

LXVI. Methodology for Systemic Geopolitical Analysis according to the Lakatosian model¹

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A Summary as introduction

1. *The absence of an epistemologically founded geopolitical analysis method that has been internationally observed was the motivation for writing the following contribution. The paper is divided into two parts: i) Definitions and Example analysis and ii) Determination of the Lakatosian Structure of the Systemic Geopolitical Analysis.*

1. See: I. Th. MAZIS, *Analyse Metathéorique des Relations Internationales et de la Géopolitique*, e-book: <http://www.e-papazisi.gr/detail.php?id=32> and my papers with Dr N. DARAS, i) Nicholas J. Daras - John Th. Mazis, “**Systemic geopolitical modeling. Part 1: prediction of geopolitical events**”, *GeoJournal*, DOI 10.1007/s10708-014-9569-3, Springer Science+Business Media Dordrecht 2014, pp. 3-8, [Author’s personal copy] and ii) Nicholas J. Daras - John Th. Mazis, “**Systemic geopolitical modeling. Part 2: subjectivity in prediction of geopolitical events**”, *GeoJournal*, DOI 10.1007/s10708-015-9670-29-3, Springer Science+Business Media Dordrecht 2015, pp. 4-8, pp. 3-8, [Author’s personal copy]

PART A²

A.1. Definition of Modern Systemic Geopolitics

The Geopolitical analysis of a geographical System characterised by an uneven distribution of power is “the geographical method that studies, describes and predicts the attitudes and the consequences ensuing from relations between the opposing and distinct political practices for the redistribution of power as well as their ideological metaphysics, within the framework of the geographical complexes where these practices apply”.

A.2. Designing a methodological proposal: 1st Stage

Decoding the title of the topic:

The title of the topic of a study of geopolitical analysis (should) define(s) the facts and the objectives of our problem. In particular it defines:

1) The boundaries of the Geographical Complex which constitutes the geographical area to be analysed.

2) The (internal or external) space of the Complex under study as a field of distribution or redistribution of power due to the activity of a specific geopolitical factor.

3) The above-mentioned geopolitical factor, the impact of which may affect the distribution of power, within or outside this Geographical Complex.

2. See: i) Nicholas J. Daras - John Th. Mazis, “**Systemic geopolitical modeling. Part 1: prediction of geopolitical events**”, *GeoJournal*, DOI 10.1007/s10708-014-9569-3, Springer Science+Business Media Dordrecht 2014, pp. 4-7, [Author’s personal copy] and ii) Nicholas J. Daras - John Th. Mazis, “**Systemic geopolitical modeling. Part 2: subjectivity in prediction of geopolitical events**”, *GeoJournal*, DOI 10.1007/s10708-015-9670-29-3, Springer Science+Business Media Dordrecht 2015, pp. 4-6, pp. 3-8, [Author’s personal copy]

A.3. Decoding the title of the Topic: Example

Topic: “The Geopolitics of the Islamic movement in the Greater Middle East”

Analysis of the Topics title:

i) Identification of the boundaries of the Geographical Complex: The boundaries of the Geographical Complex are defined by the term “Greater Middle East”.

ii) The precise identification of the Space under study: The Space under study of this specific Complex is the “interior” space of the Geographical Complex of the Greater Middle East and this is evident by the use of “in”, i.e. “in the inside of...”, “within the boundaries of...”.

iii) Identification of the Geopolitical Factor: The designated Geopolitical Factor is the “Islamist movement”.

A.4. Identifying the boundaries of the Geopolitical Systems under study: 2nd Stage

At this stage, we identify the boundaries of the Geopolitical Systems within which we are going to study the activity (or activities) of the Geopolitical Factor defined in the title. There are three levels of Systems defined according to the extent of the geographic area they refer to:

i) *Sub-systems*, that are subsets of the Systems.

ii) The *System*, that is the Geographical Complex under investigation.

iii) *Supra-Systems*, containing the main System under study -as a subset along with other Systems that may not concern the current analysis.

In order to define the System/Geographical Complex in question in terms of geographical extent, a qualitative trait is also required, one that will identify -with its very presence, its forms and its level of influences- the extent of the geographical areas of the above-mentioned Systemic levels/scales. Without this qualitative trait and its particular

characteristics, the definition of the three above-mentioned levels of Systems would not only be impossible, but also meaningless.

