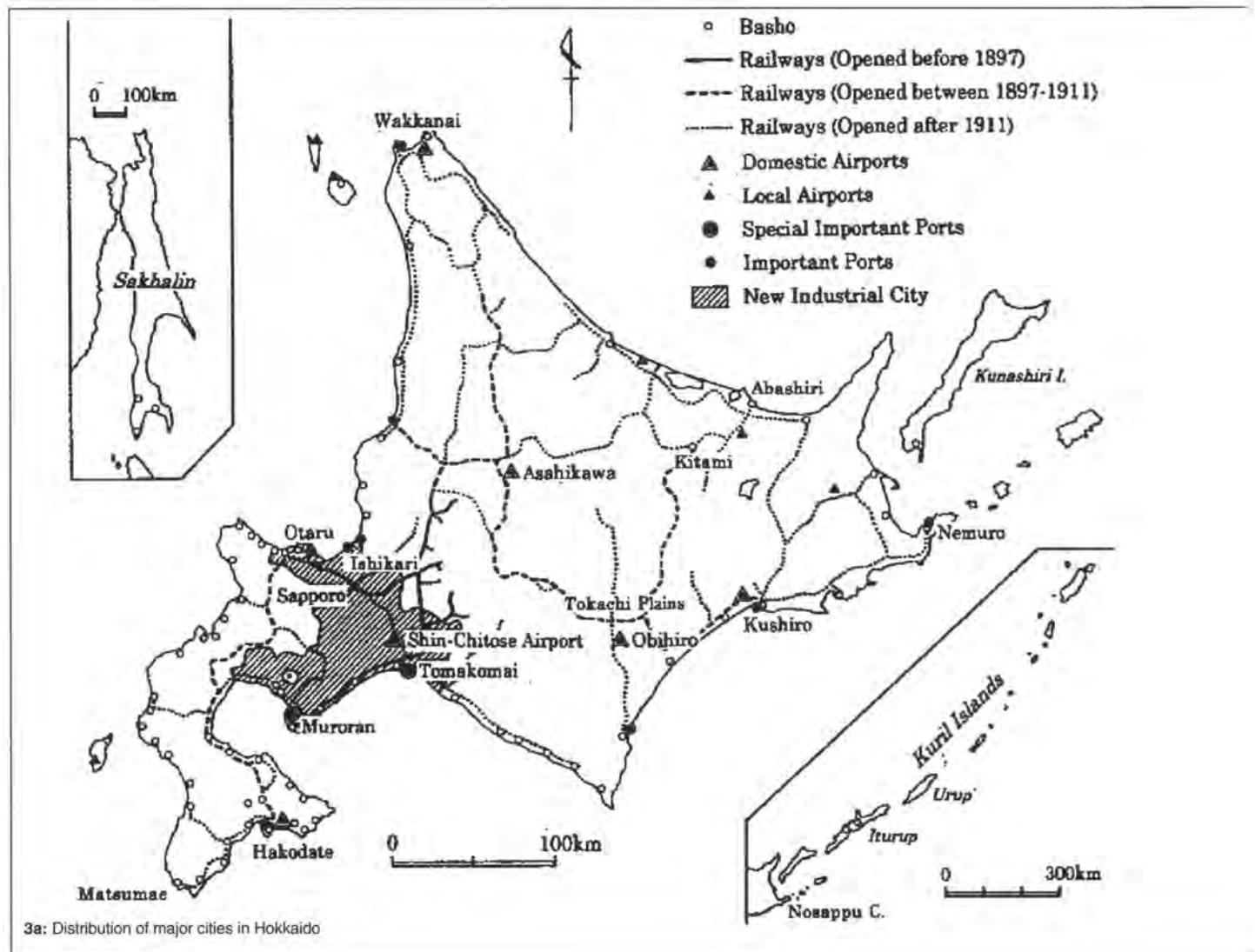3a: Distribution of major cities in Hokkaido

Fig. 3: Japan – Distribution of major frontier cities.

Okhotsk and then in the Bering Sea. After a series of invasions, Russian traders had developed Urup for over a century from 1768 to 1875. Then, Japan took it over under the Exchange Treaty of Chishima, together with Sakhalin.

During the time of the Russian occupation, the native people, including the Ainu supported by Japanese traders, resisted Russian conquest and massacre in Urup such as the Urup incident in 1771. At last, in 1805, they succeeded in expelling the Russians from Urup by means of prohibition of trade and seasonal work of the Ainu in this area. Iturup was also founded by Holland and then was developed by the Japanese, especially by Kahei Takeda after 1731. The Tokugawa shogunate asked a captain of Settsu (today's Osaka) to open his major fishing grounds and dispatched the warriors of the Tsugaru clan and the Nanbu clan on the northern tip of Honshu island to Iturup in 1800.

In 1792, the Russian Laksmann visited Nemuro to open its trade with a Japanese fisherman, Kodayu, who lived in Russia. Nemuro was a town with a small market called *basho*, which was opened by Matsumae, the local lord of Ezo island (Hokkaido) in 1701. As trade with the native Ainu increased, it opened Kunashiri market in 1754 and opened its customs house at

Notsukamapu, which was then relocated to Nemuro. After Laksmann's visit, the Tokugawa shogunate came to govern directly the eastern part of Ezo island in 1799, when it also opened the Iturup line. During the period of direct control (1799-1821), the shogunate abolished the system of *basho*-contact and controlled directly all trade in Ezo under the money economy. In order to govern the whole island, the shogunate developed roads and coastal shipping lines, which linked closely with the Magistrate at Hakodate on the boundary between Matsumae, East and West Ezo. A government office was opened in 1802 and then relocated from Hakodate to Matsumae in 1807. This was when the shogunate came to directly govern the western part of Ezo in addition to the eastern part in rivalry with the expanding power of the Russian-American Company.

The delegate and general manager of the Russian-American Company was the Russian envoy Rezanov, who had visited Japan three times since 1804 to ask for the opening of the country. Following the Russians, the British also visited Muroran, due to the locus of Ezo island at the border of the international power scramble between the Continent Empire, Russia, and the Ocean Empire, UK, on the global scene, especially in the
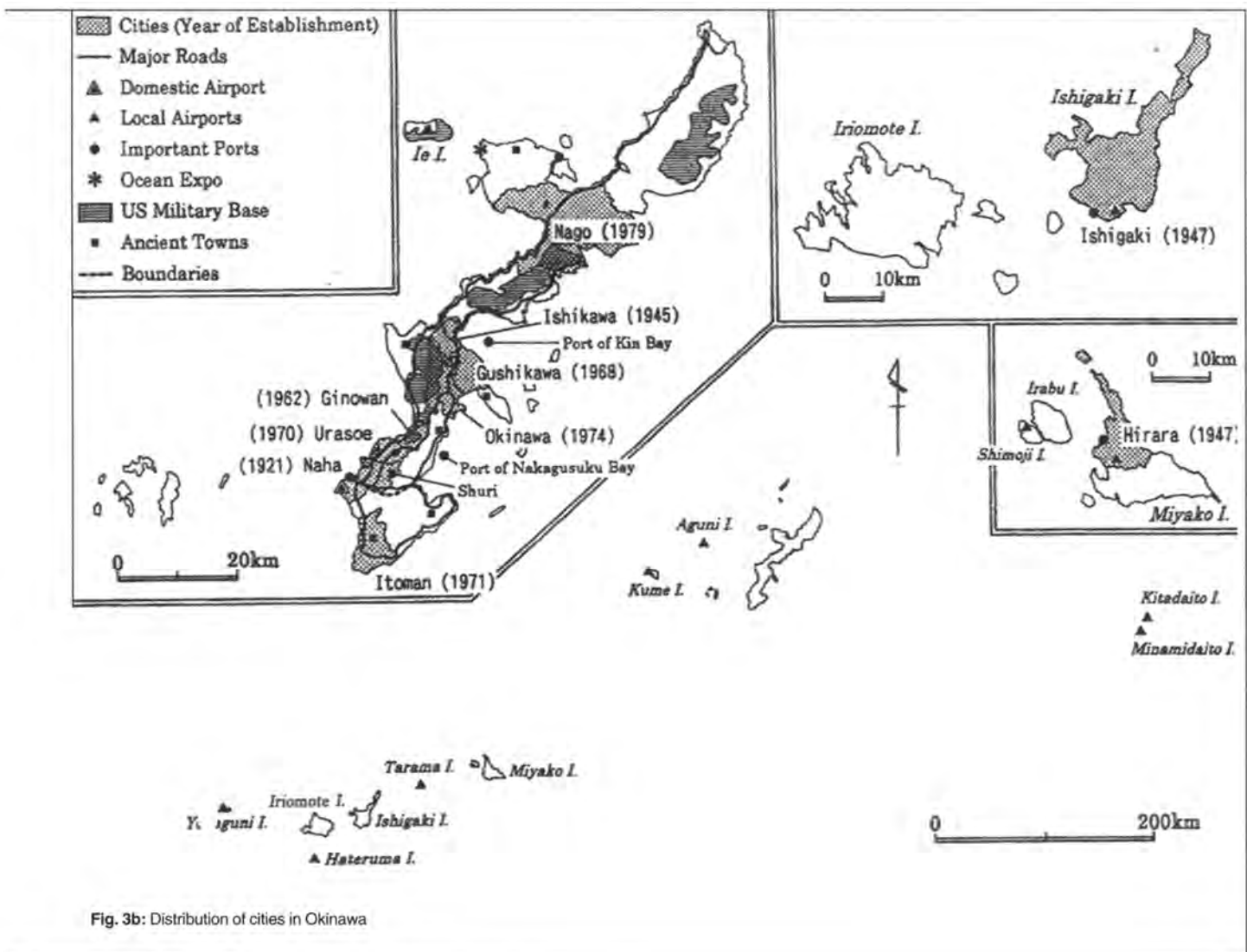

Fig. 3b: Distribution of cities in Okinawa

Fig. 3 (cont'd)

East Asia Orbit. To further seek the opening of international trade, Razanov also visited Nagasaki in 1804 while the British ship "Phaeton" visited Nagasaki in 1808, too. In the same year Rinzo Mamiya found the Mamiya Straits between Siberia and Sakhalin. Together with Dejyuro Matsuda, who was exploring the eastern coast of Sakhalin, Rinzo Mamiya started exploring Sakhalin from Korsakov towards the northern tip and then towards Delen near today's Komsomolsk-na-Amure on the River Amur. The mother port in the region was Soya-basho (today's Wakkanai) directly governed by Matsumae until 1807. From this Soya-basho, the Sakhalin-basho was separated in 1790, two years before the aforementioned visit of Laksmann. At last, Sakhalin was called "Northern Ezo" in 1809, when Ezo was officially composed of three civilized provinces, the East with the Chishima islands, the West, and the North.

Matsumae on the southern tip of Ezo island had been the most important castle town on the northern frontier of Japan. It was the only castle town in Hokkaido and the indispensable pivot of Japanese trade with the Ainu and other small minorities in Ezo island. Matsumae was authorized as the special local lord in 1604 by the black seal of the Tokugawa shogunate, who could monopolize all the trade in Ezo island, although his right had been authorized by the special order of the red seal from Hideyoshi Toyotomi in 1590. He had his territorial integrity not by the amount of rice production in the other areas and by the monopoly right of trade, due to its marginality. In 1604, when he became a daimyo, he changed his family name from Kakizaki, a retainer of the aforementioned Ando, to Matsumae, a powerful local lord on the northern tip of Honshu, who had been appointed as the aforementioned Ezo Kanrei to govern Ezo island by the Kamakura shogunate.

In order to govern Ezo indirectly, Matsumae employed the style of trade bringing tribute from tribes of the Ainu over the territory of Japanese permanent settlement, especially after the Ainu riot in 1550. After the riot, he appointed two heads of the Ainu tribes in the eastern and the western parts. In 1620, the Tokugawa shogunate granted a special right to wash for gold in Ezo island, a sort of extractive frontier when he donated the gold washed in his own territory, Matsumae. Consequently, he developed several sites to wash for gold, most of which were located near the mouth of the river along the southwestern coast, not far from his customs houses.

With the growth of trade with the Ainu, coordinated by merchants of Omi (today's Shiga prefecture on Lake Biwa between Kyoto and Hokuriku), he gave a special right of monopolized trade in the designated territory of trade *Akinai-basho* to his senior retainer instead of a fief, which gradually had been managed by the appointed special merchants in the latter half of the 17th century. An appointed merchant usually acted as a customs house in its contracted territory, *Ukeoi-basho*, where he dispatched his manager, interpreter, accountant and guard. With the increase of trade, he managed his fishing grounds and constructed warehouses and hotels for Ainu fishermen, which gradually became the communication spot of Matsumae with Japanized native Ainu. Largely due to the increase of unfair trade, the Ainu, led by the head of the eastern Ainu, who won the civil war between the East and the West after 1648, gradually rebelled against the Japanese. Even though the head could not unify all the Ainu tribes, the socio-economic disputes among the Ainu tribes had been often abused by Japanese merchants, who wanted to monopolize their trade as much as they could by direct trade with the Ainu. Shodayu supported the largest rebellion by Shakuin in 1669. He was a Japanese trader of Echigo (today's Niigata) on the Japan Sea, although it was subdued in 1670 by Matsumae with the help of the shogunate and the aforementioned local lords, Nanbu and Tsugaru. After this rebellion, most of the Ainu had been appeased and "Japanized" by means of a quasi-autonomous lo-

cal government system in this frontier.