A.5. Defining the Systems - Example

In the above-mentioned topic the boundaries of the Systemic levels are defined as follows:

1) System:

The Geographical Complex of the Greater Middle East, not only because it is stated in the title, which already consists a fundamental criterion, but also because of the fact that the “Geopolitical factor”, i.e., the “Islamist movement”, exists, acts, and affects the whole geographical area of the Complex.

2) Sub-systems:

- The “Islamist movement in Maghreb” constitutes a Sub-system due to its peculiarities that relate to the cultural, economic, political and organisational character of Islam in this geographical area.

- The “Islamist movement in the Middle East” for the same reasons.

- The “Afghan-Pakistani and the Iranian Islamic movement”.

3) Supra-system:

We can define as Supra-system the entity with the following characteristics: i) state Power Poles; ii) International Collective Security Systems (e.g., NATO); iii) supranational Collective Systems in general (e.g., EU, UN); iv) International Multinational Financial or Operational Power Poles which influence the “Geopolitical factor” acting, however, from the External space of the Geographical Complex.

A.6. Defining the fields of influence of the “geopolitical factor”:

3rd Stage

Once we have defined the three levels of Systems, we should identify the fields of geopolitical influence of the “geopolitical factor” un-

der study. In other words, we should determine which combination of the four “fields” or “geopolitical pillars” of the given “geopolitical factor” we are going to investigate, always within the framework of the chosen Systemic scale (e.g. on the level of “System” or on the level of “Subsystems”). In order to follow a rational order in the examination of the influences of the *Geopolitical Factor (GF)* we should start the investigation from the “Supra-systems” level and continue with the “System” level. Such a sequential order should prove that, in most cases, if the analysis of the influences of the GF on the level of the Sub-systems is completed, and if Sub-systems have been correctly identified, the respective analysis on the level of the whole System is also completed.

The *Geopolitical pillars* are as follows:

- a) Defence/Security
- b) Economy
- c) Politics
- d) Culture and Information

The aforementioned pillars are examined in terms of power, e.g. economic power, political power, etc.

A.7. Identifying the function of the Geopolitical factor for the specific pillars of influence: Example

At this stage we are going to identify the geopolitical trends-dynamics for each designated Subsystem. These trends are identified only and exclusively in terms of “power”. They answer the following questions:

- 1) The pillars (defence, economy, politics, culture) where the “geopolitical factor” under study prevails (in our case the GF “Islamist movement”) and by consequence already determines or may determine their attitude within the framework of each Sub-system. This type of conclusion is defined as “positive sub-systemic component of the trend power” of the “geopolitical factor” in the “Interior of the System”.

2) Which pillars absorb the influence of the “geopolitical factor”, and by consequence, it does not influence the whole attitude of the Sub-system. This form of conclusion is defined as “zero sub-systemic component power trend” of the “geopolitical factor” in the “Interior of the System”.

A.8. Synthesis: 4th Stage

Definition: The term “synthesis” refers to the procedure through which we can detect the Resultant Power Trend of the given Geopolitical factor on whichever final systemic scale (e.g. Sub-system, System or Supra-system level).

1st case:

In case we have detected and defined the particular power components (of the geopolitical factor at hand) on the Sub-system level, and our objective is the Component of the System on the systemic level, then the stage of synthesis begins from the level of the System.

2nd case:

In case the component in question is on the level of the Supra-system, then the stage of Synthesis starts after the conclusion of the Analysis of the components of the individual Systems. This means that the synthesis should start from the level of Subsystems, and we should then shape the image of the components on the level of Systems, and finally conclude with the identification of the component on the level of Supra-system.

A.9. Conclusions: 5th Stage

The last stage of the geopolitical analysis is that of Conclusions. At this stage we must describe the geopolitical dynamics, to which the “Component of power” of the “geopolitical factor” under study, subjects the attitude of the System examined, in the context of the Supra-system.

We must stress that:

At this stage of the study, as in any other stage of the aforementioned geopolitical analysis, we make no proposals.

i) At this stage, we discover: structures, actions, functions, influences, forms and dynamics of the geopolitical factor and we describe them.

ii) We also describe how they affect the attitude of the System.