Outside of the territory of Matsumae, the Japanese could not officially develop their permanent settlements, notwithstanding the development of trade and fishing by the contracted merchants owing to the freedom of trade during the period of direct rule by the shogunate in rivalry with the expansion of the Russian-American Company. This resulted in the occupation of Alaska in 1821 and in the contract of the Pacific Treaty with the United States for the determination of borders in 1824. Fortunately, Russia was busy with the management of East Siberia and Alaska and in the successive wars in Europe. Therefore, the local lord Matsumae and the Tokugawa shogunate had time to develop their frontier and Japanized it not only through the eco-political dual trade system but also through the socio-cultural system such as the construction of temples at Atsukeshi, Samani and Usu. The growth of trade with the Ainu and other minorities enabled trade spots gradually to become a town not in scale and scope but in speed and status, i.e. the function of the settlement frontier in today's Hokkaido, Kuril and Sakhalin.

In contrast with the less populated island of Ezo, Ryukyu had already been unified to be a kingdom since 1429, largely owing to the import of iron and steel from Japan and the policy of agricultural development. At that time, Ryukyu had started its tribute-trade with the Ming dynasty and was named Okinawa in 1372 after the Great Ryukyu to distinguish the Small Ryukyu, Taiwan from Okinawa. The castle town of the Ryukyu kingdom at Shuri gradually developed into a strategic crossroads in the international eco-political power scramble in Asia. The outer port of the capital, Naha, became an important gateway of the Ryukyu kingdom and an indispensable pivot among these countries instead of the other ports such as Yonabaru on Nakagusuku bay towards the Pacific. In the early 16th century, the Ryukyu kingdom established its centralism and developed its power over Miyako and the Yaeyama archipelago adjacent to Taiwan. Consequently, the king asked the local lords to live in Shuri and constructed south and north batteries respectively at Yarazamori and Miegusuku against Japanese and Chinese pirates.

After the conquest of Ryukyu by the Japanese local lord, Satsuma, on the southern tip of Kyushu island in 1609, the Ryukyu kingdom was obliged to cede its northern territory, the Amami-Oshima archipelago, to Satsuma. According to the rule of Satsuma, the Ryukyu kingdom could not develop its tribute-trade with other countries except China. However, Satsuma provided funds to import Chinese goods to the Ryukyu kingdom, which developed its trade more than ever. With the growth of international trade in Ryukyu, the Naha Magistrate of Satsuma had the politico-economic power in the Ryukyu kingdom. In 1728, the Prime Minister (Sanshikan) gave an order to repeal taxes for merchants and artisans, thus accelerating the freedom of the city, which resulted in the rapid growth of the Shuri-Naha capital region based on the improvement of Naha port, construction of bridges and river improvement with flood control in the estuary.

The traditional hosting environment of this capital region also exerted a great influence on the re-establishment of a crossroads in the modern international power scramble. In 1816, British naval vessels visited Naha and the captain, Basil Hall, reported precisely on the politico-economic and socio-cultural situation, power and authority of the Ryukyu kingdom to Europe. The French followed their rival's behavior and visited Naha in 1844, when they succeeded in opening international trade with Satsuma in Naha. A second visit by Admiral Cecil succeeded in ending the isolation of this kingdom. The second British visit in the same year also could not achieve success, in spite of their eight-year stay in the Gokoku temple at Naminoue. In 1853, the Commander of the East India Fleet, Matthew

Perry, visited Naha to ask for the procurement of their goods, barracks and coal-storage under the strong military pressure of his Navy, which visited the parliament without permission. They stayed in the Seigenji temple, which became Perry's strategic office for visiting Uraga at the mouth of Edo (Tokyo) bay to open the isolated country, Japan, in 1853 and 1854. After his first visit to Uraga, he succeeded in the construction of coal-storage, barracks and a warehouse of munitions at Naha port.

Largely owing to this locus as a gateway of the Ryukyu kingdom, it played important roles in the following two points: acceleration of opening the country, Japan and Ryukyu, in one respect. On the other hand, thanks to its locus as the backdoor of only one clan, Satsuma, it could import the latest technologies and know-how before the shogunate and other lords, not only from Europe, the center of the Modern Industrial Revolution, but also from the US, the other center of the Information Industrial Revolution, which enabled the synchronization of two eco-cultural waves for the development of synergism.

The time lag gave Satsuma a strong politico-economic driving force for the promotion of the Meiji Restoration. And the space gap between Satsuma and Edo made room for the tolerance to accept these latest technologies and knowledge, especially after the defeat in the Satsuma-English war in 1863. In other words, the time lag and space gap enabled Satsuma to form the alliance in 1864 for the Meiji restoration with the two other powerful peripheral lords, Tosa on the southern tip of Shikoku island and Choshu on the western tip of Honshu island. This shows that the frontier has played an important role in the change of dimension and in the metamorphosis of locus, especially at the time of mutation.

Syntheses of frontiers and synchronism of stabilizer

After the opening of the country, the Tokugawa shogunate concluded the Treaty of Commerce with the United States, the United Kingdom, Russia, Holland and France in 1858. Consequently, it was obliged to open the three international trade ports: peripheral Nagasaki in Kyushu, Hakodate in Ezo, and central Kanagawa near Edo. Nagasaki was the only official international port of isolated Japan during the Edo era and the symbolic city of freedom sustained by its traditional ethos and icon. It is worth mentioning that the first submarine telephone and telegraph cable between Vladivostok (established in 1860) in East Siberia in Russia and Nagasaki in Japan was already opened in 1870. And the Japanese Navy had introduced wireless telegraphy, which adopted the English style of training and strategy.

Hakodate is also a symbolic city, which established its status as the politico-administrative center of the Magistrate of the Tokugawa shogunate. Largely owing to this locus and ethos, Hakodate was chosen as the naval port and military and administrative center of the last Resistance centered around Takeaki Enomoto, the Navy officer of the Tokugawa shogunate. He was elected the administration leader of the new Japanese government in Hokkaido by the officers, although his government only survived at Goryokaku, the first western style castle in Hakodate within a year of the attack by the Meiji government. Enomoto was supported by French officers and adopted the French style of training and strategy, together with the defeated generals and soldiers of Oshu Retsuppan Domei (league of local lords in Tohoku against the Meiji government) in the Aizu war in 1868. As the local lord, Date in Sendai was the head of this league, the Meiji government dispatched its Commander-in-Chief for Expeditionary Forces to Sendai. Therefore, Sendai again developed its locus as the local center of the central government not only in administrative and military matters but also

in culture and technology.

After the end of the Hakodate war in 1869, the Meiji government established the Kaitakushi, the Office for Development of Hokkaido with Kuril and Sakhalin in 1869 in Tokyo. Then, the head office of Kaitakushi was relocated from Tokyo to Hakodate in 1870. In 1869, fiefs were returned to the Meiji government in Tokyo and then the former daimyo were appointed governors. In 1871, the substitution of prefecture for fiefs was promoted in order to establish centralization. For the development of Hokkaido itself, the head office was relocated again from coastal Hakodate to the inland center, Sapporo, in 1871 to promote the direct management of Hokkaido by the central government.

After the abolishment of the Office for Development of Hokkaido and the establishment of Sapporo, Hakodate and Nemuro prefecture in 1882, when the Korean Incident occurred, the Japanese government was more interested in Korea than the northern part of Japan, due to the Agreement with Russia over the Exchange of Sakhalin for the Kuril islands in 1875 and the end of the Civil War (Satsuma Rebellion) in 1877. Consequently, Sapporo became again a local urban center, like Otaru, Hakodate and even Asahikawa.

The number of the population in Sapporo (103,000) did not surpass that of Otaru(108,000) and that of Hakodate (144,000) in 1920. After the establishment of Sapporo city in 1922, its population increased with the agglomeration of offices of the central government and it topped all the rest in the number of population in 1940, when Japan concluded the Tripartite Alliance with Germany and Italy, and the Ministry of Planning announced the Outline of National Land Planning. The Outline and Draft Plan of the Central Area issued by the Ministry of Planning in 1943 stressed the development of total defence power in Hokkaido in response to the keen international power scrambles with the USSR and the United States in the Northern Pacific Orbit. It designated Sapporo as a first class city together with Sendai, Niigata, Hiroshima, Matsuyama and Fukuoka, in addition to the three large metropolitan areas in the Tokaido Megalopolis.

In 1951, the Hokkaido Development Bureau of the Hokkaido Development Agency was established in Sapporo, which exerted an influence on the development of Hokkaido and the transformation of its urban system. Sapporo also developed remarkably after the designation of Doo New Industrial City in 1964 and the decision in 1966 to hold the 1972 Winter Olympics in Sapporo, and the opening of the underground in 1971.

Otaru was the old customs house center and a distinguished fishing port before the Meiji restoration. In 1904, when the Russo-Japanese War was declared, the Hakodate Railway was opened and Otaru became the most important city between Hakodate and Sapporo. In succession, largely owing to the colonization of southern Sakhalin according to the Treaty of Portsmouth, Otaru also became an indispensable hinge between Sakhalin and Japan.

However, under the war economy, Otaru lost ground as a result of the development of other local ports such as Muroran and Kushiro and the relocation of office activities such as the branch of Japan Bank to Sapporo in 1941. With the growth of the port of Tomakomai after World War II, Otaru also lost ground in the shipment of coal. Notwithstanding the improvement of the harbor and urban renewal, Otaru could not recover ground during the high economic phase and its function as the outer port of Sapporo was also taken over by the newly dug port of Ishikari. It became an important cargo port, which accelerated the opening of a container ship line in 1991 as a new pivot between the new cities of freedom in China and this outer port of Sapporo in response to the mutation of the economy of the North East Asian Orbit with the collapse of the USSR in 1991.

In addition to the growth of the port of Ishikari in the north, the huge Tomakomai port had been constructed, although it could not yet exert its influence on the development of a huge industrial estate (2,600 ha) because of the mutation of industrial structure after the oil crisis, which in turn depressed the development of this huge industrial port.

According to the New Comprehensive National Land Development Plan of 1969, Tomakomai was designated as one of the Huge Industrial Development Areas, together with Mutsu-Ogawara at the northern periphery of Honshu island, Suonada at the southern periphery of Honshu island and Shibushi on the southern tip of Kyushu island. Owing to this designation, Nippon Kei-kinzoku constructed its modern aluminium refinery and its related industries as the first aluminium industrial complex in Japan in 1969, although it could not succeed in its development largely owing to the rise in the cost of electric power due to the oil crisis of 1973, just after the completion of the complex.

The development of Tomakomai port had been accelerated by the opening of a container line in 1969 and a ferry line in 1971, when the Committee for Development of Tomakomai East Huge Industrial Complex (2,030 ha) with petrochemical and iron-steel complexes was established in response to the metamorphosis of industrial structure geared by the liberalization policy. It was seen in the investment of General Motors in Isuzu Motor, which had constructed its factory in the Tomakomai-East Huge Industrial Complex. Due to the collapse of this huge plan after the oil crisis in 1973, this industrial complex could not attract huge factories and facilities except the Oil Storage Complex of Hokkaido Oil Storage Cooperative Corporation established by the Oil Corporation and six oil refinery companies in 1981 after the second oil crisis in 1979. Concerned with this sort of state intervention for preservation of this huge industrial complex in the frontier, in 1980 the central government also promoted the conversion of the oil-electric power station of Hokkaido Electric Power at Tomakomai into a coal-electric power station to rehabilitate Yubari and Kushiro coalmines.

The plan also lacked the development of a new industrial city with a good hosting environment for industry within this huge industrial complex and between Tomakomai and Chitose in rivalry with industrial estates adjacent to Tomakomai West port and Chitose airport. Therefore, Hokkaido Toyota Motor constructed its factory in the Tomakomai West Industrial Complex in 1991, the year of mutation of the North-East Asian Orbit, in addition to Isuzu Motor and Aishin in the East Complex.

In the synthesis of expanded and evolved frontiers, not only the seaport but also the airport plays an important role in synchronizing the stabilizers. Chitose airport, with its two 3,000 m runways, is one of the largest airports in Japan. Chitose was a crossroads for the development of Hokkaido island, although it could not develop its urban area due to its inferior land conditions for agricultural industries until 1939, when the Navy opened its airport for the defence of the Sea of Okhotsk and the Bering Sea under the keen international power scramble between the USSR and the United States. After World War II, especially after the Korean War, this airport was one of the most important for the US Air Force, which was succeeded by the Japanese Air Force. In 1951, the civil airline was opened in Chitose airport and owing to the growth of the Haneda-Tokyo and Chitose-Sapporo lines, the airport gradually became an indispensable hinge in the era of airlines, first in the country and then on the globe.

In 1979, the Chitose Industrial Estate near the airport had been constructed, led by the outline of the Technopolis Law enacted in 1983. It goes without saying that it became one of the most important industrial estates in the Doo Technopolis, which attracted high-tech industries such as Chiba. The new

Chitose airport was opened in 1988, when the Seoul Olympics were held and the mutation of the North-East Asian Orbit started. In 1989, the Seoul-Sapporo line was opened, followed by the Guam-Saipan line and the Honolulu line, which made Sapporo a pivot in this northern frontier.

In 1991, the New York-Sapporo air cargo line was opened, although it has not yet succeeded in its development, due to the less direct air cargo route of Hokkaido to the United States, in spite of the establishment of the Sapporo International Air Cargo Terminal in 1986 and Japan Universal Airline specializing in air cargo in 1991. According to the Temporary Measure Act for Promotion of Import and for Acceleration of Investment in Japan enacted in 1992, this international airport area was designated as a Foreign Access Zone, which still could not succeed in its development and evolve the frontier, largely due to the depression of the North-East Asian Orbit and the incomplete liberalization after the collapse of the USSR and the economy of North Korea.