The last stage of the geopolitical analysis is that of Conclusions. At this stage we must describe the geopolitical dynamics, to which the “Component of power” of the “geopolitical factor” under study, subject to the attitude of the System examined, in the context of the Supra-system.

We must stress that: At this stage of the study, as in any other stage of the aforementioned geopolitical analysis, we make no proposals. Proposals do not form part of a Geopolitical Analysis. They are part of the Geo-strategic approach which may be carried out, only if asked and by exploiting the results of the geopolitical analysis preceding. (Mazis 2015a).

PART B³

B.1. The Lakatosian Structure of the Systemic Geopolitical Analysis Contents

So, from an epistemological point of view, the above proposed methodological approach of the

Systemic Geopolitical Analysis adopts the following Lacatosian structure (Mazis 2015b):

3. See: i) Nicholas J. Daras - John Th. Mazis, “**Systemic geopolitical modeling. Part 1: prediction of geopolitical events**”, *GeoJournal*, DOI 10.1007/s10708-014-9569-3, Springer Science+Business Media Dordrecht 2014, pp. 7-9, [Author’s personal copy] and ii) Nicholas J. Daras - John Th. Mazis, “**Systemic geopolitical modeling. Part 2: subjectivity in prediction of geopolitical events**”, *GeoJournal*, DOI 10.1007/s10708-015-9670-29-3, Springer Science+Business Media Dordrecht 2015, pp. 6-8, [Author’s personal copy]

- I. Definition of the fundamental axiomatic assumptions (elements) of the *hard core* of the geopolitical research programme [1-2]
- II. Definition of the *auxiliary hypotheses* (elements [e]) of the *protective belt* of the geopolitical research project [1-6]
- III. The issue of the *positive heuristics* of the geopolitical research programme
- IV. The elements of the positive heuristics of the geopolitical research programme.

According to the Lakatosian meta-theoretical approach, the hard core (fundamental assumptions) constitutes the basic premise of a research program. The *hard core* is protected by *negative heuristics*, in short, by the rule that prohibits researchers to contradict the fundamental ideas of a given research

program, i.e., with the hard core of the program (as an attempt to address new empirical data which tend to invalidate the theory). That being said, we believe that:

B.1.1. The hard core fundamental axiomatic assumptions

I. The first fundamental axiomatic assumption (element 1), which constitutes the center of the hard core of the geopolitical research programme, is that all the characteristics of the above-mentioned subspaces of the geographical complex are countable or can be counted, through the countable results which they produce, e.g., the concept of democraticity of a polity (according to western standards, since there are no other). This is a concept identified as a Geopolitical Index within the framework of the secondary causative “Political Space, as defined earlier, and can be countable by means of a multitude of specific results, which it produces in the society where this form of political governance is applied. Such are for example the number of printed and electronic media in the specific society, the number of political prisoners or their absence, the level of protection of children of single-parent families, the number of reception areas for immigrants and density of the latter per m² etc., etc. These figures are classified, systematized and evaluated according to their specific gravity

concerning the function of the figure to be quantified, and constitute the Geopolitical Indices that we are going to present and examine in detail below.

II. The second fundamental axiomatic assumption (element 2) of the hard core of the systemic geopolitical programme is that, within the framework of the geographical area under study, there exist more than two consistent and homogeneous Poles which are: i) self-determined (as to what they consider gain and loss for themselves), and also in relation to their international environment; ii) hetero-determined, uniformly and identically to their international environment which is determined by the international actors that dwell within them and their common systemic relation is their characteristic. [...], according to the Lakatosian meta-theoretical approach, a research programme has the protective belt of complementary hypotheses, i.e., proposals that are subject to control, adaptation and re-adaptation, and that are replaced when new empirical data come to light. Moreover, given Lakatos dictum that in the positive heuristic of a programme there is, right at the start, a general outline of how to build the protective belts and that “*a research programme [is defined] as degenerating even if it anticipates novel facts but does so in a patched-up development rather than by a coherent, pre-planned positive heuristic*” (Lakatos, 1971b: 125), we should proceed by formulating a (provisional) definition of that protective belt for our research programme. Consequently, following the Lakatosian metatheoretical paradigm, the protective belt of the geopolitical research programme should be defined, complemented with the following auxiliary hypotheses-elements:

B.1.2. The auxiliary hypotheses of the protective belt of the geopolitical research programme:

(*element [e1]*): First auxiliary hypothesis of the protective belt of the geopolitical research programme: the size of the power is analyzed in four fundamental entities (Defence, Economy, Politics, Culture/Information), which in turn are analyzed in a number of geopolitical indices. These Geopolitical Indices, as already mentioned, are countable or can be counted and they are detected and counted in the internal

structures of the those Poles that each time constitute the Sub-systems of the Geographical Complexes under geopolitical analysis.

(element [e2]): Second auxiliary hypothesis of the protective belt of the geopolitical research programme: the above Poles constitute fundamental structural components of an international, and always changing, unstable System.

(element [e3]): Third auxiliary hypothesis of the protective belt of the geopolitical research programme: these Poles express social volitions or volitions of the deciding factors that characterize the international attitude of the Pole. Consequently, these poles can be national states, collective international institutions (e.g., international collective security systems, international development institutions, international cultural institutions), economic organizations of an international scope (i.e., multinational companies, bank consortia) or combinations of the above which, however, present uniformity of action within the international framework concerning their systemic functioning.

(element [e4]): Fourth auxiliary hypothesis of the protective belt of the geopolitical research programme: consists of the above-mentioned “causal and causative notions of the Primary, Secondary and Tertiary Spaces, as well as their combinations (Completes and Special Composite Spaces).

(element [e5]) Fifth auxiliary hypothesis of the protective belt of the geopolitical research programme is the premise that the international system has a completely unsure, unstable and changing structure.

(element [e6]) Sixth auxiliary hypothesis of **the protective belt of the geopolitical research programme:** systemic geopolitical analysis aims to conclusions of practicology, shortly, of some theory of practice (R. Aron), i.e., to the construction of a predictive model of the trends of power redistribution and in no case to “guidelines for action under some specific national or polarized perspective. The latter is nothing but the geostrategic biased synthesis, not a geopolitical analysis. This equals the use of the results (of the model of power redistribution) of the geopolitical analysis and follows the stage of geopolitical analysis.

It must be noted that the historicity of the elements of the research programme is represented by the cultural formations developing in the context of the fourth geopolitical pillar. Thus, their countability is possible in the same way as is for the rest of the geopolitical pillars that have a qualitative nature, by means of the geopolitical indices of the Cultural pillar. At this stage it should not be forgotten that replacing a set of auxiliary assumptions by another set, is an intra-programme problem shift, since only the protective belt and not the hard core is altered. The intra-programme problem shifts should be made in accordance with the positive heuristics of the problem that is with a set of suggestions or advices that function as guidelines for the development of particular theories within the programme. It should also be emphasized that, a key concern of the Geopolitical Research Programme is to describe the suggestions to the researcher that will determine the content of the positive heuristics of the Programme in question. Without them, it is impossible to assess the progressivism of the Geopolitical analysis according to the necessary “novel empirical content expected in our analytical spatial paradigm (model). Given these necessary clarifications concerning the elements of the positive heuristics of the geopolitical research programme, following should be defined:

- The methodology of each theoretical approach should remain stable until a possible detection of continuous degeneration,
- The requirement of predictive ability and the expansion of the empirical basis of the theoretical approach should be maintained,
- The empirical facts should constitute the final measure for assessing competitive theoretical approaches of the same set [research programme],
- The facts that have been used to test a theoretical approach should not be the only ones used for verifying this approach but, with the progress of time of research, the testing of the theoretical approach should be refereed also with facts that derive from the expansion of the empirical basis of the given approach (Mazis 2015b:1068- 1072 also comp., Daras-Mazis 2014: 3-8 and Daras-Mazis, 2015: 4-8). We point out that a geopolitical analyst is a properly informed geographer who conducts a geopolitical analysis within the framework of a

Geographical/Geopolitical Complex. Below, without any risk of confusion and for obvious reasons of adopting assimilative generality and acceptable uniformity, we will prefer to use the appellation “geopolitical operator” instead of that of “geopolitical analyst”.

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