The growth of the Sapporo metropolitan area had absorbed the shocks caused by the decline of the coal mining industry as a result of the change in energy policy from coal to oil in 1955. Largely due to the locus at the periphery of the great Sapporo metropolitan area, it was and still is not so easy to revive their economy, in spite of the construction of industrial estates. Most of all major industrial estates in the designated coal production area were developed in the Ishikari Coal Production Area adjacent to Sapporo. Owing to local demands and the convenient national network of transportation, several new agricultural areas started such as the Yubari Melon Cultivation Area. Compared with this area, peripheral designated coal production areas such as Soya on the northern tip, Rumoi on the Japan Sea and Kushiro on the Pacific could not succeed in the development of industry in spite of their frontier spirit of taking risks.

Most of the resort and pleasure city development plans, accelerated by the Law for Development of Integrated Resort Areas enacted in 1987, were not able to succeed in their development such as Utashinai and Ashibetsu between Sapporo and Asahikawa. The Furano-Taisetsu Resort Area based on the Taisetsu Mountain National Park was planned in 1992 between Asahika and East Hokkaido. Sapporo has a plan to develop the Sapporo-Shikotsu Lake International Communication Village planned in 1994 as its hosting environment for the growth of communication industries. Owing to the good hosting environments of teniapolis, Sapporo and Asahikawa were designated as International Convention Cities in 1994, although they could not succeed in attracting invitations of so many conventions, compared with other International Convention Cities in the Tokaido Megalopolis and with Fukuoka and Kitakyushu in Kyushu island.

Apart from the Sapporo metropolitan area, there are a few local urban centers including Asahikawa that have the potential for further development. Like Asahikawa, Kushiro also has direct flights to Tokyo, which gradually promotes the rejuvenation of this metropolitan area, especially after the Decision of Day for Return of Northern Territory in 1981. Between Kushiro and Asahikawa, the last frontier Kitami was developed after the settlement of 11 divisions with 86 counties in Hokkaido in 1869. It was the center of the Okhotsk earthenware culture that has developed Rijiri, Souya, Monbetsu, Abashiri and Shyari basho in succession since 1684. The Moyoro shell mound in Abashiri is the icon of this culture to be a world city with a soul, which enabled the establishment of the Hokkaido Museum of Northern Peoples in 1991, in addition to the private Museum of Northern Indigenous Peoples, Jakka Duxuni, in 1978. The most peripheral area of Hokkaido is a cultural center of Northern People, who love the natural providence and the human ethics in their long history in the sub-arctic regions. Abashiri was a crossroads of the Northern People, who developed the

Creole of their ethnic cultures in arctic Eurasia in their frontier, especially in the 6th century. Abashiri basho was opened in 1860, when the Tokugawa shogunate established its branch office to defend the Kuril islands and the Sea of Okhotsku (figs. 4 and 5).

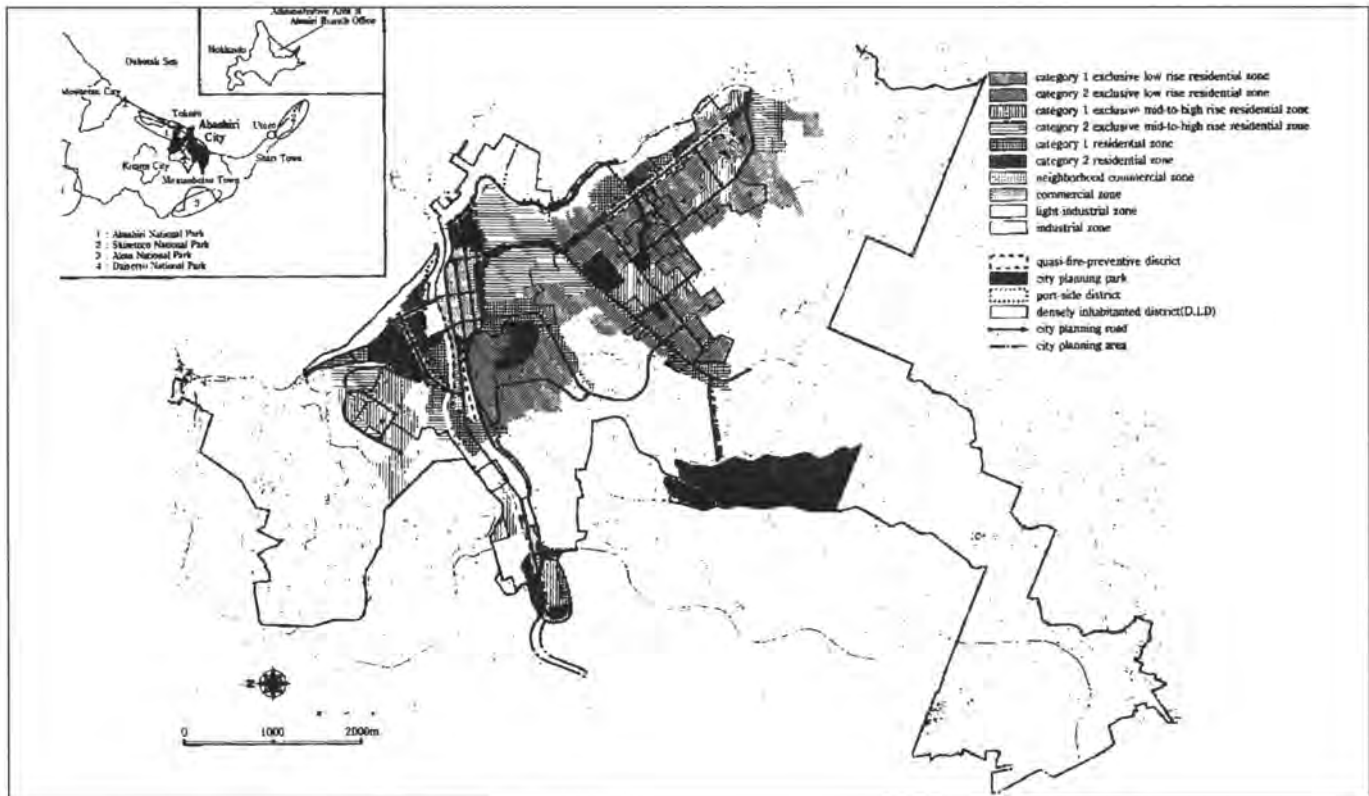Largely owing to this peripheral locus along the Sea of

Fig. 4: Japan – City planning of the northeastern frontier, Abashiri City. (*Source: Abashiri City*, 1997).
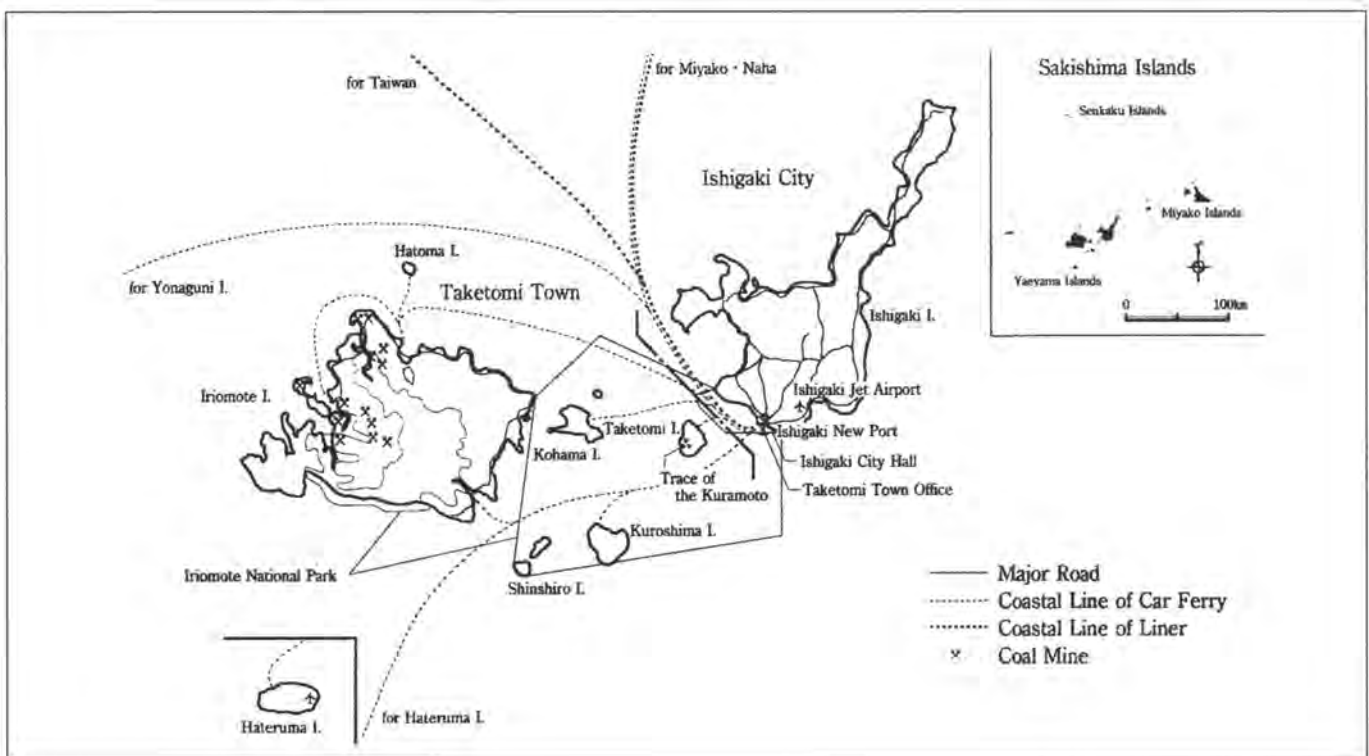

Fig. 5: Southwestern frontier of Japan – Yaeyama Islands.

Okhotsku, Abashiri became a local center after the opening of the Nemuro Branch Office of the Office for Development in 1860. According to the law for the organization of local areas into Town, Village, and County in 1878, Abashiri became the center of the Abashiri, Tokoro, Monbetsu and Shari area in 1879 because of opening its offices at its intermediate locus. Since the development of the urban area at Kitami town in 1881, Japanese people immigrated into the Abashiri region which accelerated the opening of the Asahikawa-Kushiro road via Abashiri by prisoners in the Abashiri branch prison of Kushiro, founded in 1890. Just before the Russo-Japanese War, Abashiri became one of the most important prisons in 1902, with criminal and political felons, due to this locus, and its agricultural farm and workshop became the pivot of transferring modern technologies. In 1912, the Abashiri Railway was opened between Abashiri and Tokachi, and then Abashiri port was constructed in 1919, which strengthened its crossroads locus and attracted branch offices of the central government and courts. However, Abashiri prison still exerts a great influence on the image of Abashiri as the most remote lonely place in Japan, in spite of the growth of the permeability of the cultures of the northern minorities. According to interviews with tourists in 1995, the first image of Abashiri was the prison (79.3 percent), followed by the drift ice of the Okhotsk Sea (38.3 percent), cold place (33.5 percent), remote place (30.0 percent), magnificent landscape (23.6 percent), rich marine products (22.0 percent) and excellent ocean, lake and forest natural landscape (13.2 percent).

Abashiri city endeavored to convert the iconography of a remote peripheral lonely place to the rich natural beautiful landscape with romantic northern peoples' culture in the indigenous frontier. After World War II, Abashiri became a city in 1947, when the Cold War started between the USSR and the United States, which fixed the illegal occupation of four Kuril Islands. In the high economic growth phase, Abashiri National Park was designated in 1958, which developed the tourist business along with Shiretoco National Park, Akan National Park and Daisetsu National Park. To promote tourist business in the Abashiri area, the first drift ice festival started in 1966, when the nationwide private rail and bus company, Nagoya Railway, developed its drift icebreaker for tourists in 1962 at Abashiri port, followed by the icebreaker at Monbetsu. This icebreaker is converted into a sightseeing ship for the strictly preserved natural park of the Shiretoco peninsular during the off-season, which made its base-port, Utoro of Shari, the southern center of drift ice and Aurora eco-tourism with hot springs, especially after the entry into service of the big ice breaker, "Aurora," in 1990.

Converting the iconography of Abashiri as the center of neo civilization in the Neo Industrial Revolution, but paying due regard to natural providence and human ethics, Abashiri city promoted the designation of the Abashiri Important Port in 1978 and the opening of the new Memanbetsu Jet Airport in 1985 on the fringe of the Abashiri metropolitan area to strengthen its crossroads structure, which attracted advanced technology such as Denso (a subsidiary of Toyota Motor) and Nippon Gaishi (Insulator) from the Nagoya metropolitan area. Based on this crossroads, it developed its Creole of northern people's culture and revitalization of its original locus as is seen in the construction of the Okhotsk Cultural Exchange Center in 2000 in addition to the construction of the Drift Ice Museum in 1985, a sister city contract with Port Alberny of Canada in 1986, and Okhotsk dome in 1998. The establishment of the Bio-Industry Faculty of Tokyo Agricultural University in 1989, a symbolic year opening the Heisei era, literally the era of peace, have also accelerated the synthesis of structural frontier and spatial frontier over Hokkaido Island and the Kuril Islands in the North-East Asian Orbit. It gradually promoted the revitalization of agriculture and the fishing business in this Orbit.

In 1997, the Act on the Encouragement of Ainu Culture and of its Diffusion and Enlightenment of Knowledge on Ainu Tradition was promulgated, paying due regard to its natural providence and human ethics, in place of the Hokkaido Aborigine Protection Law for a social safety net for losers enacted in 1899. In that year, Japan and Russia agreed on the development of the North-East Asian Orbit along the line, which the author has already discussed in his book, *Formation of the Pacific Maritime Corridor for Global Rejuvenation and for World Peace* (MIYAKAWA, 1997). In this book, the author proposed the twin wheel project for the two free islands, Urup and Iturup, with not only global hard mega infrastructures such as air and sea ports but also global soft mega infrastructures such as the World Venture Fund for skilled workers and R&D institutes for the Neo Industrial Revolution. If the Russian government adopts this proposal to encourage the frontier spirit and entrepreneurship and the Treaty for the Peace and Rejuvenation of the Northern Pacific is concluded between Russia, the United States, Canada, China and Japan, this twin wheel will play an important role in stabilizing the area and in the revitalization of the economy, paying due regard to the natural environment and the life of the minority. The interplay will also play its role in absorbing shocks caused by future catastrophic changes in the North-East Asian Orbit by the construction of training houses for foreign refugees and for qualifications for foreign guest workers to circulate in the world market with favorable repercussions.

A similar twin wheel project has already been adopted in Japan between Okinawa and Taiwan practically, according to the New Temporary Measure Act for Development of Okinawa in 1998, which enables free trade, finance, communication and a global graduate school of super-natural technologies, as a sort of free island, as the author discussed in his above-mentioned book in 1997. It was promoted not only by the return of Hong Kong to China in 1997 for establishing a new international trade route with China via Ishigaki island but also by the traditional locus of Okinawa in the frontier in the international power scramble. Ishigaki island had already developed in 715 and the autonomy of the local government was lost with the conquest by the Ryukyu kingdom in 1500. After the Meiji restoration, Ishigaki preserved the central locus of the Sakishima islands in the southern frontier of Japan as was seen in the establishment of an Army submarine cable relay station between Japan and Taiwan in 1894. It became the administrative center of Yaeyama village in 1908, although it had already lost ground as a frontier in 1902, when the Japanese government admitted the Japanese nationality of the Taiwanese, five years after the establishment of the Taiwan government in this new amalgamated frontier.

After World War II, Ishigai city was founded in 1947, although Okinawa was governed by the American military power until 1971, when it was returned to Japan. Under this quasi-state, the Ryukyu government, Ishigaki city became a hinge between the Ryukyu government and the Chinese government, which developed mutual trade and immigration of Taiwanese into Ryukyu. The Taiwanese community gradually became, and still is, the catalyst between Taiwan, China, Okinawa and Japan. In 1951, the Yaeyama Cultural Center between Ryukyu and America was established, which develops the Creole of cultures in this southern frontier. In response to the recovery of the local economy accelerated by the establishment of the Ishigaki Public Fish Market in 1953 and the Yaeyama Stock Breeding Corporation in 1954, the local Isigaki airport was opened in 1954. The crossroads structure was gradually strengthened by the opening of Ishigaki new port in 1963 and by the renewal of Ishigaki jet airport in 1979, which attracted Japanese tourist businesses such as Nagoya
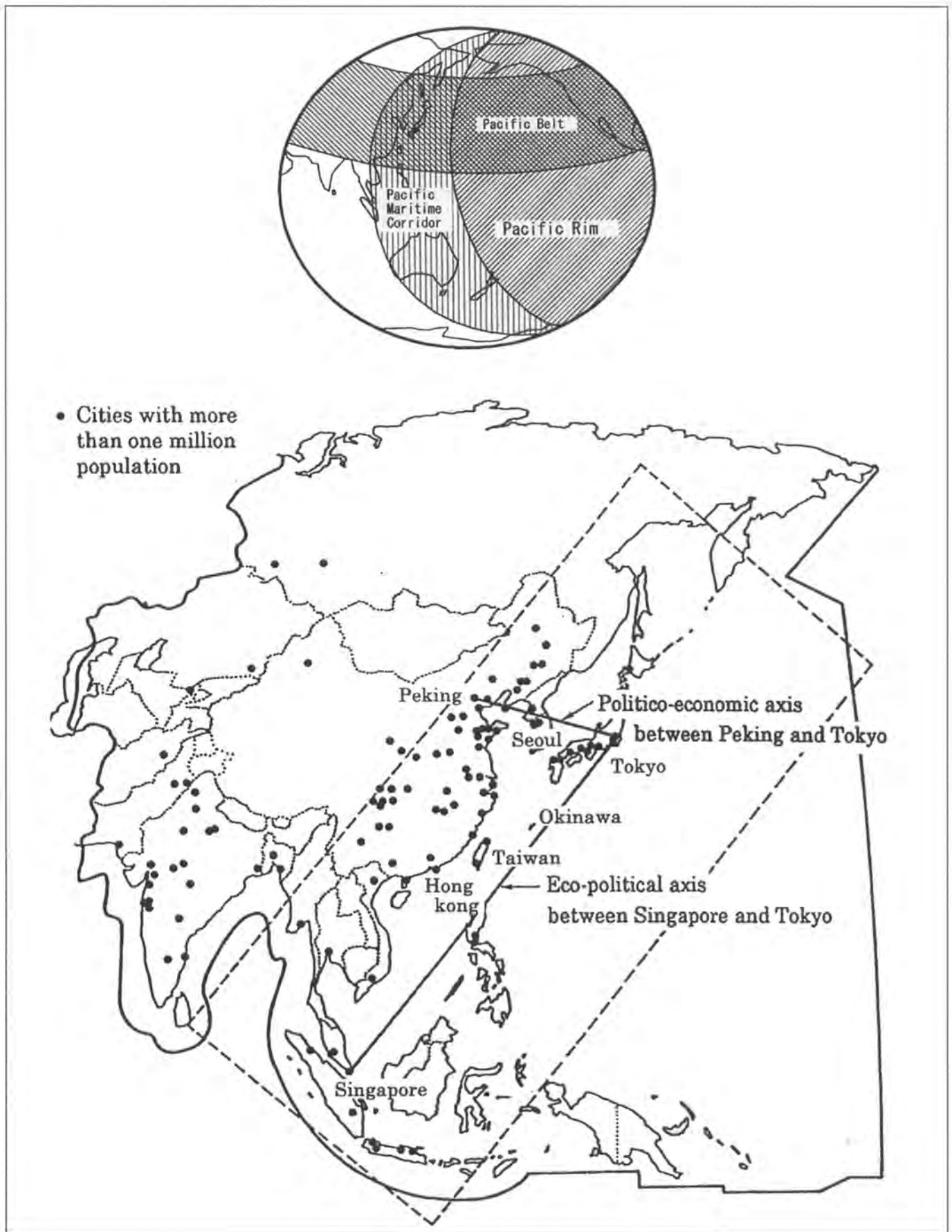
Fig. 6: Pacific Orbit on the globe and structure of the Pacific Maritime Corridor.

Railway, and accelerated the development of the tourist and resort industry and sports events such as the Triathlon Japan Cup at Ishigai island in 1996. The hosting environment of Ishigaki island developed sister city communication between Okazaki (the traditional local urban center adjacent to Toyota in the Nagoya metropolitan area, 1972), Wakanai (the northern tip city in Hokkaido near Sakhalin, 1987), Suawo of Taiwan (a traditional fishing town on the Pacific, 1995) and Ishigaki city.

Taiwan is a Diaspora, to be recognized as separate from the Chinese, a big source of Diaspora like India. Diasporas accentuate and accelerate the linkages between cities to penetrate political partitions around the globe. The phenomenon of Diasporas is simply more general and more massive than in times past. The world conference held by Diasporas such as the World Uchinancyu (people of Ryukyu) Conference has become a node of the world community. A number of new nations scattered around the globe were brought into existence by the convergence on their territory of a mixture of Diasporas. Diasporas play an important role in the formation of a world unity of humankind, world community in the double tendency of modern communities – the nexus between globalization and localization – based on the social rules for global rejuvenation and for ethnic survival. This socio-cultural world community has become indispensable in rivalry with the eco-political world community being hatched by the financial forces on the tripod London-New York-Tokyo working together on the law of capital, in response to the progress of liberalization and to the development of freedom of movement.

A community is a living tissue, which changes and evolves like everything living, amid variable conditions in its environment to improve its own modes of life and way of thinking. The conversion of iconography often causes a change of dimension, which accelerates the transformation of locus. The city in a frontier like Ishigaki and Taketomi has an opportunity to convert the old iconography to adapt with the Neo Industrial Revolution and develop the network of networks of cities and frontiersmen, which some day forms a steady and a coalescent world community based on mutual trust among peoples in rivalry with international state organizations based on treaties like the United Nations and the World Trade Organization in its endless process.

Near Ishigaki city hall and port, the town office of Taketomi has been located since 1938, which connects the several islands of Taketomi, Kohama, Hateruma, Hatoma, Iriomote, Shinshiro and Kuroshima, based on its traditional locus since 1543, when the Kuramoto, the local office of the Ryukyu kingdom, was relocated from Taketomi to Ishigaki. Owing to the coal mines in Iriomote, the island became one of the most important strategic loci in the Meiji restoration as the UK Navy surveyed it in 1843, the US Navy in 1853, the Ryukyu kingdom in 1872 and the Ministry of Industry of the Meiji government in 1885, when Mitsui started the development of coal mines. Iriomote island was designated a National Park in 1972 and became the icon of Ocean culture and lifestyle and habitat in Japan. The sister town contract with the aforementioned Syari town at the foot of the Shretoko peninsular in 1973 also helped the conversion of this iconography and dimension. In 1976, Tokai University opened its Ocean Science Research Institute and Ryukyu University also opened its Tropical Plant Research Institute, which became the new icons and incubator as a corollary, in this frontier.

According to the former Temporary Measure Act for Development of Okinawa in 1971, the Okinawa prefecture government had already opened the Okinawa Free Trade Zone in Naha, which is the only free trade zone in Japan. However, it was an isolated plan, which lacked the unique strategic policy for development in Japan and has not been linked with the Kaohisiung Free Trade Zone opened in 1966 on the southern

tip of Taiwan on the Strait and the Masan Free Trade Zone opened in 1970 on the southern tip of South Korea on the Strait to synchronize these projects for synergism.

Naha was the outer port of the former capital Shuri and has been the prefecture capital since 1879 with an international sea and air port, although its population is 306,000, still below 1 million, smaller than that of Sapporo and that of Fukuoka. Largely due to the complete occupation by American military forces after World War II, Naha could not develop its urban renewal in spite of the establishment of a Ryukyu government under the American Power or construct a new urbanized area in its suburbs, where ceramic roof manufacturers were permitted to live for the construction of military bases. With the growth of military bases in Okinawa, Naha was able to enjoy its development and constructed a new shopping street along the new international road, its main street between old Naha and Shuri not only for the local population and the Americans in Okinawa but also for tourists from Japan.

Unfortunately, after the return of Okinawa to Japan in 1971, the number of tourists did not increase, although it held the Okinawa Ocean EXPO in 1975 at Motobu town near the northern central city, Nago. Notwithstanding its stable socio-economic conditions and unique cultural iconography, Okinawa also could not attract increased Korean and Taiwanese tourists, because of losing its unique locus as a quasi-independent country. Due to the lack of unique global soft mega infrastructure, Okinawa could not attract foreign investment from Korea, Taiwan and Japan. It goes without saying that the small local market of Okinawa prefecture and the less developed high tech and high touch industries with R&D facilities also could not attract foreign investments into Okinawa, although Naha was designated as the aforementioned Brain Area.

Not only Naha but also other cities with an American military base such as Ishikawa (in 1945), Okinawa, formerly Goza (in 1956), Ginowan (in 1962), Gushikawa (in 1968) and Urazoe (in 1970) still suffer from socio-cultural conflicts with American military forces, which often produce criminals.

In response to the transformation of the international politico-economic structure in the East Asia Orbit, especially after 1992, the twin wheel projects in the northern and southern frontiers of Japan gradually became indispensable to synthesize different frontiers and to construct a built-in stabilizer not only for politico-economic but also for socio-cultural conflicts. The Okinawa and Taiwan twin wheel in the endless forefront of international political dispute was formed after the return of Hong Kong in order to sustain the official development of international trade and investment from Taiwan into China via Okinawa. It is, in turn, useful and efficient to develop an eco-political shock absorber in the international power scramble. Largely owing to its intermediate locus between Tokyo in Japan and Singapore, it is gradually exerting its great influence on the establishment of the Tokyo-Singapore Eco-Political Axis via these twin wheel free islands, although it is still under planning and is practically just starting (fig. 6).

It goes without saying that it is also very important to prevent these islands from military war in the East Asia Orbit, which would be the trigger for World War III as was seen in the serious situation over North Korea's missile tests over Japan's territory and the anti-missile defence system of the United States in 2000. In this sense, Okinawa will play an important role in the reinforcement of the Politico-Economic Axis between Tokyo and Peking, if it can recover its close eco-political relations with Peking of China, Seoul of Korea and Tokyo of Japan in this process of metamorphosis of its locus.

Compared with this southern twin wheel project, the northern twin wheel project is a more political and serious one, due to the real situation of occupation by Russia after World War II. It is true that the mutual communication without visas becomes

more vivid than before and the socio-cultural gaps between Japan and Russia are gradually filling up after the collapse of the USSR. It depends largely on the decision of the Russian government and it needs more time to fuse each frontier in order to promote the development of the North East Asian Orbit. It goes without saying that it is an opportunity to establish a stable eco-political situation in the Northern Pacific among the aforementioned five countries, Russia, China, Canada, United States and Japan at this turning point of international politico-economic structure, if the Russian government wants to promote this project for the rejuvenation of its economy on the globe.

This northern twin wheel is, in fact, a real driving force for the development of a built-in stabilizer at the newly constructed crossroads on the global scene. Its global mega infrastructure will help to develop new ideas, Creole, and to establish international order in the future, because of its locus and its room to accept new talent. The city of freedom in this twin wheel will have to be developed towards the so-called Eco-town, paying due regard to Natural Providence and Human Ethics in this orbit. If its hosting environment and built-up environment are well prepared for minorities in addition to major ethnic groups, probably Russian and Japanese, it will also exert its great influence on the development of eco-tourism and absorb shocks, especially socio-cultural conflicts caused by politico-economic refugees and diasporas in the time-lag and in the space-gap with the expansion and evolution of the frontier.

It is still a long way to arrive at a goal for world peace and to be aware of projections in time and generalization in space, but some day, a world community of tolerance and mutual understanding will come about, even in this chaotic international political structure, as a result of a new international politico-economic and socio-cultural order based on the twin wheel free islands project and insular networks in the future.

Conclusion

As the process of globalization accelerates throughout the world, together with the deepening of localization phenomena, the expansion and evolution of the frontier have become increasingly important in changing the iconography and the orbit of the state. As seen in the historical development of the Japanese urban system, the city of freedom has been an inevitable factor for driving the process.

● At the first stage of state formation, Japan established local governments and defence bases on both its northern and southern frontiers, which exerted great influence on the expansion of Japan's international orbit. The national government founded shrines and temples in the frontiers in order to convert the iconography of local culture, which resulted in the evolution of the frontier and the Japanization of local ethos.
● At the second stage, with the rapid growth of the nation, the imperial authority and the military power came to diverge into a dual political system. In response to this, two capitals emerged, one for the emperor and the other for the shogunate. Historically speaking, there has been a shift of power from the west to the east, the axis in between the dual political system, which became the basic structure of the Tokaido Megalopolis. Along with this change, the significance of the northern frontier has increased in addition to the diversification of the traditional iconography, Buddhism. With the growth of private trade at this stage, the cities of freedom flourished, especially in the northern frontier.
● At the third stage, the international orbit expanded significantly at the Japanese new locus on the border of the dichotomy of the world, towards Southeast Asia. Furthermore, the rise of local lords during the civil war activated local capitals to the extent that these cities acquired autonomy. These funda-

mental changes led to the conversion of the iconography from Buddhism to Christianity and to the establishment of a new politico-economic icon, the tea-ceremony, which enabled Japan to reunify itself into a centralized government led by the shogunate based on monopolized international trade through the free port cities.
● At the fourth stage, the unification of the nation through the Meiji Restoration resulted in concentrating both power and authority in Tokyo, thus dissolving the dual political system. This has contributed to modernizing the national system. It showed that the frontier has played an important role in the change of dimension and in the metamorphosis of locus, especially at the time of mutation. Japan came to have colonies over the national boundaries and to reorganize its national frontiers as built-in stabilizers; the city of freedom played an important role in developing these colonies.
● At the final stage, after World War II, the process of democratization brought forth local autonomy. However, decentralization in a genuine sense has not been achieved yet. As a result, with the on-going rapid globalization, the national capital Tokyo and the Tokaido Megalopolis developed remarkably as a World City and World Megalopolis. This in turn has restrained the evolution of the frontier together with the incompleteness of the city of freedom in the contracted frontier.

Even in the contracted frontier, the frontier often could become the catalyst between the two different civilizations and economies, if it allows people the freedom of movement in travel and trade under its sovereignty. Based on transaction and trust, the frontier comes to be the pivot and hinge of different cultures, communities and technologies, and promotes their Creole. It also plays an important role as a shock absorbent at the crossroads of the international power scramble for world peace and for global rejuvenation, which accelerates the formation of the Pacific Maritime Corridor based on the locus of orbit, the iconography of the city of freedom, the role of diasporas and the network of networks of communities and societies on the global scene.

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Acknowledgement

Jean Gottmann's theoretical writings: The art of reinventing geography

"Through this epistemological maneuver which we are going to re-examine, Gottmann re-oriented geography by placing it in the realm of the sciences of organization and structures. It is in this very structuralist orientation, in our opinion, that the value of this theory lies, although it was acknowledged as such neither by geographers, nor by the main representatives of structuralism."

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Introduction

In the development of the discipline, Jean Gottmann played the role of a mediator between a descriptive geography that concerned itself with drawing up a comprehensive picture of the surface of the planet, and a new geography, more interested in human actions and explanations based on quantifiable facts. But would it really do him justice to reductively portray him as a key figure in a history that is much less linear than it first appears? Throughout his career, he was able to entertain a harmonious dialogue in his reflections between the contributions of his masters and innovative methods. Indeed, why else should he still have felt the need, in the twilight of his life, to refer to P. Vidal de la Blache or A. Demangeon, as if his own scientific contribution could only be understood in the light of his predecessors? Gottmann was indeed a mediator but the interpretation of his role depends on the way in which one views the progression of science. Did he lead geography onto a new path? Or rather, did he propel geography, which had been enriched by new methods and issues, through the same, inescapable passage of the adoption of the scientific method opened up before him by P. Vidal de la Blache, F. Ratzel, H. Mackinder or W.M. Davis?

We favor the latter hypothesis. The profound transformation of the natural as well as the social sciences was felt with exceptional force in the United States after the Second World War. As a consequence, it became imperative for geography, which was "born of the need to build a bridge between the natural sciences and the human sciences" (GOTTMANN, 1952, p. ix) to reconstruct this bridge entirely, in a more rational manner and with a keener awareness of what was at stake than the 19th century masters had been able to do.

After having developed a formal method for the analysis of spatial organization, Gottmann carried out a critical review of existing theories concerning the determining factors of this organization, and devised a new one. Through this epistemological maneuver which we are going to re-examine, Gottmann re-oriented geography by placing it in the realm of the sciences of organization and structures. It is in this very structuralist orientation, in our opinion, that the value of this theory lies, although it was acknowledged as such neither by geographers, nor by the main representatives of structuralism.

The formalism of crossroads and determinism in geography

The word "determinism" has fallen into disrepute among geographers. Our goal is not to rehabilitate it. And yet, searching for deterministic mechanisms or, as one may prefer, determining factors, together with reducing the diversity of phenomena to principles that determine them, are two golden rules of scientific thinking. Gottmann's theoretical writings pursued these two objectives and have thus helped to make geography more scientific (cf. MUSCARÀ, 1999; PREVELAKIS, 2001). It was materialistic determinism, not determinism in general that Gottmann rejected. No one would deny that there exist determining relationships between the location of certain minerals or kinds of vegetation and certain populations' habitats or lifestyles. These relationships, however, are not universal; they vary in space or time with the psychology and cultures of human groups. For Gottmann:

"In order to be scientific in our discipline, a method of analysis must therefore eschew a type of geographical materialism that would be too simple for facts, and admit that spiritual forces can compensate pressures whose energy comes from other sources."[1]

Geographical space differentiates the living conditions of in-

dividuals in two ways: the first time, through the distribution of substances that are more or less useful to mankind; and the second time, through regional variation in the ways in which resources are exploited. In order never to lose sight of these two levels of spatial differentiation, Gottmann perfected his "chains of cross-roads" method of analysis and presented it in a landmark article published in the *Annales de Géographie* in 1947. In it, he proposes to analyze the forms of spatial organization by translating them into a formalism of sets of geographical places that can be associated through two types of relationships: on the one hand, relationships between their social, as well as material, "internal milieus," and on the other hand, relations of position within an "external milieu" consisting of physical geography and transportation infrastructures, as well as a whole immaterial organization of exchanges. Thus is a fundamental relationship between man and nature such as the search for the means to survive ensured by networks of relationships in geographical space, between internal milieus, either close-by or far away, extensive or limited, some organized for habitat, others for food production.

This formalism thus integrates the explanations that materialism can supply (for it does supply some) while at the same time surpassing it. By making it possible to conceptualize the multiplicity of spatial relationships, it modifies the approach to geographical phenomena entirely. Thus, regions where, to use Vidal de la Blache's term, "harmony" between natural phenomena and lifestyles is established, now appear as dynamic organizations of coherent relationships between human activities, between physical phenomena, and between the two together. Regional differentiation becomes, therefore, an organizational differentiation of the parts of the earth.

This was to lead to a complete reorientation of the strategy to search for determinism in geography. The book *La politique des États et leur géographie,* published in 1952, played a pivotal role – it is soon to be re-issued, thanks to Luca Muscarà's efforts and the support of the Bibliothèque Nationale de France. This excerpt from the introductory chapter clearly signals this new epistemological orientation:

> "The geographical milieu is a system of relationships inscribed in the differentiated and organized space that is accessible to men. There can therefore be no other determinism in geography than a determinism of relationships. Geographical facts are by their very nature relational facts."[2]

Gottmann adds:

> "The study, and possibly the control, of this system of relationships is the logical outcome of the work of geographers on the regional scale, and it is also the goal of those in charge of designing and implementing policies on the national scale" (GOTTMANN, 1952, p. 16). "... whereas geography essentially studies the spatial organization of the earth, politics seeks either to impose new forms on this organization, or to preserve old ones. State policy will therefore be determined, to a very large extent, by the system of relationships that geography will teach policy-makers." (GOTTMANN, 1952, p. 17)[3]

Although Gottmann calls for transcending the compartmentalization of the sciences, the conception of geography he develops belongs to what is commonly called today the sciences of organization and of the living or instead, in a broader definition of the term, advocated for instance by Piaget (1970, pp. 7-10) or Petitot (1985, chap. 1), genetic, or dynamic, structuralism. This approach aims at constructing objects through combinations of relationships that organize a particular material, endow it with wholeness and draw from this very material the means to stabilize these relationships, renew them, or even make them evolve. Geography did have an original approach to organization, but it remained anchored in the 19th century.

As far as we know, Gottmann's approach has never been called structuralist. For many geographers, structuralism in the human sciences simply had to refer back to linguistics or anthropology, which were supposed to be a kind of canonical form of it. But this would have implied fitting abstract relationships between places, which are characterized to a large extent by openness and variability, into closed and invariant systems (BRUNET, 1992). At the other end of the spectrum of organizational approaches, systemic theories, generated by regional econometrics, represent a kind of structuralism that is always based on the search for invariants, where spaces are closed, and abstractions are converted to figures, as if they were materials of a concrete nature, even though they are in reality of the same nature as language.

It was not in these sciences that Gottmann found his inspiration. For him, the objects of geography can be neither fixed nor closed. The crossroads obey the principle assigned by Bergson in *L'Evolution créatrice* to the "vital properties [which] are never entirely realised, but always in the process of being realised; they are tendencies rather than fixed states. And a tendency can be fully realised only if it is not thwarted by any other tendency. But how could this ever be the case in life, where mutually antagonistic tendencies are everywhere at work?"[4]

Gottmann's structuralism, if we are permitted to say so, is looking less for fully realized structures than for those that are in the process of formation and determine "tendencies." This is why it is adapted to the specific type of organization of geographical space.

The structuralist maneuver

In *La politique des États et leur géographie,* two chapters are particularly crucial to the understanding of the epistemological step taken by Gottmann: the second chapter, devoted to "Geographical doctrines in international relations" and the last one, entitled "The Genesis of regionalisms," in which he "outlines," as he says, a theory of regional organization aimed at going beyond the problems and impasses noted in the second chapter.

Let us first of all sum up the chronology of geographical thinking as Gottmann presents it. He first considers the works of men of letters or administrators such as Jean Bodin, Vauban, or Montesquieu. These men created political maxims to address problems concerning the exploitation of natural resources or with the way to gain access to them. Then, as he moves on to the 19th century, his analysis focuses on those geographers who turned their discipline into a science that no longer aimed at proposing philosophical or pragmatic maxims as in the past, but at uncovering general laws to explain the natural and human organization of the surface of the globe. But, according to Gottmann, the breakthroughs realized by these thinkers would not be reinforced by their immediate followers. The borders laid down in the 1919 treaties, drawn up according to the geographical principles of the 19th century, gave rise to violent controversies which undermined those principles without allowing new ones to emerge. Ratzel's and Mackinder's ideas were to be caricatured to the point of infamy by the school of Geopolitik, without making the decline of Europe and the emergence of the United States of America easier to understand. With few exceptions, the French school failed to analyze in sufficient depth the horror of World War I, as well as its causes and consequences, and instead diluted its energy in the description of particular cases. Finally, in the United States, supporters of ecological theories stubbornly insisted on explaining even modern history by the evolution of natural milieus.

Gottmann's chronological examination of "geographical doc-

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trines," which is to be considered within the framework of a structural theory of the region, comprises three phases: the first one for the conception of the basic model, the next one for its development, and the third being a phase of crisis in the face of the complexity thus introduced and the incapacity to bring it under control.

The source of the model is "geographical determinism." The expression took on a very precise meaning at the end of the 18th century, and can be defined as a system to explain state policies and social rules through the geographical characteristics of countries. For those thinkers who, in the tradition of the enlightenment, Lamarck's and/or Darwin's ideas on the evolution of species, and 19th century positivism, wanted to create a scientific geography, it was a tempting approach, but they realized that it posed a difficult problem. Namely, any explanatory system would need to be validated according to the scientific method. If it is obvious that such determinism cannot be absolute, it is also unthinkable that it might be entirely false, for any policy or social rule must take concrete realities into account. Now, if geographical characteristics determine social policy and social organization, the latter partially determine the geographical organization of the territory as well. Geographical organization is therefore self-determining in a sense that makes it ever more coherent with the maxims of geographical determinism. Hence the following paradox: the explanatory system would of itself produce its own truth and would render scientific validation procedures ineffectual. Even if it were false at the beginning, it would become true at the end.

Introducing the scientific method in geography therefore called for a re-examination of the problem. It became necessary, in particular, to stop considering geography and politics separately, as two elements interacting mechanically, and to posit the existence, to use Vidal de la Blache's words, of "geographical beings," which are endowed with a political function and which use territorial partitioning organically to regulate territories. In modern terms, a region would be a self-regulated structure, and a closed one only in the extreme case of total geographical determinism.

But these geographers also understood that this regulation was not just political and legal. Politics perceives and acts upon geographical reality through a social filter which continuously determines the value of resources that nature distributed unequally. Among other variables, this social process depends on factors that are unique to peoples, as well as on their territories' positions within exchange networks. Thus culture and position must be associated to politics and to physical geography to compose a modern problematique of the regulated differentiation of regions.

This plan, however, was to founder, as Gottmann shows, due to the nature of the link between these differentiating factors and the region. Each in his own way, Ratzel and Mackinder had consistently viewed this link within the framework of separation and mechanical interaction. Ratzel anchored his definition of people in nature by means of physical anthropology, and Mackinder anchored the position phenomenon in the shapes of continents. In both cases, these definitions are overly rigid and sterile because they are set outside of the relational system of human geography. The dispute between Albert Demangeon and the sociologist François Simiand (SIMIAND, 1909) is also very revealing of the problem geography was to be faced with when integrating the social factor into geographical organization. Let us add that Vidal de la Blache's organicism was limited by its generality and a certain naïveté denounced by C. Vallaux, whose remarkable analyses had little influence (1925, pp. 48-49).

This overview of geographical doctrines thus shows that the search for factors that determine how geographical systems function and evolve has been repeatedly confronted with im-

passes and paradoxes. It is impossible to logically separate a geographical region from politics, economics, society, and probably even from language, for these dimensions exist only insofar as they have been grounded in a territory. In order to resolve these paradoxes of inseparability, the only solution is to progressively construct an object that would organically integrate political, economic, and social functions. But this solution comes with a price: such an object functions in a considerably more complex way, and this increased complexity has to be addressed. Such was the challenge that needed to be confronted in order for a theory of the "genesis of regionalisms" to come into existence.

The three tests of structuralism

While considering the problematic of transdisciplinarity within the social sciences, Jean Piaget wrote that one thing these sciences had in common was that they were all dealing with the phenomenon of organization. They are faced, therefore, with three types of problems, which assume specific forms in each discipline (PIAGET, 1970, p. 262):

• How do new structures appear?
• How do the regulatory or self-regulatory processes that preserve the equilibrium of these structures function?
• How do exchanges of goods and information take place within these structures?

This text by Piaget became a landmark in the field of epistemology, and geographers are well aware that it does not mention their discipline even once. We do not know how familiar Gottmann was with Piaget's works and vice versa. Be that as it may, we stand by our thesis that his geography is structuralist and take it as a proof that the last chapter of La Politique des États et leur géographie, entitled "Genesis and evolution of regionalisms" answers these very three questions point by point.

"It is easy to understand, with the help of psychology, sociology, and history, why mankind partitioned itself in this manner, thus compartmentalising the space in which its activities take place. It is harder to see, however, how compartments or partitions come into being or evolve, how a new region is born. Vidal de la Blache believed that no issue was more important for political geography than observing how isolated towns awoke to the general currents of life surrounding them. But one needs to understand why and how these towns became isolated in the first place, and turned away from the circuits without which, unless one believes in spontaneous generation, they could not have come into being and lived."[5]

Not only is Piaget's first question clearly formulated, but it is also emphasized by the evocation of Vidal de la Blache. Circulation is introduced as a first cause of the formation of regions. This is a necessary cause but not a sufficient one, for circulation in and of itself would not have been able to engender phenomena reaching a state of equilibrium, hence Piaget's second question: that of the meta-equilibrium that brings the structure into existence. This question leads Gottmann to introduce his iconography concept:

"If circulation had ruled supreme over the political stage, it would probably have resulted in a near infinite scattering of authority, with each cross-roads or town doing absolutely as it pleased, and establishing its own rules."[6]

"In order to anchor men to the space they occupy, to give them a sense of the links that unite the nation and its territory, it is essential to integrate regional geography into the sphere of iconography. Thus iconography becomes, in geography, a centre of resistance against movement, a factor of political stabilisation."[7]

The term "iconography" has rarely been re-used by other geographers. It designates the material symbols of the norms regulating community life in a territory – monuments, statues, buildings, coats-of-arms, or flags – which are also identity markers. These symbols form an extraordinarily varied body organized according to different scales:

- that of the priorities given by society to its values (politics, religion, art, or sports ...);
- that of aesthetics, which highlights the original, noteworthy, and emblematic symbols of a given style that is reproduced in the most diverse locations (e.g. basilicas and cathedrals versus ordinary, banal churches); and,
- that of the arbitrariness of the sign vis-à-vis its function, which turns it into an identity marker that is more or less impenetrable to the lay person (e.g. heraldry).

This is when Piaget's third question, that of exchanges, starts coming into focus:

"Are circulation, a principle of movement, and iconography, a principle of stability, so constantly opposed in practice? If this were the case, mankind would have found it most difficult to organize space, and create all the forms of differentiation we know so well. We do not believe that the fact these functions are opposed might have long prevented some sort of co-ordination from taking place."[8]

This "co-ordination" is effected through a variety of means. One example is that a significant part of circulation is dedicated to the maintenance and construction of iconography; another is that circulation is channelled through a network of checkpoints, tollhouses, market squares, etc. that makes transportation safe and establishes trust between traders and buyers.

This theoretical outline thus laid the groundwork for explaining the complex way in which regional structures function. Their organization incorporates, on the one hand, a function of control of the flows that go through a region and supply the latter with the materials and information necessary for people to live and work; and on the other hand, an iconographic function which encodes the territory, allows inhabitants to build their identities, and makes them accept the political authority that guarantees this encoding. For "it is indeed necessary that a strong cement bind the community members who accept to live together under the same political authority."[9] In addition to these essential functions, which must coexist in a state of equilibrium in order for the structure to exist, there is also the aforesaid political function, which serves to catalyze the coordination between iconography and circulation.

Where formalism makes theory operational

The "chains of crossroads" formalism makes the system presented above operational. Gottmann's key concepts, *circulation, iconography, compartmentalization,* and, to some extent as well, *accessibility,* are not general abstractions but can be analyzed as sets of relationships between the internal milieus of crossroads, and within the external milieu in a given region. We shall have to make slight extrapolations on Gottmann's writings but the opinion he voiced in 1964 on the 1947 article sounds like an invitation to do just that:

"I developed the idea of the role of consumption in geography in my 1957 book, *Marchés des matières premières.* The concept of cross-roads is a more subtle, more difficult one. I had indeed already dealt with this subject in another book, *La politique des États et leur géographie;* but it should be explored further and over a longer period in order to learn how to systematically handle this complex network of spatial relationships – some of which are of a material nature, others

abstract, cultural – which progressively form in some places rather than in others to organize the lives of our regions and of whole countries."[10]

A *compartmentalized space* can be defined as a set of administrative territories whose internal milieus are subject to legal regulations. These territories are crossroads, insofar as they direct the circulation of information and political decisions. They may sometimes be embedded, overlapping, contiguous, or lacking common borders: these terms determine their relationships in their external milieu. The regulations in force within the territories are linked by the very strong logic of a juridical and administrative organization that can be hierarchical, concentrated, or decentralized. This logic organizes the relationships between the internal policies of territories. As far as relationships between these milieus are concerned, the question arises of the coherence between legal regulations and the meshing of territorial entities which conditions the healthy application of policies or, as it is called today, good governance.

It is also easy to conceive that *circulation* is controlled by a chain of particular crossroads: "markets." The mediating role of the market system between natural resources and consumers' needs is essential if we want to understand markets:

"Therefore, whether one considers foodstuffs, which occasion large-scale exchanges, or industrial raw materials which will be transformed in factories, one can see that raw materials are defined by the fact that they *belong to a network leading to an act of consumption.* This network requires a complex technical and commercial organization. It creates the need that will be satisfied by the raw material. Without such networks organized by men, there would not be raw materials in the modern sense of the word."[11]

Relationships in the external milieu of markets are determined by goods transportation conditions, present or foreseeable in the not too distant future, and by consumers' access to products – both being unequally distributed. As to relations between internal milieus, they are governed by the economic laws of supply and demand. But for Gottmann, "the law of supply and demand does not apply automatically or without cost" (GOTTMANN, 1957, p. 429). The two sets of relations interact notably by means of political reactions which modify accessibility.

Accessibility appears to be a borderline instance of circulation. Crossroads' internal milieus are linked only virtually by projects, which may become actual transactions or not.

Iconography may seem to be more alien to the formalism of crossroads. Gottmann never devoted a comprehensive book-length study to it, as he did for circulation and compartmentalization. He talks about it as a "network of symbols" (1955, quoted by PREVELAKIS, 2001, p. 48) which led the organizers of the 1996 colloquium on "European iconographies" to write in their circular letter that "what matters is not the content of an iconography but how the latter functions within a network of stable relationships between a community and geographical space." We are not dealing with an abstract ideology, but with an ideology embodied in a set of places and landscapes.

In order to define these places and their relationships in geographical space and between their internal milieus, it is useful to examine not only the 1996 colloquium's contributions, but also, as we have already proposed in a previous article (HUBERT, 1998), to use Ritchot's urban form theory (RITCHOT and MERCIER, 1992; RITCHOT, 1999; DESMARAIS and RITCHOT, 2000). We propose that iconography's crossroads be considered, to use urban form theory's terminology, as "neighborhood units" endowed with a "political positional value" that actualizes itself through the elaboration of "concrete forms" of a certain style. For instance, the style of Haussmann's boulevards symbolized the renewal of Paris and the assertion of the French bour-

geoisie's power in the second part of the 19th century. Similarly, the style of the buildings that will replace the Twin Towers in New York City will have to express the exceptional value of the site. The term "style" is understood in a broad sense that applies at the same time to urban, industrial, or agricultural morphologies. Relationships in the geographical space are defined by "endo-regulated" or "exo-regulated" positions in an "abstract form" (RITCHOT, 1992, pp. 194-205). Here, relationships between internal milieus are paradigmatic in nature, as are all systems of relationships between symbols: places are differentiated or resemble each other through related or opposed styles, the latter being the concrete signifiers of the actualization in those places of abstract axiological signifieds.

Translating general concepts into the crossroads formalism, then, makes it possible to tackle spatial analysis and field work. It also shows how justified it was to choose these three structural levels, which are clearly separated in essence, to analyze the functioning of regions and neutralize its complexity. Finally, it allows us to buttress the parallel reading of Gottmann and Piaget.

Addressing complexity

The plurality of the regulatory system, as Gottmann viewed it, is intrinsic to geographical organization, but it is – as Piaget and, in slightly different terms, Ruyer (1952) show us – a constant of self-organization phenomena. The structures studied by geographers are both structures in the making and working structures, structures that are forming only because they are functioning, and not ones that are "completed and therefore closed upon themselves" (PIAGET, 1970, p. 266), as are those of mathematics, structural anthropology, or linguistics.

Piaget writes that in these structures "in the making," "A structure's self-regulation process is no longer reducible ... to the set of rules or norms which characterise the completed structure: it consists of a system of regulation and self-regulation processes, where errors are corrected after they occur, and not yet before they do, as in the final system ... Exchanges are no longer limited to internal reciprocal processes, but consist in large part of exchanges with the outside, which bring into the system the supplies necessary to its functioning."[12]

A structure is endowed with several regulatory systems based on *rules* or *norms, values* and *signs* (PIAGET, 1970, pp. 273-278).

Rules and norms constitute a static form of regulation. Some rules can be inferred from a certain number of axioms, which makes them particularly rigid and coherent, as in mathematics and also in law, where the historical basis of Roman law has remained to this day that of all western legal thinking (LEGENDRE, 2001). There also exist systems of non-inferrable norms, which result from historical evolution. These norms are all the more stable as they are linked to the psychological, and strongly affective, mechanisms of the construction of the self and of filiation.

But some regulations are intrinsically linked with the structure's dynamism. Indeed, according to Piaget, "Any functioning is at the same time production, exchange, and equilibration, that is to say that it constantly entails decisions or choices, information and regulation. It follows that the very notions of structure and function imply ... the derivative notions of functional usefulness, or value, and of signification."[13]

It is necessary to distinguish between two kinds of values: on the one hand, "primary utilities," also called "finality values," that is, the usefulness of an element considered as playing a qualitative role in the production or preservation of this structure as an organized form" (PIAGET, 1970, p. 270); and, on the other hand, "secondary utilities," or "yield values," which relate to the cost or gain associated to the useful element" (p. 270).

There are also two sorts of significations: "immediate signification": "when a stimulus that is immediately recognised triggers an un-delayed response," and "mediate signification" (p. 271), "if encoding takes place according to a determined code and decoding occurs only later" (p. 271).

This third level of regulation stabilizes all systems of spatial discontinuity through a system of signification, or paradigm. It is of no less importance than the other two, for the differentiation between the parts of a structured totality, that is to say, the discontinuity of space, is a prerequisite for any structure to function.

If we now return to the structural levels defined by Gottmann, it becomes clear that compartmentalization depends on a system of rules and norms, whereas iconography is a system of signs, and circulation control is based on values and utilities. Piaget shows us that the existence of different regulatory systems is the key to the structure's equilibration, for rules, norms, utilities and signs do not have the same effect on a structure's synchronic (spatial) and diachronic (temporal) coherence.

Rules and norms have considerable diachronic coherence. If it does nothing but follow rules, as, for instance, in the case of apprenticeship, the functioning of the system is entirely directed toward achieving a state of stability and completeness. This is why politics is a formidable accelerator of differentiation. But these rules have little synchronic coherence. Thus, as long as conformity with the institutions is ensured, it matters little from the judicial point of view – although it does matter a great deal where circulation is concerned – that laws with opposite effects be in force in neighboring territories. "Three degrees of latitude reverse all jurisprudence," as Pascal deplored.

Systems based on utilities and values do not behave in a uniform way. They function through a series of actions, evaluations, and retroactions which do not necessarily converge; nor are they immune to bifurcations or chaotic behavior. Thus, economic organizations sometimes follow converging trends and then diverge for reasons that may be internal or external. It is sometimes during these periods of breakdown in the diachronic logic that synchronic logic becomes strongest. For instance, economic crisis or strong growth will spread from market to market, causing spatial indifferentiation. Conversely, as shown by Thierry Rebour (2000) long-term economic trends increase spatial differentiation through the growth of urban areas. For Piaget, as for Gottmann, a structure's self-organization cannot be derived only from a type of regulation based on utilities.

Lastly, regulatory systems that are based on signs systems exhibit a third type of behavior: their coherence is essentially synchronic. If iconography can withstand the change introduced by circulation, it is thanks to the strength of its synchronic coherence. It is as it were traversed by circulation, especially when the latter obeys a diachronic logic, and by policies, without being deeply affected by them, at least for a time. Any novelty must pass through the filter of its categories of interpretation and what has no meaning relative to iconography can be rejected almost without having been noticed. But iconography is very sensitive to variations in norms, which, while preserving relations of opposition between symbols, can rapidly reverse axiologies and destabilize paradigms: what was in vogue becomes passé and vice versa, albeit with some exceptions.

A geographical region is thus a complete dynamic structure whose equilibrium depends on three types of regulations: the first is strongly diachronic, the third strongly synchronic, and as for the second, it alternates between a synchronic mode with diffusing effects and a diachronic mode with focalizing effects.

The building of Brasilia (figs. 1 to 5), which was destined to become the new capital of Brazil and was launched in 1956 by President Juscelino Kubitschek, is an example of in-depth intervention on regional geographical structures where the iconographic dimension was especially stressed. Oscar Niemeyer's architecture fashioned one of the most magnificent 20th century representations of the "three powers," executive, legislative, and judiciary, which are the pillars of modern democracy. These forms, symbols of democratic rules, were immediately integrated into the national iconography, as was the overall layout of the city. This layout, "o plano piloto," the brainchild of urban planner Luciano Costa, is inspired by modernist principles and designed for automobile transit. It was compared to a bird, which, incidentally, is reminiscent of a dove landing, the symbol of the Holy Spirit in the catholic iconography. Bank notes illustrated with the Square of the Three Powers and coins adorned with the "plano piloto" thus come to fuse into one object the three elements of regional regulation according to Jean Gottmann: judicial rules and norms, circulation, and iconography.

Fig. 1: Brazil – Location of Brasília, the new capital.

1. Plaza of the Three Powers
2. Esplanade of Ministeries
3. Embassy Sectors
4. Cultural Sectors
5. Public Service and State Enterprise Sectors
6. Banking Sectors
7. Highway Platform and Bus Terminal
8. Entertainment Sectors
9. Hotel Sectors
10. Commercial Sectors
11. Medical-Hospital Sectors
12. Radio and Television Sectors
13. Convention and Exhibition Sectors
14. Sport Centre
15. Municipal Plaza

Fig. 2: Brasília – Sectoral organization and traffic plan of the Plano Piloto, 1957 (the brainchild of urban planner Luciano Costa).

Fig. 3: Brasília – General view of Oscar Niemeyer's architectural synthesis: buildings of Brazilian Congress and Esplanade of the ministries during construction, circa 1960. (*Source:* © Arquivo Público do Distrito Federal, digitized by August Real).

Fig. 4: Brasília – General view of Oscar Niemeyer's architectural synthesis: buildings of Brazílian Congress and Esplanade of the ministries in 2002, with automobile circulation. (*Source:* © etien).

Fig. 5: Brazilian national iconography – Coin adorned with Lucio Costa's plano piloto of Brasília, bank notes illustrated with Oscar Niemeyer's "Plaza of the three powers," and President Juscelino Kubitschek who launched the project of a new capital in 1956.

The problem of exchanges

The fundamental principles of the equilibrium of geographical structures were discovered by Gottmann. He also perfectly understood how much this equilibrium depended on communication between people. None of these regulatory systems can function and adapt to other systems, or even exist, without some people talking to each other, reaching compromises, travelling, or exchanging goods and information.

When he did us the honor to comment on the book that came out of our doctoral thesis (HUBERT, 1993), Gottmann thus expressed the following reservation:

> "I have to say, however, that what I missed the most when reading *La Discontinuité critique*, was the factor of communication between individuals and societies. Mankind sets itself apart from the rest of the animal kingdom through its ever increasing capacity to communicate. Discontinuities are so important because they interfere with communication; the city is an anchoring point of the whole organization system because it has always been the locus of communication *par excellence*. The old myth of the Babel Tower, linguistic diversity, must be incorporated, it seems to me, into any theory of discontinuities." (GOTTMANN, 1993, p. 202)

Within the framework of the chains of crossroads approach, all spatial relationships in the external milieu are mediated by the language and techniques of the inhabitants operating in internal milieus. The vectors of communication are produced by these internal organizations, and distances can be bridged only on the condition that there be a transaction at the point of emission or that of reception, which generally implies that an exchange has taken place. Relationships in the external milieu are therefore more often reciprocal than not, and each crossroads offers multiple opportunities for exchanges. Circulation is thus self-generating, which goes beyond a simple materialistic equilibration of resources. If, as such was and still is our thesis (HUBERT, 1999), Ritchot's theory of structural geography has taken geography one step further on the path of scientificity, then Gottmann was right to ask that it be shown that

this theory also made it possible to better define the role of exchanges within spatial structures.

Despite Petitot's teachings, our interpretation had not sufficiently distanced itself from the imposing anthropological and linguistic model of closed structures. Furthermore, this model made frequent appearances in Ritchot's and Desmarais' writings. Besides, we gave less importance to communication because we were taking particular care not to reduce the phenomena of discontinuity to mere projections of linguistic processes. This reductionist approach is only valid for one form of space differentiation by man, that of compartmentalization, but neither for the types of discontinuity due to circulation or iconography, nor especially for this critical discontinuity from which all other three are derived: *vacuum* (HUBERT, 1993, p. 151 ff).

But geographical organizations are regulated structures only because their inhabitants have organized themselves to pursue different interests by pooling their resources. It is through communication that laws get discussed, norms evolve, and styles come to be imitated or transposed. Even more fundamental, it is through general communication between incompletely informed interlocutors that the levels of values are set, that utilities are estimated according to a common standard. Similarly, it is through communication and transactions for the control of mobility and the occupation of space that inhabitants can let the "deeper values" of the collective imaginary come to the surface of consciousness (DESMARAIS, 1995, pp. 71-82). These values become in turn embodied in their habitat and the geographical landscape they fashion, which are the tangible representations and the symbols of the society they envision.

Communication is the counterpart of the lack of comprehension about and the imperfection of unfinished structures. Exchanges between levels of regulation are thus a crucial question, which can only be explored by analyzing communication and the way it has of converting norms into utilities, utilities into symbols, or symbols into rules. Is it not in part the meaning of this maxim by Montesquieu, which Gottmann liked to quote: "It is in the nature of trade to make superfluous things useful, and useful ones necessary"?

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Communication and exchanges, however, also need to be organized in time to allow spatial structures to emerge, and structural geography has put forward some new ideas since 1993. In particular, new attention has been given to a phenomenon largely ignored by Gottmann in his theoretical works, but which seems to play an important role: it is rent, which is not a utility like the others, but a factor regulating and anchoring circulation. Ritchot shows that it enhances the economic value of iconography, and Rebour, that its payment provides cash for the purchase of consumer goods (see the cycle of "redeeming," REBOUR, 2000, p. 57). Rent is therefore at the meeting point of circulation and iconography, and it is not surprising that the selling of land has been controlled by political power for so long. But it goes even further. Rebour also shows that transactions linked to rent generate a profit, whose distribution between social forces determines the morphology of urban networks. The variations of rent and productivity are also linked with the differentiation in circulation flows and with long-term cyclical variations in the importance of these flows. For Moriconi-Ebrard, it is necessary to distinguish between three channels to understand the dynamic of urbanization: that of agriculture and food products, that of the military and high-tech manufactured goods, and finally that of finance and services. In his study of the history of large cities, he reveals an alternating pattern with one channel reinforcing another, and then neglecting it for the benefit of the third one (MORICONI-EBRARD, 2000, p. 293). Each of these phases favors the circulation of a flow, as well as the development of habitat in zones surrounding the main crossroads. For Moriconi-Ebrard, the formation of large urban areas constitutes the unfolding of a complete cycle, with political and economic agents controlling not only the techniques necessary for boosting supplies as well as those ensuring military and financial power, but also the crises, famines, wars, and economic depressions punctuating the passage from one phase to another.

Because it links together the three levels of regulation of geographical structures, communication is the key to understanding the evolution and future of both the content and the form of the different regions of the world.

Conclusion

A dwarf on a giant's shoulders can see further than the giant. If he manages to securely fasten a rope between two giants, he can see other things while staying on their level. Such was this article's ambition. Through inventing this meeting between Gottmann and Piaget, we wanted to show that such a meeting was plausible and could help us to understand how geography can be and remain a science engaged in a dialogue with other sciences.

Such was indeed geography's problem after World War II, which had just shown the ability, multiplied tenfold, of human organizations to impact the geographical milieu. Politicians found themselves charged with greater responsibilities, and immense tasks, which necessitated a better understanding of the system of geographical relations, opened up everywhere in the world: the reconstruction in Europe and Japan, agricultural and industrial development – with or without decolonization – in other countries in Asia, Eurasia, South America, Africa, as well as the management of megalopolitan urbanization in North America. These tasks have not disappeared and have sometimes resurfaced on other continents. This responsibility remains as pressing as ever.

Jean Gottmann is one of the very few geographers whose works shed light on the constitution of geographical knowledge and on its limits: the only thing a geographer can do is observe and analyze the functioning of regions which are both in the making and adapting their functioning to their formation. May-

be those regions will not reach a complete form, maybe mankind will even stop producing regions some day, and will find a new way to combine the strengths of men with a view to improving their living conditions. But in order to understand and apprehend these regions at the very moment they come into being, geography must equip itself with methods, theories, or models that are not always neutral vis-à-vis their object of study. Gottmann has explained the necessary art of reinventing the region in order to circumvent the excess of complexity that may cause us to lose sight of our goal.

Notes

1. "Une méthode d'analyse, pour être scientifique dans notre discipline, doit donc renoncer à un matérialisme géographique trop simple pour les faits et admettre que les forces spirituelles peuvent compenser des pressions dont l'énergie puise à d'autres sources." (GOTTMANN, 1966, p. 91).
2. "Le milieu géographique est un système de relations qui s'inscrivent dans l'espace différencié et organisé accessible aux hommes. Il n'y peut donc y avoir en géographie de déterminisme que sous la forme d'un *déterminisme de relations*. Les faits géographiques sont par leur nature même des faits *relationnels*" (GOTTMANN, 1952, p. 15; this passage was felicitously evoked by G. PREVELAKIS, 2001, p. 48).
3. "L'étude et le contrôle éventuel de ce système de relations est l'aboutissement logique des travaux du géographe à l'échelle régionale, comme aussi le but des responsables d'une politique à l'échelle des Etats " (GOTTMANN, 1952, p. 16) "[...] tandis que la géographie étudie essentiellement l'organization de l'espace terrestre, la politique cherche à imprimer à cette organization des formes nouvelles ou à préserver les anciennes. La politique des Etats sera donc déterminée très largement par le système de relations que la géographie enseignera aux responsables de cette politique" (*ibid.*, p. 17).
4. " Les propriétés vitales ne sont jamais entièrement réalisées, mais toujours en voie de réalisation; ce sont moins des états que des tendances. Et une tendance n'obtient tout ce qu'elle vise que si elle n'est contrariée par aucune autre tendance: comment ce cas se présenterait-il dans le domaine de la vie, où il y a toujours implication réciproque de tendances antagonistes?" (quoted by GOTTMANN, 1966, p. 86).
5. "On peut fort bien comprendre par la psychologie, la sociologie et l'histoire, *pourquoi* l'humanité s'est ainsi cloisonnée, compartimentant en conséquence l'espace où ses activités se situent. On voit moins bien comment se produit et évolue le compartiment ou la cloison, *comment naît une région nouvelle*. Vidal de la Blache croyait qu'il n'était pas de problème plus important pour la géographie politique que de déceler et de suivre l'éveil à une vie générale de localités isolées; encore faudrait-il savoir pourquoi et comment ces isolements sont apparus, ces localités se sont écartées de circuits sous lesquels, à moins d'admettre des cas de génération spontanée, elles n'auraient pu se former et vivre." (GOTTMANN, 1952, p. 214).
6. "Si la circulation avait été maîtresse sans partage de la scène politique, elle aurait sans doute abouti à un éparpillement de l'autorité presque à l'infini, chaque carrefour, chaque ville agissant à sa guise, établissant ses propres règlements." (*ibid.*, p. 219).
7. "Pour fixer les hommes à l'espace qu'ils occupent, pour leur donner le sentiment des liens qui unissent la nation et le territoire, il est indispensable de faire entrer la géographie régionale dans l'iconographie. C'est ainsi que *l'iconographie* devient en géographie un môle de résistance au mouvement, un *facteur de stabilisation politique*." (*ibid.*, p. 221).
8. "La circulation principe de mouvement, et l'iconographie, principe de stabilité, sont-elles en si constante opposition dans les faits ? S'il en était ainsi quelles difficultés les hommes n'auraient-ils pas eues à organizer l'espace, à créer toutes les différenciations que nous connaissons. Nous ne croyons pas que l'opposition des fonctions ait empêché une coordination de se faire et depuis fort longtemps." (*ibid.*, p. 221).
9. "Il faut en effet qu'un ciment solide lie les membres de la communauté qui acceptent la cohabitation sous la même autorité politique." (*ibid.*, p. 221).

10. "J'ai développé l'idée du rôle de la consommation en géographie dans mes *Marchés des matières premières* [en 1957]. Le concept de carrefour est plus subtil, plus difficile. Je l'ai sans doute repris dans un autre livre *La politique des Etats et leur géographie* [en 1952], mais il faudrait encore y travailler longuement pour apprendre à manier systématiquement cette trame complexe de relations dans l'espace, les unes matérielles, les autres abstraites, culturelles, qui peu à peu se nouent en certains endroits plus qu'en d'autres pour organizer la vie de nos régions, de pays entiers" (GOTTMANN, 1966, p. 93).

11. "Ainsi, que l'on considère les denrées alimentaires qui donnent lieu à de vastes opérations d'échange ou les matières premières industrielles qui se transforment en usine, la qualité de 'matière première' apparaît *déterminée par l'appartenance à un circuit aboutissant à une consommation.* Le circuit exige l'existence de toute une organization technique et commerciale. C'est lui qui crée le besoin auquel satisfait la matière première. Sans circuits organisés par les hommes, il ne serait pas de matières premières au sens moderne du mot" (GOTTMANN, 1957, p. 19; the text's italics).

12. "L'autoréglage de la structure ne se réduit plus [...] à l'ensemble des règles ou normes caractérisant la structure achevée: il est constitué par un système de régulations ou d'autorégulations, avec correction après coup des erreurs et non pas encore précorrection comme dans le système final [...] l'échange n'est plus limité à des réciprocités internes mais comporte une part importante d'échanges avec l'extérieur, en tant qu'alimentation nécessaire du fonctionnement" (PIAGET, 1970).

13. "Tout fonctionnement est à la fois production, échange et équilibration, c'est-à-dire qu'il suppose sans cesse des décisions ou choix, des informations et des régulations. Il en résulte que les notions mêmes de structure et de fonction entraînent [...] les notions dérivées d'utilité fonctionnelle ou valeur et de signification " (PIAGET, 1970, p. 269).

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Acknowledgement

The complete bibliography of Jean Gottmann

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Jean Gottmann was an indefatigable writer throughout his whole life. Michael Berchin, his stepfather, was a journalist and editor of the most read Russian newspaper outside Russia in Paris while he grew up and was studying at the Sorbonne. And Bernice Adelson Gottmann, his wife, was editor at *Life* magazine in New York. Gottmann wrote mostly for academic journals, but also for two governments and for the UN during and after the war. During his academic transhumance, he often supported himself with his books and his writing. Of the huge amount of letters he wrote to thousands of correspondents, 22,000 pages are located and catalogued at the BnF, in Paris.

Here, Gottmann's geographic literature is represented. It spans over 60 years of activity – between 1933 and 1994 – and is composed of almost 400 titles, about 30 of which are books. Published mostly in French and English, his writings have been translated into 14 languages including Spanish, Portuguese, Italian, Tamil, Dutch, Turkish, Slovenian, Japanese, Polish, Yiddish, German and modern Greek.

Jean Gottmann's first official bibliography – covering his writings between 1933 and 1984 – was published in John Patten (ed.), 1983, *The Expanding City, Essays in Honour of Professor Jean Gottmann*, London, New York, Academic Press, pp. xvii-xxxv.

The same bibliography is entirely reprinted, with just one addition relative to 1983, in his volume of the same year: *The Coming of the Transactional City*, published in College Park by the University of Maryland's Institute for Urban Studies.

A selection of his publications dedicated to urban geography between 1949 and 1987 can be found in Jean Gottmann and Robert Harper, 1990, *Since Megalopolis, the Urban Writings of Jean Gottmann*, Baltimore and London, Johns Hopkins University Press, pp. 269-280.

Thanks to the opening of the Fonds Gottmann, at the Bibliothèque Nationale de France (Département des Cartes et Plans) it was possible to verify his entire bibliography on the same notebook where Gottmann kept note of his own publications.

Finally, the information in this bibliography was compared to the one available from the indexes of those thematic volumes that are selections of previously published essays from different scientific journals. In particular *Etudes sur l'Etat d'Israel* (1958), *Essais sur l'aménagement de l'espace habité* (1966), *La città invincibile* (1983) and *Since Megalopolis* (1990).

We would like to thank Jean-Yves Sarazin, curator of the Fonds Gottmann at the Bibliothèque Nationale de France in Paris, for his kind re-reading of the complete bibliography. An online version was published by Cybergeo in 1998 (No. **64**, 27.11.98, 28 p.) and is available at:
http://www.cybergeo.presse.fr/ehgo/muscara/gottbibl.htm

We would also like to invite the reader who may be informed of recent and/or posthumous publications of Jean Gottmann – not included in this list – to contact the author.

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Jean Gottmann in *Ekistics* for the first time, 1963

ECONOMICS, ESTHETICS AND ETHICS IN MODERN URBANIZATION

Jean Gottmann

The paper from which this article is abstracted was published as an afterthought to Gottmann's major work Megalopolis (1961). The full text is available in pamphlet form from The 20th Century Fund, 41 East 70th Steet, New York.

POWER AND PRESTIGE IN THE CITY

For many thousands of years the majority of mankind lived in the rural countryside and worked at making the soil yield the raw materials necessary to feed and occupy everybody. Only a minority inhabited cities—densely built-up small areas, set aside from the «open country» as separate entities, endowed with a set of laws and regulations peculiarly their own. Walls, ramparts, or at least legal lines enclosed them. In some cases city people may have engaged in farming outside the walls; they may have drawn most of their income from agricultural revenues. But the city was more typically specialized in trade, manufacture, administration, and in large gatherings for religious, political, recreational, or commercial purposes. These specially *urban* functions carried power, and with power, prestige. For whether it was a temple, a market, a tribunal, or a king's residence that originally determined the city's growth on a given site, a city was always a seat of some kind of power. A scholarly international meeting recently held in Chicago to examine the origins of the urban process in ancient times published its proceedings under the title: *The City Invincible*. Indeed, the city was a place from which the open country was dominated, where wealth was gathered, the locus of authority and responsibility. It claimed a long, lasting future of dominance.

Change affects much more than the attitude of the rural population towards the modern urban centers. It modifies the very structure of the city, the means and the aims of those who plan, build, and govern cities. Architects and urbanists used to be concerned mainly with beauty and prestige: their job was to build churches and castles, fortresses and ramparts. Because all these buildings housed prestigious and respected functions and people, they had to be spectacular, to impress the outsider, the people passing by. A certain kind of beauty, of esthetics was indeed one of the buildings'

functions. It may have been functional to decorate and overstress the esthetic features. This past of architecture and urbanism has brought us an extraordinary artistic heritage, in fact most of the world's marvels. A great art thus evolved, going through many styles, schools, and stages.

The people of our century are more intent than ever on preserving the monuments of the past, on treasuring and admiring the art and techniques of architectural and urbanistic beauty. Every city retains, for the various aspects of community life, an urgent need of spectacular buildings, the materials, design, and appearance of which give expression to the beauty, dignity, and authority of the functions performed within and to the virtues of the owner, whether private or public, individual or corporate. But this is no longer the main market for the talents of the architect, urbanist, and builder. Those talents and endeavors are also and increasingly to be exercised for a completely different market of mass consumption, mass transportation, mass production, for the daily use of the rank and file as much as and perhaps more than for the use of those who hold power and prestige. And still we all want the city to be beautiful, as well as comfortable and accessible to all. The urbanization of the world carries with it social progress: a more urbane way of life for the vast majority of the people, more comfort, better education, more leisure, and better taste. Two centuries ago people craved more happiness for all; now we talk of the opportunity for excellence. Our social and political ethics require the greatest possible equality in distribution of benefits. Are such requirements consistent with esthetic demands inherited from a very different past, and with the economic mechanisms of the time?

These are not purely academic questions. The solutions provided are molding the environment of our generation and the next. Their discussion

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Ekistic grid index

The articles in this issue are coded by the scale of settlements and an aspect of an element indicated in the ekistic grid.

The content of each article is classified within an ekistic grid as follows:

• The scale of the settlement(s) with which the article deals is selected from among the 15 ekistic units:

No.	Name	Population
1	Anthropos	1
2	Room	2
3	House	5
4	House group	40
5	Small neighborhood	250
6	Neighborhood	1,500
7	Small polis	10,000
8	Polis	75,000
9	Small metropolis	500,000
10	Metropolis	4 million
11	Small megalopolis	25 million
12	Megalopolis	150 million
13	Small eperopolis	1,000 million
14	Eperopolis	7,500 million
15	Ecumenopolis	50,000 million

• The subjects dealt with in each article are selected from among the subheads of the five ekistic elements. The position of a dot in any square of the grid indicates which of the four subheads is being referred to. If the article arrives at a synthesis of these elements, either in a physical plan or in ekistic theory, the dot is at the top or bottom of the square.

key to placement
of subheads

① ②
④ ③

primary emphasis

secondary emphasis
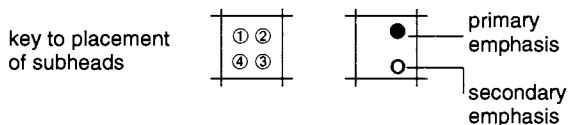
The subheads of the elements are:

NATURE
1. Environmental Analysis
2. Resources Utilization
3. Land Use, Landscape
4. Recreation Areas

ANTHROPOS
1. Physiological Needs
2. Safety and Security
3. Affection, Belonging, Esteem
4. Self-actualization, Knowledge and Aesthetics

SOCIETY
1. Public Administration, Participation and Law
2. Social Relations, Population Trends, Cultural Patterns
3. Urban Systems and Urban Change
4. Economics

SHELLS
1. Housing
2. Service Facilities
3. Shops, Offices, Factories
4. Cultural and Educational Units

NETWORKS
1. Public Utility Systems
2. Transportation Systems
3. Personal and Mass Communication Systems
4. Computer and Information Technology

SYNTHESIS
1. Physical Planning
2. Ekistic Theory

Each article is described by keywords, which are also used in the *Ekistic Index,* and by abbreviations referring to their illustrative content.

Keyword letter code

D = Diagrams
I = Illustrations
M = Maps
R = References
S = Statistics, Tables, Graphs
X = Simulation, Mathematical Models, etc.

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Note

ACE	: Athens Center of Ekistics
COF	: "City of the Future" Research Project
COG	: "Capital of Greece" Research Project
HUCO	: "Human Community" Research Project

These publications, though in very limited supply, can be obtained from the Athens Center of Ekistics, 24 Strat. Syndesmou Street, 106 73 Athens, Greece. Price in US$ includes mailing cost (surface mail).

EKISTICS (modern Greek: ΟΙΚΙΣΤΙΚΗ) is derived from the ancient Greek adjective *οικιστικός*, more particularly from the neuter plural *οικιστικά* (as "physics" is derived from *φυσικά*, Aristotle). The ancient Greek adjective *οικιστικός* meant: "concerning the foundation of a house, a habitation, a city or a colony; contributing to the settling." It was derived from the noun *οικιστής*, meaning "the person who installs settlers in a place." This may be regarded as deriving indirectly from another ancient Greek noun, *οἴκισις*, meaning "building," "housing," "habitation," and especially "establishment of a colony, a settlement or a town" (already in Plato), or "filling it with new settlers": "settling," "being settled." All these words grew from the verb *οικίζω*, "to settle," and were ultimately derived from the noun *οἶκος*, "house," "home" or "habitat."

The *Shorter Oxford English Dictionary* contains a reference to an *oecist, oekist* or *oikist,* defining him as: "the founder of an ancient Greek ... colony." The English equivalent of *οικιστική* is *ekistics* (a noun). In addition, the adjectives *ekistic* and *ekistical*, the adverb *ekistically,* and the noun *ekistician* are now also in current use. The French equivalent is *ékistique,* the German *ökistik,* the Italian *echistica* (all feminine).